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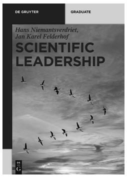

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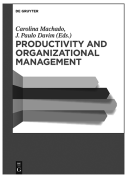

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Micro MBA

Theory and Practice

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Preface

Nowadays – and this will be the case increasingly moving forward – all professionals are looking to develop their skills and competencies to more effectively meet the growing demands of today's competitive job market. Because of this reality, it has become quite normal for almost all professionals, in various sectors to consider obtaining a master's in a business-related field as a means to acquire the necessary and critical knowledge and expertise. Based on these concerns, this book, *Micro MBA – Theory and Practice*, can be seen and understood as an excellent opportunity to increase the desired abilities and competencies of these professionals.

As one of the most prestigious and sought-after degrees around the world, the Master of Business Administration, or MBA, is designed to develop skills required in business and management careers. Although it focuses on the business world, an MBA can also be very useful to those pursuing a managerial career in private industry, the public sector, government, technology- and engineering-related fields, and others. At this stage, however, often professionals face difficulties not only due to the high cost of such courses but also because they do not always have time in their schedules to earn an MBA. Taking into account this reality, this book, in focusing on subjects such as accounting, economics, marketing, human resources, operations, and project management, aims to cover the "core" curriculum of subjects generally featured in an MBA program. Based on the "core" subjects presented in this book, interested readers will be able to acquire knowledge that they will then be able to apply in a variety of real-world business situations or that will allow them to pursue their personal or professional interests. Because the book covers the main areas of interest in business, readers will be able, in accordance with their own interests and availability and without additional expenses, to acquire the knowledge that an MBA would confer and develop the skills needed to pursue a career in a variety of fields. In addition, the book aims to support academics and researchers by highlighting the most recent findings and developments in the relevant research areas, suggesting topics for discussion and facilitating an exchange of information on models, practices, methodologies, and applications in business.

In six chapters, the book covers the subjects addressed in an MBA program, namely, organizational behavior, accounting/corporate social responsibility (CSR), project management, marketing, and human resource management. Chapter 1 covers organizational culture, Chapter 2 discusses issues related to CSR, Chapter 3 focuses on project management, and Chapter 4 deals with consumer behavior, specifically that of millennials in the tourism industry. Then Chapter 5 discusses an important aspect of human resource management: performance appraisal. The final chapter, Chapter 6, presents a discussion of job analysis in knowledge-intensive, high-performance small and medium-sized enterprises.

The book is designed to increase the knowledge and professional skills of all those interested in developing their careers in various fields, such as university research (at the postgraduate level), business, manufacturing, education, engineering, healthcare, and other service and industrial sectors.

The editors would like to express their gratitude to de Gruyter for the opportunity to publish this book and for its professional support. Finally, we would like to thank to all the contributors for their interest in this project and for carving out the time to write their respective chapters.

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Carolina Machado received her PhD in Management Sciences (Organizational and Policies Management/Human Resource Management) from the University of Minho in 1999, and Master's in Management (Strategic Human Resource Management) from the Technical University of Lisbon in 1994. She has taught human resource management–related courses since 1989 at the University of Minho and in 2004 was promoted to Associated Professor. Her experience and research interests lie in the fields of human resource management, international human resource management, human resource management in small and medium-sized enterprises, training and development, management change, and knowledge management. She is Head of Human Resources Management Work Group at University of Minho, as well as Chief Editor of the International Journal of Applied Management Sciences and Engineering (IJAMSE), Guest Editor of journals, books Editor and books Series Editor, as well as reviewer in different international prestigious journals. In addition, she has also published both as editor/co-editor and as author/co-author several books, book chapters and articles in journals and conferences.

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J. Paulo Davim received his Ph.D. in Mechanical Engineering in 1997, his M.Sc. in Mechanical Engineering (materials and manufacturing processes) in 1991, his Mechanical Engineering degree (5 Years) in 1986 from the University of Porto (FEUP), the Aggregate title (Full Habilitation) from the University of Coimbra in 2005, and his D.Sc. from London Metropolitan University in 2013. He received his Eur Ing from the Fédération Européenne d'Associations Nationales d'Ingénieurs / European Federation of National Engineering Associations (FEANI-Brussels) and his Senior Chartered Engineer title from the Portuguese Institution of Engineers with an MBA and Specialist title in Engineering and Industrial Management. Currently, he is a professor in the Department of Mechanical Engineering at the University of Aveiro, Portugal. He has more than 30 years of teaching and research experience in manufacturing, materials, and mechanical engineering, with a special emphasis in machining and tribology. He also has an interest in management and industrial engineering and higher education for sustainability and engineering education. He has advised large numbers of postdoc, doctoral, and master's students as well as coordinated and participated in several research projects. He has received several scientific awards. He has worked as an evaluator of projects for international research agencies and served as an examiner of Ph.D. theses at many universities. He is the editor-in-chief of several international journals, guest editor of journals, book editor, book series editor, and scientific advisor for many international journals and conferences. Presently, he is an editorial board member of 25 international journals and serves as a reviewer for more than 80 prestigious Web of Science journals. In addition, he has published, as editor or coeditor, more than 100 books and as author, or coauthor, more than 10 books, 70 book chapters, and 400 articles in journals and conference proceedings (more than 200 articles in journals indexed in Web of Science core collection/h-index 44+/5500+ citations and SCOPUS/h-index 52+/8000+ citations).

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Chapter 1

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1 Organizational culture: forces that shape thinking, behavior, and success

Abstract: A critical issue in business is that organizations are composed of individuals and social groups and that organizational outcomes rest on the creativity, efforts, and behavior of these different actors and social units. This chapter considers perhaps the most powerful and decisive aspect of people performance in organizations: organizational culture. The chapter explores the meaning of organizational culture and how culture informs organizational members of the root assumptions, values, and behaviors that constitute the organization's raison d'être, vision, and future. It considers how cultures evolve within organizations, the pivotal role played by their founding members, and how organizational leadership can change culture, reshaping and refocusing it to contribute to the organization's continuing survival and success.

> Culture is an abstraction, yet the forces that are created in social and organizational situations that derive from culture are powerful. If we don't understand the operation of these forces, we become victim to them. [1, p. 3]

1.1 Introduction

In North America, Europe, and Australia there is a growing trend for business schools to design their curricula with **graduate employability** in mind. The challenge they confront is to provide a set of skills and competencies that will allow graduates to successfully enter the workplace, advance within it, and productively manage organizations and personal careers [2–4]. Graduate employability is particularly challenging for a number of interrelated reasons: (a) the work world is constantly changing, which makes it difficult to predict the skills and competencies that will be relevant in the future; (b) new knowledge and disruptive technologies are rapidly diffused; (c) the half-life of knowledge in many professional and disciplinary areas is not very long; and (d) computer-based artificial intelligence that renders many human-centered skills and competencies obsolete is being increasingly used [5–7].

Responding to these complex challenges, many business schools are now accentuating broader and more enduring skills, emphasizing critical and fundamental areas in their curricula, and cultivating a commitment to continuous intellectual growth and lifelong learning after graduation [8–10]. Most likely – given the nature of this book and its intended readership – you have made a commitment to lifelong learning. Further, given the predicted readership of this book (those in the scientific and

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engineering communities), this chapter might cover an area that has not been previously studied or that has not been considered particularly relevant.

This chapter might prove challenging because, unlike many of the “hard” and technically focused topics of conventional MBA programs, **organizational culture** is a “soft” topic, akin to subjects like organizational communication or interpersonal relationships. Although many science and engineering students prefer the reassuring nature of technically based “hard” areas of study in MBA programs, such as capital budgeting or managerial economics, it is important to realize that in the real work world, especially at middle and senior management levels, the competencies most in demand and most associated with success are those people-centered ones that many generations of business undergraduates have rather dismissively referred to as “soft” subjects [11, 12].

This chapter explores organizational culture by providing a critical working knowledge of the topic. Organizational culture is a very significant aspect of all social aggregations: project teams, work groups, and corporate organizations. An awareness of organizational culture is of critical importance for those who work in, or collaborate with, such groups. This importance is reflected in the simple definition of organizational culture offered by Schneider, who claims that organizational culture is “the way we do things **in order to succeed**” [13, p. 128, emphasis in original]. Further, the impact of organizational culture, and the profound challenges and opportunities that it presents to managers, is underscored by Edgar Schein, who advises that “the only thing of real importance that leaders do is to create and manage culture…to understand and work with culture…[and] to destroy culture when it is viewed as dysfunctional” [1, p. 11].

This chapter is organized as follows. Section 1.2 provides a broad review of culture at the levels of metaphor and national phenomenon. Section 1.3 considers culture as an organizational reality, while Section 1.4 explores the structure and nested layers of culture in organizational contexts. Section 1.5 examines organizational culture as an espoused value system and organizational climate that is the experienced culture projected and confirmed by organizational processes, policies, and procedures. Section 1.6 considers the role of leadership in organizational culture, including the role played by an organization’s founding leaders, mechanisms for perpetuating culture, and the processes through which present leaders can shift and realign culture. Section 1.7 briefly summarizes some of the main issues developed in the chapter. This final section is followed by a number of short questions that the reader might find helpful in reviewing the chapter. Answers to these questions are provided after the reference section.

1.2 The multiple roots of culture

The underlying **ideologies** of an organization – that is, the “shared, interrelated sets of beliefs about how things work; values that indicate what’s worth having or doing;

and norms that tell people how they should behave" [14, p. 33] – are recognized by all of those in the organization, but their cultural origins often remain unconsidered and unappreciated. Indeed, it might be said that the truly **acculturated** organizational participant is the one who self-identifies with the organization, behaves according to its norms, subscribes to its assumptions and values, and yet remains oblivious to the presence, power, or even existence of the organization's underlying culture.

The central theme of this chapter is organizational culture. However, it is important to consider the **other culture systems** within which an organization and its culture are embedded because, to a great extent, cultures do not exist independently or uniquely but are nested in – and moderated by – one another. Rather than approaching culture as a singular phenomenon, it is better to think of it as a set of dynamic and fluid forces that come into play at different times, operate at different levels, produce different outcomes, and continuously undergo change even though those changes might seem gradual.

1.2.1 Culture as a metaphor

At the outset, it is important to appreciate that when referring to **culture** (Latin: *cultura* = cultivation) we are employing a metaphor and that "culture in all of its early uses was a noun of process: the tending of something, basically crops or animals" [15, p. 87]. Metaphorically, the growth of individuals and their development within a social setting has been compared with cultivating crops in fields or tending grapes in vineyards. Culture – as a process and as an outcome – is connected with growing, nurturing, supporting, and caring. However, over time, this agriculturally rooted metaphor has given rise to two different ways in which culture is conceived of in contemporary English:

– **Culture as an exclusive quality:** In the first sense – in which the roots of the agricultural metaphorical are stronger – culture is associated with a process of deliberate selection, careful propagation, and specific domestication, all designed to develop what are considered more refined human attributes and behaviors. In this older sense, culture is associated with an exclusive **high culture** as seen in intellectual development, aesthetic refinement, and civilized behavior. Here, culture is regarded as the exclusive domain or preoccupation of an elite social class, and culture differentiates between higher and lower social classes. The outcomes of this process are understood in terms of refinement, cultured minds, and cultured individuals.
– **Culture as a common social experience:** In the second sense – the sense used in this chapter and in organizational culture studies generally – culture is understood in a less restricted sense and is associated with growing up within a specific context, or with developing within a common social environment. Culture, consciously recognized or unrecognized experience, is encountered by **everyone** and shapes everyone. As Spencer-Oatey explains, "our notion of culture is not some-

thing exclusive to certain members; rather, it relates to the whole of a society. Moreover, it is not value-laden. . . . they [cultures] are [only] similar or different to each other" [16, pp. 15–16].

As a construct, culture has been used in multiple senses, in different contexts, and in various fields of social science. It is hardly surprisingly that no single universally agreed-upon definition of culture has emerged; indeed, there are approximately a hundred different definitions in the literatures of anthropology and sociology [17, 18]. Reviewing these, Spencer-Oatey provides her own definition, although she concedes that any definition is likely to be partial, vague, and fuzzy. She defines culture as follows:

> The assumptions and values, orientations to life, beliefs, policies, procedures and behavioural conventions that are shared by a group of people, and that influence (but do not determine) each member's behaviour and his/her interpretations of the 'meaning' of other people's behaviour [16, p. 3].

1.2.2 Culture as a national expression

Culture is a shared experience that develops in any context where there is prolonged social interaction. In trying to explain how culture develops, a commonly used unit of analysis has been the nation-state. However, in trying to identify distinctive **national cultures**, there are a number of significant problems: (a) defining the "nation" involved (e.g., its geopolitical borders, historical development, regional integrity and differences); (b) assessing the homogeneity of the national state (e.g., the extent of racial, ethnic, and religious diversity; distinctive social communities, subgroups, and enclaves; historical patterns of immigration and migration); and (c) constructing a set of stable, reliable, and valid dimensions through which different national cultures can be defined, measured, and compared.

National culture is a subject of interest and study in its own right, but it is important to appreciate the extent to which national cultural dimensions are expressed in organizations [19]. The key figure in the analysis and measurement of national culture is Gert Hofstede [20, 21], and his major contribution – *Culture's Consequences* – specifically focuses on the widely held national values that contribute to **comparative managerial** differences. Hofstede's work attempts to identify, define, and measure quantifiable dimensions of national culture. He defines national culture simply as "the collective programming of the mind which distinguishes the members of one group or category of people from another" [20, p. 9].

Hofstede's approach was based on the statistical analysis of responses to cultural assumptions in different countries. The analysis identified a number of **cultural dimensions**, which he found present in different degrees in all national cultures. The analysis and cultural dimensions identified are widely used but have been criticized for portraying national culture as a **static manifestation** rather than as a dynamically evolving system. Many scholars also criticize Hofstede's basic assumptions, research methodology, and data analysis. These critics express concerns that his attempts to reveal stable, persistent, and static national cultural dimensions have inadvertently resulted in misconceptions, misunderstandings, and plausible, but limited and dangerous, **sophisticated stereotypes** [22–24]. Despite these persistent criticisms, Hofstede's national cultural dimensions are widely used:

– **Power distance:** "The extent to which less powerful members of a society accept and expect that power is distributed unequally" [25, p. 89]. In high power distance cultures, social status and hierarchy are accepted as natural arrangements and the source of personal power, social inequality, and legitimate authority vested in those of higher social rank (compare Malaysia with its high power distance index of 104 and Israel, which scores 13 on the same scale [26]).
– **Individualism/collectivism:** This is the difference between "people looking after themselves and their immediate family only, versus people belonging to in-groups that look after them in exchange for loyalty" [25, p. 89]. Individualistic cultures focus on the individual, the uniqueness of the "I," and distinctive projections of self. Collectivistic cultures focus on the group, membership in the collective, cooperative efforts, and a dominant concern with "we" and "us" (compare the United States, with its high individualism index of 91, and South Korea, which scores a low 18 [26]).
– **Masculinity/femininity:** This dimension emphasizes the role of gender, and "dominant values in a masculine society are achievement and success; the dominant values in a feminine society are caring for others and quality of life" [25, p. 89]. Masculine cultures tend to find expression through the assignment of distinctive gender-based roles, rigid gender-specific activities, and assumptions of male dominance in areas such as leadership, power, and authority (compare Japan, with its high masculinity index of 95, and Sweden, which scores a low 5 [26]).
– **Uncertainty avoidance:** This is a measure of "the extent to which people feel threatened by uncertainty and ambiguity and try to avoid these situations" [25, p. 90]. In high-avoidance cultures, there is a significant degree of reluctance and sense of discomfort associated with being in situations that involve change, innovation, and risk-taking (compare Portugal, with its high uncertainty avoidance index of 104, and Denmark, which scores a low 23 [26]).
– **Long-term vs. short-term orientation:** This dimension measures "the extent to which a society exhibits a pragmatic future-orientated perspective rather than a conventional historic or short-term point of view" [25, p. 90]. Long-term-orientation cultures place value on persistence, perseverance, and an investment in the future. Short-term-orientation cultures tend to favor instant rewards and immediate results in the pursuit of either personal happiness or gratification (compare China, with its high long-term-orientation index of 118, and the United States, which scores a low 29 [26]).

National culture is best understood as a statistical construct in which the majority of the population clusters around central values (averages) associated with specific cultural dimensions, for example, high power distance and individualism/collectivism. However, as with all statistical descriptions, (a) there is considerable individual variance about the defined cultural dimension average (country score) and (b) the national culture profile provides a generalized picture and cannot be used to define individuals precisely or to predict their cultural behavior accurately.

National cultures provide a socially perpetuated framework within which inhabitants have a set of generally agreed-upon ways of explaining behavior, identifying values, and understanding "the ways in which we do things." These generally held assumptions and patterns are recognizable and seem perfectly natural within the country; however, there is considerable individual variation, and there are always distinctive subcultures that differ from national norms.

When individuals who belong to one national culture interact with those of another, they often observe differences and begin to appreciate that **they themselves** possess cultural perspectives that had been unrecognized, unconsidered, and invisible until the exposure took place. For example, learning a foreign language, working in a different country, or managing foreign nationals all expose national culture differences. Sometimes, national culture differences appear subtly; sometimes, they are recognized dramatically. In a globalized world, especially in the globalized world of business, awareness of national cultural differences and competencies in negotiating them are critical factors for success [27–29].

Since organizational participants generally come from the surrounding national population, it might seem obvious that national cultural values will permeate the organization. However, each organization creates – either spontaneously or in a more consciously and calculated way – its own distinctive set of culture assumptions, beliefs, and behaviors. Organizational culture can be seen as being nested in a broader national culture, and the relative strength, influence, and expression of each culture system can sometimes become a matter of practical concern, rather than simply of academic interest [30, 31]. From a practical perspective, relative cultural strength and possible culture conflict – between national and organizational cultural perspectives – is usually not particularly important. However, **culture clash** can pose a particular challenge and represent a significant communication barrier for different national units of global companies, for mergers and acquisitions that stretch across national borders and for multinational corporations [32–34].

1.3 The culture of organizations

Culture is a socially initiated, sustained, and perpetuated process that comes into play in contexts where there is long-term interaction and social exchange between individuals. These contexts include the formation and development of groups and organizations. Although business organizations can become very large corporations, they usually begin as much smaller units – entrepreneurial microenterprises and startups (with less than ten participants), small and medium-sized enterprises (10–50 participants), and family businesses. Culture develops naturally and spontaneously in all of these organizations but, as they grow, it can also be purposefully created, adjusted, and changed to better suit the growth and success of that organization. Considering stable long-lived groups and organizations, Schein defines culture as follows:

> A pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems [1, p. 17].

At any given moment, organizational culture can appear static and stable. However, when considered over a period of time, it can be seen as dynamic and constantly evolving to accommodate the changes that occur in the external and internal environments of the organization. In this evolutionary process, the dominant forces are (a) those of the external world (the task environment) in which the organization exists, primarily involving the struggle to find a viable niche in the shifting external social, political, and economic landscape; and (b) those of the internal world of the organization, predominantly involving efforts to resolve the social and political issues that threaten organizational cohesion or the integration of participants into a purposeful collective.

External and internal forces can threaten the existential future of the organization, and they challenge it to acknowledge these threats, respond to them, and find ways of successfully adapting to them. Organizations that survive and find new and productive opportunities to exploit are those that have an **innate capacity** for sustained flexibility, ongoing creativity, and openness to innovation. These adaptations are all dynamic organizational responses and altered performances – that is, they are expressions of the organization's ability **to do things differently**. To do things differently, however, organizations need to recognize when change is required. As social collectives, organizations need to consider the ongoing necessity for doing things differently and to learn from their history of adaptations. Put simply, they have to constantly be aware of their culture and whether it is leading to success [35–38].

1.4 The structure of organizational culture

Organizational culture is a complex phenomenon that has a layered structure, with the surface layers easily identifiable and the deeper layers more significant but less obvious. Schein [1] identifies three such interconnected layers nested in one another: (a) a surface layer of **artifacts**, signs, and symbols that is quite visible but that can also be easily misunderstood or misinterpreted; (b) a deeper layer of **espoused beliefs** and values that only emerges from discussions and interactions with organizational members; and (c) a yet deeper and more hidden core of **basic assumptions** that also emerges from discussions with those in the organization but that is often not referred to directly because these assumptions seem so obvious.

1.4.1 Artifacts: visible organizational structures and processes

The most obvious manifestations of organizational culture are to be seen in the physical world that the organization creates for itself. These include the architectural design that the business selects for its buildings, the spatial allocations of the building's interior, the layout of working and production spaces, the selection and arrangement of furniture and equipment, and the design colors and textures that have been selected. None of these features are random and they do not simply materialize – they are selected, preferred, and planned with purpose and reason. The physical way in which the organizational setting has been created can be interpreted as a projection of underlying cultural values and assumptions.

Of course, the projection of the organization's culture into the physical world is moderated by a **design purpose** – a functionality that might itself be embedded in, or connected to, organizational culture. Organizational spaces are social spaces that are designed with an intent that might stimulate organizational creativity, define organizational behavior, promote organizational learning, or – most notably in organizations such as colleges and campuses – structurally facilitate preferred ways of teaching and learning. These intentions can often reflect the deeper cultural beliefs and values of the organization [39–41].

Similarly, in any organization, there are numerous visible and observable phenomena that are also deeply rooted in its culture. For example, the language or jargon that is used to communicate with other organizational participants; the technology that is employed and the products that result from organizational efforts; the dress code, either formally articulated or implicitly acknowledged; and such simple taken-for-granted artifacts such as the organization's logo, letterhead, and web design.

Equally observable, and just as accessible, are the narratives that are perpetuated – the persistent myths about past organizational behavior or the sagas about organizational founders and significant personalities. All of these become obvious in casual discussions with organizational members. Just as obvious – and often quite unique to the organization – are the ceremonies, commemorations, rites, and rituals that it has created. All of these shared expressions reflect a set of understandings and behavioral expectations, even though their origins may be unclear or obscure and even though their meaning and significance may be interpreted differently by organizational insiders and visitors [42–44]. Indeed, especially for the outsider, there is a danger that focusing on the particular, selectively disregarding pieces of the pattern, and projecting personal interpretations can lead to a false reading or misinterpretation of the underlying organizational culture.

For example, the visible and discernable artifacts present in the organization are often regarded as **organizational symbols**, where symbols “refer to things that stand for the ideas that compose the organization” [45, p. 73]. Rafaeli and Worline [45] note that organizational symbols: (a) have the power to reflect underlying aspects of culture; (b) to elicit internalized norms of behavior from organizational participants; (c) to frame shared experiences; (d) to facilitate communication between those participants; and (e) to integrate the whole organization into what they call a **system of significance** [45, p. 85].

Viewing the organization through the prism of symbolism and symbolic systems can provide rich and powerful ways of understanding its internal cultural landscape. However, these symbolic approaches need to be used with caution, because there is always the danger that the significance and meaning attached to symbols can be misunderstood by those who are detached from the organization, or who are not embedded in its culture [46, 47]. As Schein cautions, it is “especially dangerous to try to infer the deeper assumptions from artifacts alone, because one’s interpretations will inevitably be projections of one’s own feelings and reactions” [1, p. 27].

1.4.2 Espoused beliefs: underlying philosophies and justifications

Organizations, particularly for-profit business corporations, are created to act in the social and economic spheres. They employ people and utilize their skills and talents. They interact with those located inside and outside the organization and enter competitive marketplaces where they attempt to attract, retain, and increase a consumer base. As social actors, organizations require a social identity, and that identity is predicated on the beliefs they espouse and the values they to hold to be important and true.

There are two discernible culture layers that should ideally reflect and validate one another but that sometimes do not: (a) a **publicly projected** set of values and beliefs that are explicitly communicated to the organization’s relevant publics and external stakeholders and (b) an **internal set** of cultural values and beliefs that are embedded in the narratives, behaviors, and philosophies that the organization espouses and that are recognized by its members.

– **Publicly projected and communicated beliefs:** To share and communicate their beliefs and values with the external publics and stakeholders, organizations distribute a set of formal statements that serve to identify and particularize them. This is most evident in modern business corporations, which set out a **vision statement**, a **mission statement**, and a collection of communications that articulate relevant values, beliefs, and inspirations that identify the corporations and against which their future performance and actions can be assessed. These narratives serve to differentiate one corporation from another by providing a unique and convincing raison d’être for the entity and for those who populate it. Not infrequently, these external narratives are shaped by considerations of public relations, marketing potential, and corporate self-interest. Indeed, these externally projected beliefs are often synonymous with the **corporate brand image**. These communications are typically enthusiastic and positively and purposefully vague; however, it is important that they accurately mirror – or at least convincingly resonate with – the cultural values held by the organization. Projected beliefs should align with what the organization holds true, what it genuinely wants other social actors and stakeholders to know, and what it expects its own members to believe [48, 49].

– **Espoused beliefs and values:** Publicly projected organizational beliefs are directed to external audiences, but these narratives are also known to organizational participants. However, this is not the normal way through which organizational members understand the organization's culture. For them, what the organization believes, what it values, and how it sees the world become evident through an internal process of socialization. For organizational members and for organizational novices, the internal sharing of espoused values is the primary way through which culture is instilled. Ultimately, culture is the "shared basic assumptions, values, and beliefs that characterize a setting and are taught to newcomers as the proper way to think and feel" [50, p. 362]. For newcomers and corporate visitors, the organization's espoused values become apparent through ongoing interactions with those inside the organization and provide answers to questions of behavioral significance: What do we do? Why do we do this? How does what we do match who we think we are? Culture needs to give clear and consistent answers to these questions, to provide a blueprint for anticipated behavior, and to promote a sense of identity and identification [51–53].

These publicly projected and organizationally espoused projections of corporate values should be similar, if not identical. A damaging deficit can result if they are not or – as will later be discussed – if there is a significant mismatch between what the organization asserts about itself and how others come to perceive it. This potential deficit calls into question either the organization's integrity and trustworthiness or its ability to view itself and its actions accurately. A potential deficit between espoused and enacted cultural values can result in: (a) reputational damage or a diminished organizational image for external publics and stakeholders; or (b) negative internal consequences such as reduced participant commitment, diminished employee loyalty, increased employee intent-to-leave and actual turnover, and difficulties in attracting new organizational members [54–56].

1.4.3 Deeper assumptions and values

The **espoused beliefs** and values of an organization are those that have emerged through a process of evolutionary challenge and adaption. Through that process, organizational culture represents what the organization believes about itself, how it believes that it should act, and how its internal constituent members believe they should approach their organizational roles and actions. The word choice is significant.

In modern English usage, “to espouse” means to actively support a cause or point of view, but in its older usage it also means “to wed someone” (a spouse). Both meanings revolve around a common linguistic source (Latin: *spondēre* = to promise, or to betroth). In a sense, participants are **wedded** to the values and beliefs that give the organization cultural meaning and significance, and these values constitute the basis for a relationship of commitment and mutual responsibility. As with marriage, the arrangement is voluntary rather than imposed. Participants enter into the relationship with their organization on a voluntary basis that changes and reshapes both parties, but the relationship is based on mutual attraction and trust that may change over time, especially if there is a sense that the values and beliefs that formed the basis of the relationship have significantly shifted or were misrepresented.

Underpinning these espoused values are older and deeper ones that represent the core of the organization’s culture. These are fundamental assumptions about the nature of the world within which the organization operates and the relationship between the organization and that world. They include the purpose of the organization, the meaning of organizational participation, and the social identity of the organization and its members. Perhaps at some time these assumptions and values were in dispute. However, over time and through a continuous process of testing and verification, they have become completely accepted, rarely questioned, and essentially taken for granted within the organization and by organizational participants.

Commenting on this level of deep assumptions and values, Schein argues that they are now regarded as basic assumptions within the organization, and that “if a basic assumption comes to be strongly held in a group, members will find behavior based on any other premise inconceivable” [1, p. 31]. In his later work, Schein returned to these deep cultural values and beliefs, describing them as **shared tacit assumptions** “which were at one time explicit values but, because they worked so well, became taken for granted and increasingly non-negotiable” [57, p. 109].

1.5 Enacted values and organizational climate

One of the challenges in understanding organizational culture is that it can be regarded simultaneously as a **description** and an **experience**. As a description, organizational culture can be portrayed through it artifacts, espoused beliefs, and underpinning basic assumptions. Descriptions can be relatively objective, but they are also static: culture can all too easily become a series of posed photographs, not a spontaneous video. There is also a tendency in arriving at cultural descriptions to rely on what the organization itself propagates as normative values – expectations of what its culture is supposed to be and projections of what it aspires to be, rather than about what it actually is. Static descriptions of **culture as rhetoric** or **culture as proclaimed** often differ significantly from culture as actually experienced by organizational members [1, 50, 58].

For example, the organization might espouse high ethical behavior and a deep commitment to corporate social responsibility. These are the values that will be offered up when organizational participants are interviewed, just as they will refer to **espoused theories** when they are trying to explain what they do. However, these might not actually be the **theories in use** that govern what is really done and that only become evident when organizational members are actually observed in the workplace [59]. The actions and behavior of many of those working within the organization might be at variance with espoused values, even though these individuals will claim that they subscribe to the organization's values and do not dispute them. Organizational members can often be conflicted between competing versions of **values as proclaimed** and **values as enacted**. They usually replicate the social norms that they witness and demonstrate the behaviors that they experience, but they are left confused and come to doubt the veracity of the organization's representation of anticipated organizational behavior [59–62].

One way of exploring organizational culture is through discussions with those who work in the organization; indeed, this is the only way in which the deeper and more hidden aspects of culture can be revealed. However, members usually provide organizational values as espoused rather than values as enacted, especially when dealing with outsiders. This is always a concern because culture should be a mapping of what actually exists and what is at work, not a superficial description of what it is thought to be. Culture contains within it the power to integrate individuals into a social collective, to pattern their behavior, and to orientate their behavior toward collective solutions to the challenges and problems the organization faces. However, to utilize that power, it is important to have a clear and comprehensive understanding of what actually constitutes the organization's culture.

The actual experience of organizational culture is termed **organizational climate**. This is what organizational members really feel, see, and do as opposed to what they believe they should think, recognize, and do. Schneider, Ehrhart, and Macey, in a comprehensive review of organizational climate, define it as "the shared perceptions of and the meaning attached to the policies, practices, and procedures employees experience and the behaviors they observe getting rewarded and that are supported and expected" [63, p. 362]. Organizational climate is an expression of the personal, subjective, and experiential understanding of organizational culture that is collectively arrived at by organizational members as they engage with the organization and implement its various policies and practices.

Thus, to come to a useful understanding of an organization, we need to consider two different but interconnected aspects:

(a) The "external" or objective description of its culture and of how the organization as an entity presents itself to insiders and outsiders. This is **organizational cul-**

ture, and it incorporates the assumptions, beliefs, and values that are recognized as important, especially by the leadership of the organization.

(b) The “internal” shared meanings and perceptions that organizational participants have about the organizational entity and their relatedness to it. This is **organizational climate**, and it incorporates the experiential understandings and associated meanings that have been gathered, especially by organizational members, about what the organization actually believes, values, and rewards.

Both of these perspectives are important, and both of them must be determined. As Schein [64] puts it, “to understand what goes on in organizations and **why it happens in the way it does**, one needs **several** concepts... climate and culture, if each is carefully defined, then [sic] become two crucial building blocks for organizational description and analysis” [pp. xxiv–xxv, emphasis in original].

1.6 Organizational culture and leadership

Organizational culture is a perpetual work in process that is continuously being reshaped and reexpressed in a process of evolution and adaptation. However, these adaptive changes tend to take place over long time periods, and the changes are often slight and incremental. There are occasions when either the espoused or expressed culture of an organization is unproductive or dysfunctional and needs to be deliberately restructured. How can this restructuring be accomplished and by whom? Before considering the answers to these questions, it is necessary to develop a better appreciation of how leaders and cultures come together.

1.6.1 Founders

An organization is not simply a collection of individuals. Instead, it has a separate identity that possesses a distinctive personality or **persona**. This is most obvious in the formation of the business corporation, which, through the legal process of incorporation, is endowed with “a separate **indivisible legal personality**” [65, p. 1188]. However, all organizations begin their lives with a group of founding members and (usually) with a founding leader who represents or activates the group. Founders are simply “those individuals involved in actualizing the steps of organizational founding” [66, p. 709].

In actualizing organizational creation, founders tend to be motivated by a keen entrepreneurial vision and possess a set of robust theories about how things should be done and about what the organization should accomplish. These theories may appeal to other members of the founding group or be accepted in a more critical and skeptical manner, but initially they are only theories – visions that might be inspirational but that are presently speculative and unrealized. However, the theories and assumptions of founders are quickly put to the test as the organization comes into existence and struggles to survive. In time, “if their assumptions are wrong, the group fails early in its history.... If correct, they create a powerful organization whose culture comes to reflect their original assumptions” [1, p. 243].

The creation and perpetuation of a strong culture can result in a powerful and effective organization, but that does not necessarily mean that a strong culture will ensure the continuing growth and relevance of the organization. Solving the **culture problem** early in its life is a prerequisite for the organization’s survival. But during its existence, the organization may encounter significant challenges to internal integration or external fit that cannot be solved by its original culture. Without such challenges or shocks, the original culture is likely to persist unchanged and to faithfully reflect the theories and assumptions held by its founder.

1.6.2 Perpetuating organizational culture

Organizational cultures are not simply created at the time of the company’s founding – they are replicated and perpetuated in subsequent generations of organizational participants. There are a number of policies, processes, and procedures through which perpetuation occurs, with some being purposefully used by the organization and others being somewhat more subtle and spontaneous.

– **Perpetuation through selection:** One of the outcomes of strong organizational cultures is that those within the organization tend to identify themselves as the “in-group,” and this brings into play a dynamic that seeks to reinforce and perpetuate the characteristics, beliefs, and cultural values of that group. In other words, there is a group and institutional “tendency to favor members of one’s own group over members of other groups” [67, p. 10]. In perpetuating their distinctiveness, identity, and cohesiveness, the in-group and the organization reinforce their identity by making comparisons with out-groups or “others.” At the organizational level, the processes and procedures of employee recruitment, selection, and retention are colored by these considerations – a preference for those who think and behave like we do. Of course, cultural replication through the preferential selection and hiring of “similar” new organizational members needs to be tempered by considerations of discrimination and equal employment opportunity. This can be challenging, especially if the organization is small and lacks the resources or experience of a competent human resource department. Unwittingly and unintentionally, the preferential hiring of like-minded and socially similar individuals can create a pattern of direct or indirect discrimination. Just as dangerously, selective hiring can result in a lack of cultural diversity, a depletion of the internal talent pool, a reduction of organizational talent and creativity, and the exclusion of those who might possess highly advantageous but radically different cultural inputs [68–70].

– **Perpetuation through socialization:** Those selectively recruited into the organization may be predisposed to accept its cultural values and beliefs, but they are initially unfamiliar with them. Culture is transmitted through the socialization of incoming members in a variety of ways: (a) reward systems that provide direct value for those who comply with cultural values and behaviors; (b) a process of personally mimicking and modeling the organization's culture; and (c) formal training programs, participation in organizational rites and rituals, and engagement in a system of communications by which the organization repeats, explains, and reinforces its cultural values. Through these processes, incoming and existing organizational participants are gradually brought together and coalesce around the organization's espoused culture [71–74].

Schein observes that the "initial selection decisions for new members, followed by the criteria applied in the promotion system, are powerful mechanisms for embedding and perpetuating the culture, especially when combined with socialization tactics designed to teach cultural assumption" [1, p. 261]. These mechanisms are undoubtedly effective in accomplishing the explicit goals of perpetuating organizational culture. However, there is little empirical research in this area, and there are undoubtedly many other subtle reinforcing processes at work – all of which reinforce organizational culture, perpetuate it, and make it more resistant to management's change efforts [75, 76].

1.6.3 When organizational culture needs to change

Sometimes, the espoused organizational culture is not reflected in the organizational climate. Sometimes, the espoused culture ceases to provide the organization with any competitive advantage in a changed external environment. In these circumstances, senior management needs to identify the problem and intervene. For example, imagine that a corporation promotes a culture of safety that values the wellbeing of its members and of the consumers it serves. It genuinely believes that safety considerations are paramount and subordinate other organizational goals and behaviors. It prides itself on articulating a **safety culture** that is recognized and understood by employees and consumers alike. However, employees come to understand these cultural values as more rhetoric than reality because, in their daily work, they encounter a **safety climate** – the corporation's safety-related policies, procedures, and practices – that clearly demonstrate that safety is of little organizational importance or that, at best, it is only a peripheral concern [77–80].

Few companies, especially manufacturers of potentially hazardous products, will openly espouse a set of beliefs that ranks safety low and prioritize values related to cost reduction and risk-taking. Many might genuinely believe – at least in the boardroom, marketing department, and public relations office – that safety is the firm's primary concern. However, a rhetorical declaration does not create an organizational culture, any more than wishful thinking can transform the organizational climate. Managers, supervisors, and workers on the production line might realize that their bonuses, performance, and continuing relationship with the company all rest on cost-cutting and risk-taking expediencies that have little to do with safety and that indeed might compromise it.

The misalignment of organizational culture and organizational climate is not simply an academic issue – it can lead to an erosion of participant loyalty, commitment, and identity. If detected by senior management, misalignments can be changed. If not detected, they can potentially lead to catastrophic outcomes, for instance, in this example, when the firm's products are implicated in preventable accidents and unintended but predictable deaths. A failure to align organizational culture and organizational climate can result in reputational damage that endangers the viability of the firm in a competitive world. These outcomes are not produced by organizational culture or organizational climate – they are the outcome of both. Both organizational culture and climate need to be understood. Both need to be congruent or complementary to one another, and both need to be actively monitored and managerially changed if they are found to be dysfunctional or if they are inhibiting the growth and viability of the organization [64, 81].

1.6.4 Change interventions in organizational culture

In most cases, organizational **change management** is essentially organizational **culture management** and is initiated by the organization's senior leadership. Leadership is a very extensive area of study, and there exist multiple types and theories of leadership. However, leadership in organizations falls into two main types: (a) **supervision**, in which the main focus is directing organizational members and which can be thought of as **leading in** the organization; and (b) **strategic**, in which the focus is on the organization as an entity and which can be considered as the **leading of** organizations. Changing organizational culture is accomplished by strategic leaders, who usually possess a transformative or a visionary agenda [82–85]. The process is initially destabilizing and fraught with danger for the organization and its members. Throughout the process, leaders must clearly communicate their vision, and that shared vision "serves the function of providing the psychological safety that permits the organization to move forward" [1, p. 323].

Changing organizations and their cultures, and indeed making any significant changes in human-based systems, is informed by the now classic work of Kurt Lewin [86–88]. He advocated a sequence of "unfreeze–change–refreeze" efforts, which prepared the organization for change, initiated change, and then locked the changes into the system. Lewin's approach was directed toward bringing about profound, planned, and episodic change and not to continuous and low-level shifts. In bringing about significant episodic change, he argued that "to break open the shell of complacency and self-righteousness it is sometimes necessary to bring about deliberately an emotional stir-up" (as quoted in [89, p. 400]).

- **Unfreezing prevalent culture:** Here, the leader facilitates an organization-wide critical review of the existing culture. The purpose is to identify the cultural values and beliefs that are currently held and to see whether these are truly reflected in the organizational processes, procedures, and reward systems. The review is open-ended, but there is a clear message that the present organizational culture will have to undergo drastic change. This initial stage is disruptive and is inevitably viewed as disturbing and distressing by many organizational members who realize that they will lose power, influence, self-esteem, and perhaps even identity in the changed organization. Part of the leader's role during this phase is to convert these anxieties into a source of future-orientated motivation [88].
- **Initiating change:** Schein [1, pp. 332–334] indicates that the active change phase should have eight goals: (a) offer a compelling **positive vision** and encourage participants to appreciate that their lives will be better if they adopt the news ways of thinking that are being promulgated by senior leadership; (b) provide **formal training** at the individual, group, and unit levels to explain and demonstrate the implications associated with changing organizational thinking and culture; (c) **engage individuals** and encourage them to appreciate that it is possible to adapt to and deal with the changes that are taking place; (d) focus on the **organizational groups** (e.g., teams, project teams) that will have to respond collectively to the new cultural landscape and to operate within it; (e) provide all concerned with the **time to learn**, practice, and demonstrate their understanding of the new cultural values; (f) identify, promote, and reward individual and group **role models** who demonstrate that they have adopted the new culture value system and that they have changed their performance and practice; (g) provide **support groups**, organizational spaces, and safe places in which questions about change can be raised, frustrations vented, and reservations shared and addressed; and (h) institute new organization-wide **reward systems** that clearly, convincingly, and consistently reflect the new ways of thinking and the new cultural values.
- **Refreezing changed culture:** This final phase allows the new values and beliefs that have been promoted to become permanent fixtures in the altered landscape of organizational culture. The permanence of the altered culture must be acknowledged by senior leadership, but more importantly the new established culture system must be clear to all organizational members. It is important that verification of the shift in culture should come from both **external stakeholders** who deal with the organization and from its **internal membership**. When the new culture has been confirmed and reinforced by these groups, "the new beliefs and values gradually stabilize, become internalized, and, if they continue to work, become taken-for-granted assumptions until new disconfirmations start the change process all over again" [1, p. 328].

Significant change within an organization needs to be a managed process and requires considerable skill and support from the leader. Leaders need to possess a clear vision for the organization, the technical ability to initiate and sustain the change process, and the personal capacity to provide support and encouragement and resolve the multiple tensions, discontent, and anxiety that inevitably accompany significant episodic change. Successful change is often the outcome of a thoughtful, creative, and engaging process in which change is constructively negotiated rather than imposed. Leaders must appreciate this and possess the skills and competencies to inspire and support their followers in this process. Negotiating change usually requires a negotiating culture, but negotiating change is equally a matter of leadership. As Basu observes, "both leadership and culture are critical to understanding organizations.... [T]o make them effective, managers cannot ignore one or be complacent about the other" [90, p. 41].

1.7 Conclusion

For the undergraduate and graduate business student, organizational culture and its close ally organizational climate are often seen as remote and peripheral subjects [50, 64, 81]. However, for practicing managers and leaders, issues of culture and climate become very apparent and particularly powerful in all organizational contexts – including those centered on engineering, technology, and science [91–94]. Within the organization, it is impossible for individuals to succeed or advance professionally without understanding the role of organizational culture and the ways in which cultural values are embedded in the workplace. Organization may be described in multiple ways, but fundamentally they are dynamic **social arrangements**, and – as with all human and social contexts – their cohesiveness, behavior, and existence all hinge on the cultural expectations and norms that they have created.

This chapter has attempted to provide a short but comprehensive introduction to the key issues that come into play when organizational culture is recognized. However, it is only an introduction. It may help the reader to become more sensitive to the organizational forces, challenges, and opportunities connected with organizational culture and to apply that sensitivity to other business and management situations. Business and management education is diffuse and draws upon a wider range of fields that might at first glance seem unrelated. However, this is how management is taught because this is how management – as a complex, varied, and socially based practice – is conducted.

This chapter might accomplish two other goals. First, it might prompt readers to conduct their own assessment of the organizational culture that exists in their educational, work, or professional contexts. If, as has been suggested, culture is critical for personal success within organizations, then it is critical for readers to more accurately and thoughtfully understand the culture that surrounds them and in which they are embedded – even though that cultural dimension might presently be unknown or unconsidered.

Second, after reading this chapter readers might wish to consolidate and expand their understanding or organizational culture more generally. If so, the best starting point is to read the seminal text, Edgar Schein's [1] *Organizational Culture and Leadership*, which has informed much of this chapter. There are good reasons why this has become the classic text in the field and why it continues to shed light on both old and new organizational problems. Indeed, the reader will have noted that this chapter began with an epigraph taken from Schein's work. It might therefor be appropriate to conclude with another of his observations, this one recorded more recently in a discussion with a group of leading organizational culture scholars. After a lifetime of engagement with organizational culture, Schein observes:

> In conclusion, I believe the concept of culture can be an important and meaningful construct in organizational psychology and sociology but only if we capture in the definition both the multi-level complexity and dynamic evolutionary quality of the concept. [57, p. 112]

Knowledge revision

Review statements (true or false)

The following statements may be helpful for reviewing this chapter. Each statement requires a true or false response. Answers, together with explanations, can be found after the reference section.

1. Organizational culture may be an interesting academic study, but it has little value or practical application for the manager.
2. Since most organizations are embedded in a defined nation-state, the culture that develops in an organization more or less mirrors the surrounding national culture.
3. A clear understanding of underlying culture can be gained by analyzing the visible artifacts and observable structures and processes of the organization.
4. The deeper assumptions and values of organizational culture, which might also be referred to as shared tacit assumptions, are relatively fluid and easily changed.
5. Organizational climate is the formal statement of how the organization describes its key assumptions, beliefs, and values.
6. Organizational culture and organizational climate are two important aspects of the organization, but in most cases they are really the same thing.
7. Organizational culture comes into being in a fairly random and serendipitous manner, usually without any clear point of origin.
8. Organizational culture is transmitted through a process of internal socialization and through selective recruitment and hiring practices that attract and retain individuals who will most likely identify with the culture.

9. In almost every case when there is a need for a change in organizational culture, the recognition comes too late and the necessary change cannot be initiated.
10. The **initiating change** phase of the three-stage organizational change model is the most complex and risky.

Please see the answers at the end of the chapter.

Bibliography

[1] Schein EH (2004). Organizational culture and leadership, 3rd edn. San Francisco, CA: Jossey-Bass.
[2] Cox S, King D (2006). Skill sets: An approach to embed employability in course design. Education and Training 48(4):262–274.
[3] Yorke M, Knight PT (2006). Curricula for economic and social gain. Higher Education 51(4):565–588.
[4] Pegg A, Waldock J, Hendy-Isaac S, Lawton R (2012). Pedagogy for employability. York, UK: Higher Education Academy. Accessed, July 27, 2017 at https://www.heacademy.ac.uk/sites/default/files/pedagogy_for_employability_update_2012.pdf
[5] Cai Y (2013). Graduate employability: A conceptual framework for understanding employers' perceptions. Higher Education 65(4):457–469.
[6] Neimeyer GJ, Taylor JM, Rozensky RH, Cox DR (2014). The diminishing durability of knowledge in professional psychology: A second look at specializations. Professional Psychology, Research and Practice 45(2):92–98.
[7] Simpson B (2016). Algorithms or advocacy: Does the legal profession have a future in a digital world? Information & Communications Technology Law 25(1):50–61.
[8] Dorsett R, Lui S, Weale M (2010). Economic benefits of lifelong learning. Research Paper No. 13. London, UK: Centre for Learning and Life Chances in Knowledge Economies and Societies.
[9] Love D (2011). Lifelong learning: Characteristics, skills, and activities for a business college curriculum. Journal of Education for Business 86(3):155–162.
[10] Naudé, L (2011). Lifelong learning discourses: An argument for co-emergence. International Journal of Continuing Education & Lifelong Learning 4(1):73–90.
[11] Andrew J, Higson H (2008). Graduate employability, "soft" skills versus "hard" business knowledge: A European study. Higher Education in Europe 33(4):411–422.
[12] Klause P (2007). The hard truth about soft skills: Workplace lessons that smart people wish they'd learned sooner. New York, NY: Harper Collins.
[13] Schneider WE (1999). The reengineering alternative: A plan for making your current culture work. New York, NY: McGraw Hill.
[14] Trice HM, Beyer JM (1993). The cultures of work organizations. Englewood Cliffs, NJ: Prentice-Hall.
[15] Williams R (1973). Keywords: Vocabulary of culture in society. Oxford, UK: Oxford University Press.
[16] Spencer-Oatey H (2012). What is culture? A compilation of quotations. Warick, UK: Global PAD Open House. Accessed, July 27, 2017 at http://www2.warwick.ac.uk/fac/soc/al/globalpad/openhouse/interculturalskills/global_pad_-_what_is_culture.pdf
[17] Apte M (1994). Language in sociocultural context. In Asher RE (ed). The encyclopedia of language and linguistics, 4th edn. (pp. 2000–2010). Oxford, UK: Pergamon Press.

[18] Spencer-Oatey H (2008). Culturally speaking: Culture, communication and politeness theory, 2nd edn. London, UK: Continuum.
[19] Bird A, Mendenhall ME (2016). From cross-cultural management to global leadership: Evolution and adaptation. Journal of World Business 51(1):115–126.
[20] Hofstede G (1984). Culture's consequences: International differences in work-related values. Newbury Park, CA: Sage.
[21] Hofstede G (2001). Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations. London, UK: Sage.
[22] Bird A, Osland J (2004). Global competencies: An introduction. In Lane H, Maznevksi M, Mendenhall ME, McNett J (eds.), The Blackwell handbook of global management: A guide to managing complexity (pp. 57–80). London, UK: Blackwell.
[23] Orr LM, Hauser WJ (2008). A re-inquiry of Hofstede's cultural dimensions: A call for 21st century cross-cultural research. The Marketing Management Journal 18(2):1–19.
[24] Osland JS, Bird A (2000). Beyond sophisticated stereotyping: Cultural sensemaking in context. Academy of Management Executive 14(1):65–77.
[25] De Mooij M, Hofstede G (2010). The Hofstede model: Applications to global branding and advertising strategy and research. International Journal of Advertising 29(1):85–110.
[26] Clearly Cultural: Geert Hofstede cultural dimensions. Accessed, July 27, 2017 at www.clearlycultural.com/geert-hofstede-cultural-dimensions/
[27] Nguyen NTD (2013). Exploring cultural differences in implementing international technology transfer in the case of Japanese manufacturing subsidiaries. Contemporary Management Research 9(1):13–34.
[28] Shore B, Cross BC (2005). Exploring the role of national culture in the management of largescale international science projects. International Journal of Project Management 23(1):55–64.
[29] Škerlavaj M, Su C, Huang M (2013). The moderating effects of national culture on the development of organisational learning culture: A multilevel study across seven countries. Journal for East European Management Studies 18(1):97–134.
[30] Gulev RE (2009). Are national and organizational cultures isomorphic? Evidence from a four country comparative study. Managing Global Transitions 7(3):259–279. Accessed, July 27, 2017 at http://www.fm-kp.si/zalozba/ISSN/1581-6311/7_259-279.pdf
[31] Reed EN, Suresh G (2003). Do organizational cultures replicate national cultures? Isomorphism, rejection and reciprocal opposition in the corporate values of three countries. Organizational Studies 24(7):1115–1151.
[32] Desphandé, R, Farley JU (2004). Organizational culture, market orientation, innovativeness, and firm performance: An international research odyssey. International Journal of Research in Marketing 21(1):3–22.
[33] Eisend M, Evanschitzky H, Gilliland DI (2016). The influence of organizational and national culture on new product performance. Journal of Product Innovation Management 33(3):60–276.
[34] Leidner DE, Kayworth T (2006). A review of culture in information systems research: Toward a theory of information technology culture conflict. MIS Quarterly 30(2):357–399.
[35] Büschgens T, Bausch A, Balkin D (2013). Organizational culture and innovation: A meta-analytic review. Journal of Product Innovation Management 30(4):1–19.
[36] Cameron K, Quinn R (1999). Diagnosing and changing organizational culture: Based on the competing values framework. Reading, MA: Addison-Wesley.
[37] Martins E, Terblanche F (2003). Building organizational culture that stimulates creativity and innovation. European Journal of Innovation Management 6(1):64–74.

[38] Naranjo-Valencia JC, Jiménez-Jiménez D, Sanz-Valle R (2015). Studying the links between organizational culture, innovation, and performance in Spanish companies. Revista Latinoamericana de Psicología 48(1):30–41.
[39] Kallio TJ, Kallio K-M, Blomberg AJ (2015). Physical space, culture and organisational creativity: A longitudinal study. Facilities 33(5/6):389–411.
[40] Oblinger DG (ed) (2006). Learning spaces. EDUCAUSE. Accessed, July 27, 2017 at net.educause.edu/ir/library/pdf/PUB7102.pdf
[41] Sailer K (2014). Organizational learning and physical space: How office configurations inform organizational behavior. In Antal AB, Meusburger P, Suarsana L (eds.), Learning organizations: Extending the field (pp. 103–127). Dordrecht, the Netherlands: Springer.
[42] Islam G, Zyphur MJ (2009). Rituals in organizations: A review and expansion of current theory. Group Organization Management 34(1):114–139.
[43] Smith ACT, Stewart B (2011). Organizational rituals: Features, functions and mechanisms. International Journal of Management Reviews 13(2):113–133.
[44] Erhardt N, Martin-Rios C, Heckscher C (2016). Am I doing the right thing? Unpacking workplace rituals as mechanisms for strong organizational culture. International Journal of Hospitality Management 59:31–41.
[45] Rafaeli A, Worline M (2000). Symbols in organizational culture. In Ashkanasy N, Wilderom C, Peterson M (eds.), Handbook of organizational culture and climate (pp. 71–85). Thousand Oaks, CA: Sage.
[46] Alvesson M, Berg PO (1992). Corporate culture and organizational symbolism: An overview. New York, NY: Walter de Gruyter.
[47] Gagliardi P (ed) (1990). Symbols and artifacts: Views of the corporate landscape. New York, NY: Walter de Gruyter.
[48] Augustsson F, Larsson M (2012). Managing the corporate brand: A study of the corporate brand manager in theory and practice. Unpublished M.Sc. thesis, Lund University, Sweden. Accessed, July 27, 2017 at http://lup.lub.lu.se/student-papers/record/2740428/file/2740432.pdf
[49] Urde M (2013). The corporate brand identity matrix. Journal of Brand Management 20(9):742–761.
[50] Schneider B, Ehrhart MG, Macey WH (2011). Perspectives on organizational climate and culture. In Zedeck S (ed). APA handbook of industrial and organizational psychology: Vol. 1. Building and developing the organization (pp. 373–414). Washington, DC: American Psychological Association.
[51] Martin SR (2016). Stories about values and valuable stories: A field experiment of the power of narratives to shape newcomers' actions. Academy of Management Journal 59(5):1707–1724.
[52] Riketta M (2005). Organizational identification: A meta-analysis. Journal of Vocational Behavior 66(2):358–384.
[53] van Knippenberg D, Sleebos E (2006). Organizational identification versus organizational commitment: Self-definition, social exchange, and job attitudes. Journal of Organizational Behavior 27(5):571–584.
[54] Breaugh JA (2012). Employee recruitment. Current knowledge and suggestions for future research. In Schmitt N (ed). The Oxford handbook of personnel assessment and selection (pp. 68–87). New York, NY: Oxford University Press.
[55] Catanzaro D, Moore H, Marshall TR (2010). The impact of organizational culture on attraction and recruitment of job applicants. Journal of Business and Psychology 25(4):649–662.
[56] Porter TJ (2013). Employees' responses to the mismatch between organizations' espoused values and basic assumptions about organizational culture. Unpublished Ph.D. Thesis, University

of St. Thomas, Minnesota. Accessed, July 27, 2017 at http://ir.stthomas.edu/cgi/viewcontent.cgi?article=1025&context=caps_ed_orgdev_docdiss
[57] Schein E (2015). Opinions: All about culture. Journal of Business Anthropology 4(1):106–115. Accessed, July 27, 2017 at rauli.cbs.dk/index.php/jba/article/view/4792/5223
[58] Martin J (2002). Organizational culture: Mapping the terrain. Thousand Oaks, CA: Sage.
[59] Argyris C, Schön DA (1974). Theory in practice: Increasing professional effectiveness. San Francisco, CA: Jossey-Bass.
[60] Khandelwal KA, Mohendra N (2010). Espoused organizational values, vision, and corporate social responsibility: Does it matter to organizational members? The Journal for Decision Makers 35(3):19–35.
[61] Howell A, Kirk-Brown A, Cooper B (2012). Does congruence between espoused and enacted organizational values predict affective commitment in Australian organizations? The International Journal of Human Resource Management 23(4):731–747.
[62] Schultz PW, Nolan JM, Cialdini RB, Goldstein NJ, Griskevicius V (2007). The constructive, destructive, and reconstructive power of social norms. Psychological Science 18(5):429–434.
[63] Schneider B, Ehrhart MG, Macey WH (2013). Organizational climate and culture. Annual Review of Psychology 64:361–388.
[64] Schein EH (2000). Sense and nonsense about culture and climate. In Ashkanasy NM, Wilderom CPM, Peterson MF (eds.), Handbook of organizational culture and climate, (pp. xxiii–xxx). Thousand Oaks, CA: Sage.
[65] Rajan RG (2012). Presidential address: The corporation in finance. Journal of Finance 67(4):1173–1217.
[66] Nelson T (2003). The persistence of founder influence: Management, ownership, and performance effects at initial public offering. Strategic Management Journal 24(8):707–724.
[67] Swann WB, Polzer JT, Seyle DC, Ko SJ (2004). Finding value in diversity: Verification of personal and social self-views in diverse groups. Academy of Management Review 29(1):9–27.
[68] Giberson TR, Resick CJ, Dickson MW (2005). Embedding leader characteristics: An examination of homogeneity of personality and values in organizations. Journal of Applied Psychology 90(5):1002–010.
[69] Judge TA, Cable DM (1997). Applicant personality, organizational culture, and organization attraction. Personnel Psychology 50(2):359–394.
[70] Stamarski CS, Son Hing LS (2015). Gender inequalities in the workplace: The effects of organizational structures, processes, practices, and decision makers' sexism. Frontiers in Psychology 6:1400.
[71] Bauer TN, Bodner T, Erdogan B, Truxillo DM, Tucker JS (2007). Newcomer adjustment during organizational socialization: A meta-analytic review of antecedents, outcomes, and methods. Journal of Applied Psychology 92(3):707–721.
[72] DiMaggio PJ, Powell WW (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American Sociological Review 48(2):147–160.
[73] Kerr J, Slocum JW, Jr. (2005). Managing corporate culture through reward systems. Academy of Management Executive 19(4):130–138.
[74] Kondra AZ, Hurst DC (2009). Institutional processes of organizational culture. Culture & Organization 15(1):39–58.
[75] Ogbonna E, Harris LC (2014). Organizational cultural perpetuation: A case study of an English Premier League football club. British Management Journal 25(4):667–686.
[76] Kelman HC (2006). Interests, relationships, identities: Three central issues for individuals and groups in negotiating their social environment. Annual Review of Psychology 57:1–26.

[77] Neal A, Griffin MA (2006). A study of the lagged relationship among safety climate, safety motivation, safety behavior, and accidents at the individual and group levels. Journal of Applied Psychology 91(4):946–953.
[78] Neal A, Griffin MA, Hart PM (2000). The impact of organizational climate on safety climate and individual behavior. Safety Science 34(1–3):99–109.
[79] Petitta L, Probst TM, Barbaranelli C, Ghezzi V (2017). Disentangling the roles of safety climate and safety culture: Multi-level effects on the relationship between supervisor enforcement and safety compliance Accident Analysis and Prevention 99(A):77–89.
[80] Zohar D (2003). Safety climate: Conceptual and measurement issues. In: Quick J, Tetrick LE (eds.), Handbook of occupational health psychology (pp. 123–142). Washington, DC: American Psychological Association.
[81] Schneider B, González-Romá V, Ostroff C, West MA (2017). Organizational climate and culture: Reflections on the history of the constructs in the Journal of Applied Psychology. Journal of Applied Psychology 102(3):468–482.
[82] Boal KB (2004). Strategic leadership. In Goethals GR, Sorenson GJ, Burns JM (eds.), Encyclopedia of leadership (pp. 1497–504). Thousand Oaks, CA: Sage.
[83] Boal KB, Hooijberg R (2000). Strategic leadership research: Moving on. The Leadership Quarterly 11(4):515–549.
[84] Hooijberg R, Hunt JG, Antonakis J, Boal K (2007). Introduction. In Hooijberg R, Hunt JG, Antonakis J, Boal K, Lane N (eds.), Being there even when you are not: Leading through strategy, structures, and systems (pp. 1–9). Bingley, UK: Emerald Group Publishing.
[85] Hooijberg R, Hunt JG, Antonakis J, Boal K (2007). Leading through strategy, structures and systems: Concluding thoughts. In Hooijberg R, Hunt JG, Antonakis J, Boal K, Lane N (eds.), Being there even when you are not: Leading through strategy, structures, and systems (pp. 289–300). Bingley, UK: Emerald Group Publishing.
[86] Lewin K (1951). Field theory in social science. New York, NY: Harper & Row.
[87] Weick KE, Quinn RE (1999). Organizational change and development. Annual Review of Psychology 50:361–386.
[88] Schein EH (1996). Kurt Lewin's change theory in the field and in the classroom: Notes toward a model of managed learning. Systems Practice 9(1):27–47.
[89] Marshak RJ (1993). Lewin meets Confucius: A review of the OD model of change. Journal of Applied Behavioral Science 29(4):393–415.
[90] Basu KK (2015). The leader's role in managing change: Five cases of technology-enabled business transformation. Global Business and Organizational Excellence 34(3):28–42.
[91] Baron JN, Hannan MT (2002). Organizational blueprints for success in high-tech start-ups: Lessons from the Stanford project on emerging companies. California Management Review 44(3):8–36.
[92] Chatman JA (2014). Culture change at Genentech: Accelerating strategic and financial accomplishments. California Management Review 56(2):113–129.
[93] Chatman JA, Cha SE (2003). Leading by leveraging culture. California Management Review 45(4):20–34.
[94] Tucker AL, Edmondson AC (2003). Why hospitals don't learn from failures: Organizational and psychological dynamics that inhibit system change. California Management Review 45(2):55–72.

Answers to review statements

1. **False**. An understanding of culture helps people perform successfully and advance their careers. A deeper appreciation of culture is also essential for managers who wish to change how the organization operates and to resolve problems of internal integration and external adaptation in an ever-changing social and economic world.
2. **True**. National culture has a profound impact on organizational culture because the organization's founders usually belonged to that culture. In multinational settings, there is often a conflict between the national culture of organizational members (in different foreign units) and the organizational culture (domestic headquarters). Organizational culture experienced in foreign units is moderated by national perspectives. One of the methodological conundrums of Hofstede's [20, 21] studies is that the different national participants he selected belonged to the **same** global organization (IBM). Apparently, the implication was that participants would identify more strongly with their national cultures than their shared corporate one.
3. **False**. It is true that considerable insight into organizational culture can be gained by considering its artifacts and visible structures and processes. However, especially if you are not actively engaged in the organization's culture process, it is all too easy to focus on isolated fragments, project your own patterns, and construct a selective and flawed system of symbolic meaning.
4. **False**. The shared tacit assumptions constitute the underpinning values and beliefs of the organization's culture system. They remain present, uncontroversial, and often unconsidered because they have worked well in the past. In time, these deep-seated assumptions may shift or be replaced through a process of evolution and adaption, but they are usually resistant to sudden change or purposeful manipulation.
5. **False**. Espoused culture is how the organization describes its fundamental assumptions, beliefs, and values. Many organizational members, especially senior management, may genuinely believe that this culture permeates the whole organization and is understood and acted upon by everyone. Organizational climate, however, is the understanding of the fundamental values that those inside the organization gain from their actual experiences of the organization's policies, procedures, and processes.
6. **False**. Organizational culture and organizational climate are two distinct perspectives that are related but often not congruent, which can be the source of many operational problems. To be effective – and to operate as a cohesive and productive force – culture as espoused by the organization should align with, or at least complement, the climate as experienced by those within the organization.
7. **False**. Organizational culture can change over time and indeed may have to change significantly to allow the organization to endure, adapt competitively, and suc-

ceed. However, the core values of its culture can usually be traced back to its founders, who instituted distinctive and appropriate cultural values that allowed the organization to survive its original and (usually) precarious foundation.

8. **True**. Both socialization and selective recruitment are ways of perpetuating organizational culture. In the short run, these produce cultural homogeneity that can reduce ambiguities and lead to more effective coordination and performance. However, in the long run, increased homogeneity of organizational culture can result in groupthink, the conservation of conformity, and the inability to recognize, question, or reform inappropriate or dysfunctional cultures.
9. **False**. Undoubtedly there are organizations that do not understand that their culture is inappropriate, and they pay the price for that through market failure and bankruptcy. However, the fundamental role of organizational leadership is to continuously scan both external and internal environments and to determine whether their organization's present culture is appropriate and, if it is not, to undertake proactive change.
10. **True**. The **initiating change** phase is particularly problematic because it deliberately introduces instability, confusion, and discontent into the organization. There is a truism that "all change is resisted" because change can redistribute power and privilege, alter expectations and rewards, and challenge certainty and identity. This can produce acute personal discomfort, anxiety, and fear, even though those involved may believe that the result of change will benefit the organization as a whole.

Filomena Antunes Brás

2 Corporate social responsibility reporting and sustainability

Abstract: At the end of each fiscal year, companies prepare management reports for their stakeholders. This chapter aims to describe and discuss the concepts of corporate social responsibility (CSR) and sustainability, to present the evolution of the concept and field of study, identifying two major branches of CSR – the theories and rationales behind sustainability reporting and users of CSR/sustainability reports – and to present the main frameworks in which CSR/sustainability reporting is conducted.

2.1 Introduction

Every year, at the end of the economic and financial year, companies are required by law to fill reports on their business activity. This reporting includes mainly financial statements (mandatory) and a report on how management used company resources to create wealth for shareholders. This is the primary purpose of management: to generate wealth for company owners. But is this really the primary purpose of management, to create wealth for shareholders?

For a long time, the idea existed that business enterprises should only be accountable to their shareholders. However, since the 1960s, a movement of social and environmental consciousness has led companies to be accountable to society beyond making profits for shareholders [1]. Indeed, a company's level of governance and responsibility has emerged as a significant indicator of its overall business health [2]. That is referred to as corporate social responsibility (CSR). Nowadays, it is impossible to pick up a magazine or newspaper, watch TV, or search the Internet without chancing upon a discussion of how companies are living up to their CSR. Indeed, many companies throughout the world publish reports highlighting their economic, environmental, and social performance [3]. It is now generally accepted that in the short term a company might experience growth while inflicting some harm on society and the environment, but in the long term this is impossible [4]. The concept of sustainable development has emerged. It is largely concerned with organizing and managing human activities in such a way that they satisfy physical and psychological needs without compromising the ecological, social, or economic base that enables these needs to be met [4].

CSR as a field of study has undergone a journey that is almost unique in the pantheon of ideas in the management literature [5] and in the accounting literature. Since the 1960s, the scholarly literature has reflected the greater attention researchers have been devoting to the issue of what precisely CSR is. To respond to this question we need to ask what purpose businesses serve, what contributions they make to society [5], and how they report on CSR [3]?

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The term CSR is still in popular use, even though competing, complementary, and overlapping concepts such as corporate citizenship, business ethics, stakeholder management, and sustainability [1] have also come into use. Indeed, CSR has become an established umbrella term that embraces both the descriptive and normative aspects of the field and underlines everything that firms achieve in the realm of social responsibility in terms of policies, practices, and results [1]. Although CSR and sustainability are two distinct concepts, for the purposes of this chapter, they will be used interchangeably.

This chapter aims to describe and discuss the concepts of CSR and sustainability, to present the evolution of the concept and field of study, identifying two major branches of CSR – the theories and rationales behind sustainability reporting and the users of CSR/sustainability reports – and to present the main frameworks in which CSR/sustainability reporting is conducted.

2.2 The concept of CSR and sustainability

Some of the economic benefits from the development and growth of economies have been accompanied by social and environmental costs. Indeed, it should be borne in mind that many social and economic costs of economic growth are inseparable from that growth and often have a causal relationship with it. For example, the growth of large plantations in developing countries may have a detrimental effect on environmental biodiversity but may improve social conditions for the local population [2].

CSR has been defined in a variety of ways, and its concept has been evolving for decades. For example, the seminal 1953 book by Howard R. Bowen, *Social Responsibilities of the Businessman*, which some authors claim marked the beginning of the modern era of social responsibility [6], defined CSR as the set of responsibilities to society that businessmen/women are expected to perform in a reasonable way. In the 1960s Keith David stated that CSR referred to "businessmen's decision and action taken for reasons at least partially beyond the firm's direct economic or technical interest," William Frederick asserted that businesses' resources should be used for broad social goals, and Joseph McGuire posited that CSR urged corporations to assume certain responsibilities to society that extend beyond their economic and legal obligations (cited in [1, p. 87]).

The 1970s were the decade in which "corporate social responsibility, responsiveness, and performance became the center of discussions" (cited [1, p. 87]). This led to a split within the CSR concept into two branches. One branch became devoted to emphasizing that companies should assume a socially responsible posture. The other branch was focused on the act of responding to or achieving a responsive posture toward society [1]. Carroll's conceptual model of corporate performance considered four different categories of CSR, which included businesses' fulfillment of economic, legal, ethical, and discretionary/philanthropic responsibilities. This four-part definition of CSR has been formulated as follows: "The social responsibility of business encompasses the economic, legal, ethical, and discretionary [later referred to as philanthropic] expectations that society has of organizations at a given point in time" [6].

The 1980s saw more empirical research and fewer new concepts of CSR. In this period, research was directed at pursuing the link of CSR and corporate financial performance. The business case for CSR dates to this time [1].

The 1990s and 2000s became the era of global corporate citizenship (Frederick cited by [1]), where concerns about sustainability and sustainable development emerged and became part of the CSR concept.

The concept of sustainability has its roots in forest engineering and requires that the harvest of trees should not exceed the growth of new trees, meaning society should not use more natural resources than the natural environment can regenerate [7]. Sustainable development, as defined by the Brundtland Commission (United Nations World Commission on Environment and Development – UN-WCED), "Sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains two key concepts: the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs" [8]. This means that sustainable development is also about equity – both intragenerational and intergenerational – because the statement claims that it means meeting the needs of the present without compromising the ability of future generations to meet their own needs. How can this be achieved? [9]

The concept of sustainability is usually divided into two main categories: weak and strong sustainability [7]. Weak sustainability is associated with the idea that a community can use its natural resources and degrade the natural environment as long it is able to compensate for the loss with human (skills, knowledge, and technology) and human-made (buildings, machinery, equipment) capital. In this category, in the extreme case, natural and human-made capital can be considered equivalent because investment in either form of capital can generate the same income streams. This category has been seen by business as one justification for the continued use of nonrenewable resources if human-made capital can be substituted. On the other hand, strong sustainability argues for the conservation of nonrenewable resources (e.g., biodiversity) on the basis of nonsubstitutability, irreversibility, equity, and diversity. Its argument is that there are large uncertainties about the possibility of the substitution between natural and human-made capital. Uncertainties exist at the technical level, and even where there is a consensus about the technology itself, risks for future generations mean that there can be no right or wrong view [7]. Under strong sustainability, the concern is that environmental accounting is irredeemably contaminated by its hidden (ideological) assumptions and is "open to capture" by those with a "vested interest in down-playing ecological impact" (Maunders and Burritt cited in [7]). At a minimum, strong sustainability reminds managers that they have to be aware of a broader set of perspectives about the relative importance of business in society [7].

Poverty and ecological degradation exist for many reasons related to particular times and places, but it seems there are also systematic reasons behind these phenomena, namely, as a result of the dominant objective of organizing economies around the maximization of economic growth, which usually means energy- and material-intensive production and exploitative social relations, which are socially and environmentally unsustainable [4].

The definition proposed by UN-WCED was very important since it contributed to the acceptance of the meaning of sustainability and sustainable development [10].

Sustainable growth and sustainable development do not entirely match the biological approach based on the capacity of the planet or specific ecosystems to sustain life. However, a company is a social system whose survival is also a result of its economic performance. Sustainable development forces environmental groups, businesses, and governments to recognize that environmental factors may have a long-term detrimental impact on economic performance and that these factors were not given due consideration in the past [7].

An accepted and often-referenced definition of CSR is that proposed by the Commission of European Communities [11, p. 6]:

> A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. Being socially responsible means not only fulfilling legal expectations but also going beyond compliance and investing "more" into human capital, the environment and relations with stakeholders.

CSR represents a company's voluntary compromise with society in performing its business operations in such a way that it contributes to the development of society while at the same time preserving the natural environment. This voluntary compromise also means companies have a responsibility to the people and social groups with which they interact.

Gray and Milne (cited in [9, p. 52]) have questioned the concept of CSR and whether corporations can, in fact, be socially responsible when it so obviously runs counter to the fundamental self-interest of business, shareholder demands, and the law that governs corporations and their directors. Sometimes it can be nothing other than insincere because sometimes it might be illegal to place stakeholders on an equal footing with shareholders [9].

Today it is common to read about the so-called business case for CSR. This refers to the arguments or rationales supporting why businesses in general should accept and advance the CSR cause [1]. The business case is concerned with the primary question: What do the business community and organizations get out of CSR, that is, how do they benefit tangibly from engaging in CSR policies, activities, and practices? For the most part, the business case refers to the bottom-line reasons for businesses to pursue CSR strategies and policies [1].

In sum, although there are many definitions of CSR, they all share the same features, though with different emphases: companies have an obligation beyond shareholders' considerations; CSR is a strategic response of a company that must sustain and develop over time, and these principles must guide company performance and behavior. Finally, the company must match all its stakeholders' needs, not just those of shareholders. But where do we find and how do we follow this strategic response of a company to its CSR? One way is to follow what companies publish in their annual reports or in their CSR/sustainability report.

A sustainability report is a report published by a company or organization about the economic, environmental, and social impacts of its everyday activities. A sustainability report also presents the organization's values and governance model and demonstrates the link between its strategy and its commitment to a sustainable global economy. A sustainability report is a key platform for communicating sustainability performance and impacts – whether positive or negative. Sustainability reporting can be treated as synonymous with other terms for nonfinancial reporting: triple-bottom-line reporting, CSR reporting, and more. It is also an intrinsic element of integrated reporting, a more recent development that combines the analysis of financial and nonfinancial performance [12].

2.3 Brief overview of historical development of CSR reporting

The roots of CSR certainly extend back to before 1960. Historically, there are very strong links between economic activities, facilitated by the accounting process, and social effects. In the past, there was little recognition that the activities of business organizations could be socially harmful. Companies were regarded as meeting the needs of the majority of people. Problems such as dangerous products, corruption, fraud, and unsafe labor practices were regarded as financial problems affecting profitability, which had wider implications only insofar as the financial viability of the company might be threatened [2].

However, this perception has changed with reflections on company reporting. The designation CSR appears for the first time in the middle of the twentieth century in the USA; thus, the concept it in the literature has its roots in Western societies. The responses to the Vietnam War, the peace movements, and social movements such as civil rights, women's rights, consumers' rights, and environmentalism, which were very active in the 1970s, are credited with launching the movement toward satisfying public demands for increased CSR [1, 2]. Thus, the foundation for CSR was being laid by a quickly changing social environment and pressures from others, especially activists, to adopt CSR perspectives, attitudes, practices, and policies [1].

In the 1960s and 1970s, the CSR concept evolved primarily through academic contributions in the literature and the slowly emerging realities of business practices [1]. During this period of time, people started to question the purpose of companies and their responsibility in terms of becoming involved in community affairs. People became social conscious and recognized that companies had responsibilities toward their communities. At this time, there was also an absence of any coupling of social responsibility with financial performance, that is, companies engaged in CSR activities did not expect any specific returns from carrying out those activities [1].

This is why, although CSR concerns date back to the 1960s, it is only since the 1990s that public disclosure information about CSR and the social and environmental impacts of business operations have become widespread among companies, at a time when a number of large companies made considerable advances in reporting aspects of their environmental impact [3]. These disclosures were disclosed in annual reports along with the financial reporting. The purpose was to publicize the environmental and social policies, practices, or impacts of business operations.

Today, CSR reporting has evolved, and the number of organizations that report on their CSR activities has increased; in adition, CSR reporting itself has become more extensive, and often this reporting is done in separate, standalone social and environmental reports (with a summary of these disclosures being provided in annual reports) [3].

The business case for CSR refers to the so-called business justification and rationale, that is, the specific benefits to businesses in an economic and financial (bottom-line) sense that would flow from CSR activities and initiatives. In some cases, the effect of CSR activities on firm financial performance may be seen clearly and directly. In other cases, however, the effect of CSR activity on firm performance may only be seen through the understanding of mediating variables and situational circumstances [1].

In other words, the business case for CSR refers to the arguments that provide a rational justification for CSR initiatives from a primarily corporate economic/financial perspective. Business case arguments contend that firms that engage in CSR activities will be rewarded by the market in economic and financial terms. A narrow view of the business case justifies CSR initiatives when they produce direct and clear links to firm financial performance. Mostly, the narrow view of the business case focuses on immediate cost savings. By contrast, the broad view of the business case justifies CSR initiatives when they produce direct and indirect links to firm performance. The advantage of the broad view over the narrow view is that it allows the firm to benefit from CSR opportunities. The broad view of the business case for CSR enables the firm to enhance its competitive advantage and create win-win relationships with its stakeholders, in addition to realizing gains from the cost and risk reduction and legitimacy and reputation benefits that are realized through the narrow view [1].

Various questions have framed this search for the business case: Can a firm really do well by doing good? Is there a return on investment in CSR? What are the bottom-line benefits of socially responsible corporate performance? Is corporate social performance positively related to corporate financial performance? It has been argued that, in business practitioner terms, a “business case” is “a pitch for investment in a project or initiative that promises to yield a suitably significant return to justify the expenditure" [13, p. 84]. That is, can companies perform better financially by addressing both their core business operations and their responsibilities to the broader society [13]?

Kuruccz, Colbert, and Wheeler [13] identified four types of business case for CSR: (1) cost and risk reduction (optimization subject to constraints), (2) competitive advantage (adapting and leveraging opportunities), (3) reputation and legitimacy (building a responsible brand), and (4) synergistic value creation (seeking win-win outcomes).

Cost and risk reduction arguments posit that CSR may allow a firm to realize tax benefits or avoid strict regulation, which would lower its cost. The firm may also lower the risk of opposition from its stakeholders through CSR activities. Legitimacy and reputation arguments hold that CSR activities may help a firm strengthen its legitimacy and reputation by demonstrating that it can meet the competing needs of its stakeholders while at the same time operating profitably. A firm, therefore, would be perceived as a member of its community and its operations would be sanctioned. Competitive advantage arguments contend that, by engaging in certain CSR activities, a firm may be able to build strong relationships with its stakeholders and garner their support in the form of lower levels of employee turnover, access to a higher talent pool, and customer loyalty. Accordingly, the firm will be able to differentiate itself from its competitors. Synergistic value creation arguments hold that CSR activities may present opportunities for a firm that would allow it to fulfill the needs of its stakeholders and at the same time pursue its profit goals. The pursuit of these opportunities is possible only through CSR activities. Growing support for the business case among academic and practitioners is evident [1, 13].

While acceptance of the arguments for the business case for CSR has been growing, it is worth noting some of its criticisms and limitations. For example, consumers may not have the ability to support companies engaging in CSR activities owing to their limited power in the marketplace. Accordingly, CSR initiatives are not rewarded, and the business case for CSR does not hold. Therefore, one possible solution is that policymakers empower consumers by providing them with more information through mandatory reporting on social and environmental performance and the development of a "comprehensive social or CSR" label [1]. Although many authors wished for a straight positive link between CSR and performance, in practice that may not be viable. There will not always be a positive correlation between carefully chosen CSR initiatives and firm financial performance, nor when there is a link will that relation continue in perpetuity. Mintzberg [1] argues that firms may be rewarded, in an economic and financial sense, for engaging in CSR practices to a certain extent. Beyond a given level of CSR investment, the market will cease to reward it [1, p. 100].

In public statements on their sustainable development policies and practices, many organizations claim that they recognize their social and environmental, in addition to their economic, responsibilities and are seeking to manage and account for these activities in an appropriate manner [4]. However, many authors claim that many organizations are simply using sustainability accounting techniques as a public relations tool to win the approval of those stakeholders whose continued support is crucial for the perceived legitimacy of their activities [4].

2.4 Two branches of CSR

The definition of CSR has been evolving for decades. Two important events mark the CSR debate and two schools of thought on CSR. The first event is the publication of Milton Friedman's 1962 work, in which he views the CSR debate as "fundamentally subversive" (cited by [6, p. 497]). Friedman asserts: "Few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible" (cited by [6, p. 497]).

Friedman goes on to argue that social issues are not the concern of business people and that these problems should be resolved by the unfettered workings of the free market system. Further, this view holds that if the free market cannot solve the social problems, it falls not upon business but upon government and legislation to do the job. In addition, business is not equipped to address social activities. This position holds that managers are oriented toward finance and operations and do not have the necessary expertise (social skills) to make socially oriented decisions [1]. It could also be argued that CSR dilutes businesses' primary purpose. The objection here is the adoption of CSR would cause a business to venture into fields of endeavor that are unrelated to their "proper aim" [1]. Another argument against CSR is that business already has enough power, and so why should we place in its hands the opportunity to wield additional power, such as social power [1]? Finally is the argument that in pursuing CSR, business will make itself less competitive globally [1]. Although these arguments from the Milton Friedman school of thought were introduced long ago, they are still accepted by many managers.

Another school of thought comes from stakeholder theory, which was introduced by Freeman [14]. Arguments in favor of CSR typically begin with the belief that it is in business's long-term self-interest – enlightened self-interest – to be socially responsible. This view holds that if a business is to have a healthy climate in which to function in the future, it must take actions now that will ensure its long-term viability. The second argument in favor of CSR is that it will "ward off government regulation." This is a very practical reason, and it is based on the idea that future government intervention can be forestalled to the extent that a business polices itself with self-disciplined standards and meets society's expectations of it. Two additional arguments in favor of CSR include that "business has the resources" and "let business try." These two views maintain that, because business has a reservoir of management talent, functional expertise, and capital and because so many others have tried and failed to solve social problems, business should be given the chance [1]. Another justification for CSR holds that proactive policies are better than reactive ones. This basically means that acting (anticipating, planning, and initiating) is more practical and less costly than simply reacting to social problems once they have surfaced [1]. Finally, it has been argued that business should engage in CSR because the public strongly supports it. Today, the public believes that, in addition to its pursuit of profits, businesses should be responsible to their workers, communities, and other stakeholders, even if making things better for them requires companies to sacrifice some profit.

Besides the two aforementioned branches of CSR, several theories have been applied to explain the motivation for CSR reporting. The most popular include theories such as accountability, legitimacy, political economy, stakeholder, and institutional theory [9]. The essence behind these theories is summarized by Buhr (cited in [9, pp. 61–62]), presented in Table 2.1.

The rationales presented in Table 2.1 also reflect the different business cases identified by Kuruccz, Colbert, and Wheeler [13] and the two branches of thought about CSR.

Tab. 2.1: Rationales for sustainability reporting. Source: Adapted from Buhr (2007) (cited in [9, pp. 61–62]).

Aspect	Proactive	Reactive
Moral and ethical reasons, duty	We see this sort of reporting as our ethical duty. This reporting is part of the accountability equation, and we have a champion or champions in the upper ranks of management who want us to do this.	What we must do is comply with the law. If the law does not require this reporting, we see no moral duty to engage in it.
Competitive advantage	We would like to be seen as a leader in this area. This is the vision that we have of ourselves.	We do not see any competitive benefit in being a leader in this area, and we view it as too costly to be on the leading edge.
Party to setting of voluntary standards – GRI, IIRC	We would like to work with others setting voluntary international standards. We might believe that voluntary standards are the way to go to stave off (costly) regulation.	We are not interested in or able to participate in such voluntary activity.
Party to setting of mandatory standards – government, accounting, or securities based	We should do this so our views can be heard and represented in the process. This might include a conscious desire to “capture” the agenda and ensure the results are compatible with what we are willing to do.	We do not want mandatory standards, so we will not participate in the process except perhaps to resist.

Tab. 2.1: (continued)

Aspect	Proactive	Reactive
Peer and industry pressure	We believe that it is important for our industry association to endorse this reporting. We want our industry to have a better image. We want to bring others in our industry up to our level of reporting.	Too many of our competitors are engaging in this reporting. We must provide some sort of reporting and not lag too far behind unless we are willing to tolerate some sort of competitive disadvantage.
Corporate performance	We are really doing better than people think we are, and we need to let them know.	Our corporate performance is not so hot and "least said soonest mended."
Image management, public relations, corporate reporting awards	This sort of reporting is a great way to beef up our image. Let's get our spin doctors on it right away. This is a symbolic way for us to show how progressive we are.	There is a reaction to a disaster "X" in our industry. We must do collateral damage control and report on how we have safeguards in place so that we are not like disaster "X."
Social pressures, social license to operate	We believe in enlightened self-interest and win-win situations. Let's use this as one way to get the local community to buy in to what we are doing.	Why do we need to communicate with anyone other than shareholders? But maybe if we do, we can avoid the attacks by NGOs and rabid interest groups.
Financial benefits from investor reactions	We believe that we can attract investors with this sort of reporting. We feel that we can lower our cost of capital because this sort of reporting indicates how we have solid systems, top-notch strategic thinking, and corporate transparency.	We do not see any financial benefit from engaging in this reporting, and in fact we see these reports as costing too much money, time, trouble, and effort to produce.
Existing regulation – government, accounting, or securities based	We have regulations in this area, and we want to do a good job of providing full and fair disclosure, complying with both the form and the spirit of the regulations.	Sure there is regulation in this area, but we do not think that it is well enforced and we are not afraid of the penalties if we are caught. Let's just ignore this and keep a low profile and see what happens. Maybe we will have to do something if our auditors or the securities regulators raise the issue.

2.5 To whom does one report on CSR and sustainability?

While financial reporting is generally aimed at providing economic and financial information to the providers of financial capital, such as shareholders and lenders, CSR reporting is concerned with voluntary identification and disclosure of information about the relationship of an organization with its employees, its local community, and society in general [2]. Accounting standards and other regulatory standards guide financial reporting. But what supports CSR disclosure?

The predominant development of sustainability reporting has been voluntary, that is, a function of the motivations of the organizations themselves. Table 2.1 presented a range of theoretical explanations for reporting on sustainability. But who really cares whether CSR improves the bottom line [1]?

Obviously, corporate boards, chief executive officers, chief financial officers, and upper-echelon business executives care. They are the guardians of their companies' financial welfare and ultimately must bear responsibility for the impact of CSR on the bottom line [1]. They need to justify whether their firms' strategies that include CSR are financially sustainable. However, other groups care as well. Shareholders are increasingly concerned with financial performance and are concerned about possible threats to management's priorities. Social activists care because it is in their long-term best interests if companies can sustain the types of social initiatives that they are advocating. Governmental bodies care because they want to ensure that companies deliver social and environmental benefits more cost-effectively than they can through regulatory approaches [1]. Consumers' concern is growing since they pressure the government to regulate products to make them socially and environmentally friendly since many of them want their purchasing to reflect their values [1].

2.6 How to disclose CSR and sustainability information?

Sustainability, CSR, and accounting: What is the relationship among these aspects?

Accounting is a powerful tool that has conventionally been used to optimize the economic and financial performance of organizations [4]. Conventional management and financial accounting have provided tools in the management, planning, control, and accountability of the economic aspects of organizations. Now we can add the techniques of sustainability and accountability to these conventional tools.

Accounting systems are one of the most important management tools for every company. The function of accounting is to provide relevant, reliable, and accurate information to guide the decisions of managers, investors, and other stakeholders [7].

Accounting produces information under certain conventions to manage complex reality. However, conventional accounting has been heavily criticized because it concerns mainly the convention of using money and monetary calculations; thus, it has been said that the information collected by today's accounting systems mirror only what business and political leaders currently consider to be important for the economy and society, from their own perspective [7].

Conventions reflect the distribution of power among different stakeholders such as shareholders, managers, future generations, and others. Since power relations among stakeholders are constantly changing, accounting systems also change since they are generally under constant pressure to change, expand, or adapt to provide information that the most powerful stakeholders wish to be reported [7]. As society changes, new information and new stakeholders also become important. This means that accounting conventions need to change also.

The growing concern over CSR issues has generated criticisms of accounting conventions in general use. The convention of ignoring events that take place outside an accounting entity lead to major problems when one tries to account for the environmental and social impacts of business. Conventional accounting systems do not provide information on how much the environment is harmed, no matter how high the social costs and no matter whether the damage is irreversible [7].

The influence of CSR issues on financial performance has been an intensively discussed topic for many years. However, reporting on CSR activities remains voluntary. Several authors argue that the existence of CSR accounting standards could be beneficial for the economy and society because it would improve transparency and accountability regarding the consequences of corporate activities for investors. However, the existence of such standards could also have negative effects because the standards could increase uncertainty and encourage managers to reduce transparency by promoting a desire to increase secrecy about possible negative CSR impacts. Therefore, although it is increasingly important that companies disclose information about its CSR activities, this disclosure process has been made in addition to the disclosures in financial reports or in CSR/sustainability reports.

Corporate sustainability reporting goes beyond CSR reporting and is characterized by the extension and progression from earlier forms of corporate reporting to include matters of an organization’s environmental policies and impacts (e.g., resource and energy use, waste flows) and its social policies and impacts (e.g., health and safety of employees, impacts on local communities, charitable giving) [9]. The reporting frameworks that have grown up around reporting practices have entrenched these developments. For example, the Global Reporting Initiative (GRI) aimed at extending the financial accounting framework to include nonfinancial reporting to a wider range of stakeholders [9].

In its current format, reporting on CSR consists of some combination of communication on social, environmental, and economic issues related to the organization doing the reporting. This communication might be in a standalone report or be part of an annual report, inside or outside of the audited financial statements or inside or outside of management discussion and analysis [9].

CSR reporting is associated more with public corporations because it is there that it has a major influence, but CSR reporting is also carried out by private businesses, governments, nongovernmental organizations (NGOs), not-for-profits, and even family businesses.

According to Buhr, Gray, and Milne [9], CSR reporting can be analyzed chronologically by examining its threads: employee reporting, social reporting, environmental reporting, and, more recently, a mix of different forms of reporting.

Employee reporting is characterized by first reporting on issues such as community development and worker safety. Employee reporting was one aspect of social reporting in the 1960s and 1970s. By the end of the 1970s, social accounting was on the wane [9]. Only in the late 1980s and 1990s did social reporting lead to environmental reporting. In the main, the social was absorbed into background information, and the environment has emerged as something fresh and new [9]. Companies started to provide environmental information in their annual reports, and a few of them began to voluntarily produce standalone environmental reports. Over time certain types of information became mandatory. In fact, environmental reporting blossomed at the same time the *Brundtland Report* was issued. By 2000, companies started to produce reports in which environmental, economic, and social aspects of corporate performance were included. This linkage is sometimes referred to as triple-bottom-line reporting.

However, despite the developments in CSR reporting, it remains voluntary and usually unregulated. There is no standardized terminology that can be used unambiguously to interpret report content or reporting developments. While environmental reports tend to consider selected elements of an organization's performance and social reports comprise some aspects of their employee and community interactions, the concept of the triple bottom line does little more than add a largely underspecified economic dimension to this mix [9]. But two developments overcome these shortcomings of CSR reporting: Global Reporting Initiative (GRI) and the Integrated Reporting (<IR>).

2.6.1 Global Reporting Initiative

The GRI represents a multistakeholder cooperative effort aimed at establishing a generally accepted framework of reporting principles for environmental, social, and economic reporting. Its *Guidelines* have been published with regular updates since 2000 [9]. Broadly speaking, the GRI indicators sought to develop a manifestation of an organization's triple bottom line and suggest that an organization that took its responsibilities seriously would manage its behavior across all three dimensions of its activities [9].

The *Guidelines* suggest standard disclosures for an organization's strategic profile and management approach and recommend performance indicators relating to the organization's economic, social, and environmental performance. Organizations are invited to comply with the *Guidelines* and to report their compliance on the GRI website. Compliance with the latest version of the *Guidelines* (G4) will be required for all reports or other materials published on or after July 1, 2018. Using the GRI *Guidelines*, reporting organizations disclose their most (positive or negative) critical impacts on the environment, society, and the economy [15]. Following the *Guidelines*, according to GRI, can generate reliable, relevant, and standardized information, making it possible to assess opportunities and risks and enabling more informed business and stakeholder decision-making. G4 is designed to be universally applicable to all organizations of all types and sectors, large and small, across the world [15].

The G4 *Guidelines* include two different types of standard disclosures: general standard disclosures and specific standard disclosures. General standard disclosures (58 indicators) include information about strategy and analysis (2), organizational profile (14), identified material aspects and boundaries (7), stakeholder engagement (4), report profile (6), governance (22), and ethics and integrity (3). Specific standard disclosures include disclosures on management approach (1) and indicators by aspect: 91 performance indicators across three categories – economic (9), environmental (34), and social (48) [15].

Disclosures on management approach give organizations the opportunity to explain how they are managing their material economic, environmental, or social impacts (what the framework calls *Aspects*), thereby providing an overview of their approach to sustainability issues.

Information in the economic category involves not only economic performance but also market presence, indirect economic impacts, and procurement practices.

Information in the environmental category includes information about materials, energy, water, biodiversity, emissions, effluents and waste, products and services, compliance, transport, overall supplier environmental assessment, and environmental grievance mechanisms.

Information in the social category has improved over previous versions of the GRI *Guidelines*. Now companies are required to disclose information about their labor practices and decent work, human rights, society, and product responsibility. Table 2.2 presents the subcategories to disclose.

According to GRI [15], if companies wish to demonstrate that their report is "in accordance" with the *Guidelines*, then they must self-declare how GRI's *Guidelines* have been applied in their sustainability report. GRI recognizes that sustainability reporting is not a one-size-fits-all approach. Therefore, G4 allows organizations to choose between two "in accordance" options – core or comprehensive – based on which best meets their reporting needs and those of their stakeholders. The options do not relate to the quality of the report or to the performance of the organization; rather, they reflect the degree to which the *Guidelines* have been applied.

The core option contains the essential elements of a sustainability report and provides the background against which an organization communicates its economic, environmental, social, and governance performance and impacts. Under the core option, an organization must report at least one indicator for all identified material aspects.

The comprehensive option is built on the core option by requiring a number of additional disclosures about the organization's strategy and analysis, governance, ethics, and integrity. Under the comprehensive option, an organization must report all indicators for all identified material aspects [15].

GRI asserts that there are several internal benefits for companies and organizations from using the *Guidelines*. GRI can provide an increased understanding of risks and opportunities, emphasizing the link between financial and nonfinancial performance, and improvements in thinking about a long-term management strategy and policy and business plans; in addition, it can streamline processes, reduce costs, and improve efficiency. It also facilitates benchmarking and assessing sustainability performance with respect to laws, norms, codes, performance standards, and voluntary initiatives. Finally, it can help companies avoid being implicated in publicized environmental, social, and governance failures and facilitate comparisons of performance internally and between organizations and sectors [12].

As external benefits of sustainability reporting, GRI refers to things such as mitigating/reversing negative environmental, social, and governance impacts, improving reputation and brand loyalty, enabling external stakeholders to understand the organization's true value as well as tangible and intangible assets, and demonstrating how the organization influences and is influenced by expectations about sustainable development [12].

Tab. 2.2: Guidelines for specific standard disclosure overview. Source: GRI (2017).

Category	Indicators
Economic	– Economic performance – Market presence – Indirect economic impacts – Procurement practices
Environmental	– Materials – Energy – Water – Biodiversity – Emissions – Effluents and waste – Products and services – Compliance – Transport – Overall – Supplier environmental assessment – Environmental grievance mechanisms

Tab. 2.2: (continued)

Category	Indicators	
Social	Labour practices and decent work	– Employment – Labour/management relations – Occupational health and safety – Training and education – Diversity and equal opportunity – Equal Remuneration for women and men – Supplier assessment for labour practices – Labour practices grievance mechanisms
	Human rights	– Investment – Non-discrimination – Freedom of association and collective bargaining – Child labour – Forced or compulsory labour – Security practices – Indigenous rights – Assessment – Supplier human rights assessment – Human rights grievance mechanisms
	Society	– Local communities – Anticorruption – Public policy – Anticompetitive behaviour – Compliance – Supplier assessment for impacts on society – Grievance mechanisms for impacts on society
	Product responsibility	– Customer health and safety – Product and service labelling – Marketing communications – Customer privacy – Compliance

In the past, according to Buhr, Gray, and Milne [9], the facts of reporting following the *Guidelines* do not suggest unalloyed success will be achieved but rather something of a heroic failure, for several reasons. The GRI has not managed to gain agreement on a full set of indicators that together might constitute something approaching a social or environmental accountability. While the environmental indicators were widely considered to be helpful, the social and economic indicators were a much less inspiring collection. It is expected that the G4 *Guidelines* will overcome these shortcomings.

The issue of assurance of sustainability reporting is a very important concern since it is a less common practice and growth trends for it have been much more modest. Indeed, all financial statements are required by law to be audited because they are important documents on which people rely and whose accuracy and reliability cannot be simply assumed. Sustainability reports, as part of voluntary reporting, have no attendant requirement for assurance. Therefore, the reader of such sustainability reports would be well advised to treat them with considerable caution [9].

2.6.2 Integrated reporting

An attempt to merge sustainability reporting with financial reporting constitutes the basis of formation of the International Integrated Reporting Council (IIRC). The IIRC was founded upon the initiative of two leading organizations in the field of accounting for sustainability: the Prince's Accounting for Sustainability Project (A4S) and the GRI [16].

The formation of the IIRC in 2010 was a major international event that drew upon the support of a considerable array of big names from the worlds of accounting and reporting [9].

IIRC is a global coalition of regulators, investors, companies, standard setters, the accounting profession, and NGOs. Its mission is to establish integrated reporting and thinking within mainstream business practice as the norm in the public and private sectors [17].

In 2011 the publication *Towards Integrated Reporting: Communicating Value in the 21st Century* was published; it set out the shape that future reporting might take. In this publication, IIRC set out in broad terms what it proposed to do and proposed an answer to the question of what integrated reporting is (IIRC 2011 cited in [16, p. 2]):

> Integrated reporting brings together material information about an organization's strategy, governance, performance and prospects in a way that reflects the commercial, social and environmental context within which it operates. It provides a clear and concise representation of how an organization demonstrates stewardship and how it creates and sustains value.

The period 2014–2017 is considered the breakthrough phase in the sense that it represents the move from the creation of the International <IR> Framework and market testing to the development and early adoption by reporting organizations around the world. The IIRC's objective for this phase was to achieve a *meaningful shift toward early adoption of the International <IR> Framework* [17].

According to IIRC, <IR> is a process founded on integrated thinking that results in a periodic integrated report by an organization about value creation over time and related communications regarding aspects of value creation. An integrated report is a concise communication about how an organization's strategy, governance, performance, and prospects, in the context of its external environment, lead to the creation of value in the short, medium, and long terms [17].

<IR> was created to enhance accountability, stewardship, and trust, as well as to harness the information flow and transparency of business that technology has brought to the modern world. Its advocates say that <IR> represents an evolution of corporate reporting, with a focus on conciseness, strategic relevance, and future orientation, that improves the quality of information contained in final reports. It is intended that <IR> will make the reporting process itself more productive, resulting in tangible benefits because <IR> requires and brings about integrated thinking, enabling a better understanding of the factors that materially affect an organization's ability to create value over time. Its creators believe it can lead to behavioral changes and improvements in performance throughout an organization.

<IR> was created for organizations that want to embrace integrated thinking and to advance their corporate reporting. Businesses have reported breakthroughs in understanding value creation, greater collaboration within their teams, more informed decision-making, and positive impacts on stakeholder relations.

The International <IR> Framework establishes the *Guiding Principles* and *Content Elements* that govern the overall content of an integrated report and explains the fundamental concepts that underpin them.

An integrated report should include a statement from those charged with governance that includes an acknowledgment of their responsibility to ensure the integrity of the integrated report, an acknowledgment that they have applied their collective mind to the preparation and presentation of the integrated report, their opinion or conclusion about whether the integrated report is presented in accordance with this framework, or, if it does not include such a statement, it should explain what role those charged with governance played in its preparation and presentation, what steps are being taken to include such a statement in future reports, and the timeframe for doing so, which should be no later than the organization's third integrated report that references this framework [17].

<IR> aims to explain how an organization creates value over time. Value is not created by or within an organization alone. It is influenced by the external environment, created through relationships with stakeholders, and dependent on various resources. <IR> reflects a set of fundamental concepts for understanding the framework.

One of the innovations introduced by <IR> is the concept of the stock and flow of capital. The framework includes six types of capital: financial, manufactured, intellectual, human, social and relationship, and natural capital.

Financial capital is the pool of funds that are available to an organization for use in the production of goods or the provision of services and obtained through financing, such as debt, equity, or grants, or generated through operations or investments.

Manufactured capital includes physical objects that are available to an organization for use in the production of goods or the provision of services.

Intellectual capital is the organizational, knowledge-based intangibles, including intellectual property, such as patents, copyrights, software, rights, and licenses to so-called organizational capital such as tacit knowledge, systems, procedures, and protocols.

Human capital is people's competencies, capabilities, and experience, as well as their motivations to innovate, including their alignment with and support for an organization's governance framework, risk management approach, and ethical values; ability to understand, develop, and implement the organization's strategy; and loyalties and motivations for improving processes, goods, and services, including their ability to lead, manage, and collaborate.

Social and relationship capital consists of the institutions and relationships within and between communities, groups of stakeholders, and other networks and the ability to share information to enhance individual and collective well-being. Social and relationship capital includes shared norms, common values and behaviors, key stakeholder relationships, and the trust and willingness to engage that an organization has developed and strives to build and protect with external stakeholders, intangibles associated with the brand and reputation that the organization has developed, and an organization's social license to operate.

Natural capital is all renewable and nonrenewable environmental resources and processes that provide goods or services that support the past, current, or future prosperity of an organization. It includes air, water, land, minerals, and forests, as well as biodiversity and ecosystem health.

According to the IIRC [17], not all types of capital are equally relevant or applicable to all organizations. While most organizations interact with all forms of capital to some extent, these interactions might be relatively minor or so indirect that they are not sufficiently important to include in an integrated report.

Although these concepts of capital are considered fundamental for the implementation of the <IR>, the IIRC has been conducting consultations with all components of an organization that adopt the framework, and one of the greatest difficulties that has arisen is the different notions of capital, because the concepts are interrelated and it is not easy for corporations to identify them.

<IR> aims to report on how the corporation creates value. Figure 2.1 depicts the value creation process as understood within the framework.

The external environment, including economic conditions, technological change, societal issues, and environmental challenges, sets the context within which an organization operates. Those charged with governance are responsible for creating an appropriate oversight structure to support the ability of the organization to create value.

At the core of the organization is its business model, which draws on various types of capital as inputs and, through its business activities, converts them to outputs (products, services, byproducts, and waste). The organization's activities and its outputs lead to outcomes in terms of effects on capital. The capacity of the business model to adapt to changes (e.g., in the availability, quality, and affordability of inputs) can affect the organization's longer-term viability. Once again, from the IIRC's consulting process, one of the difficulties pointed out is the difference between outcomes and outputs because its difference is not perceived.

Business activities include the planning, design, and manufacture of products or the deployment of specialized skills and knowledge in the provision of services. Encouraging a culture of innovation is often a key business activity in terms of generating new products and services that anticipate customer demand, introducing efficiencies and better use of technology, substituting inputs to minimize adverse social or environmental effects, and finding alternative uses for outputs. Outcomes are the internal and external consequences (positive and negative) of capital as a result of an organization's business activities and outputs.

Continuous monitoring and analysis of the external environment in the context of the organization's mission and vision identifies risks and opportunities relevant to the organization, its strategy, and its business model. The organization's strategy identifies how it intends to mitigate or manage risks and maximize opportunities. It sets out strategic objectives and strategies to achieve them, which are implemented through resource allocation plans. The organization needs information about its performance, which involves setting up measurement and monitoring systems to provide information for decision-making.

Finally, <IR> considers that the value creation process is dynamic in the sense that it is necessary to review regularly each component and its interactions with other

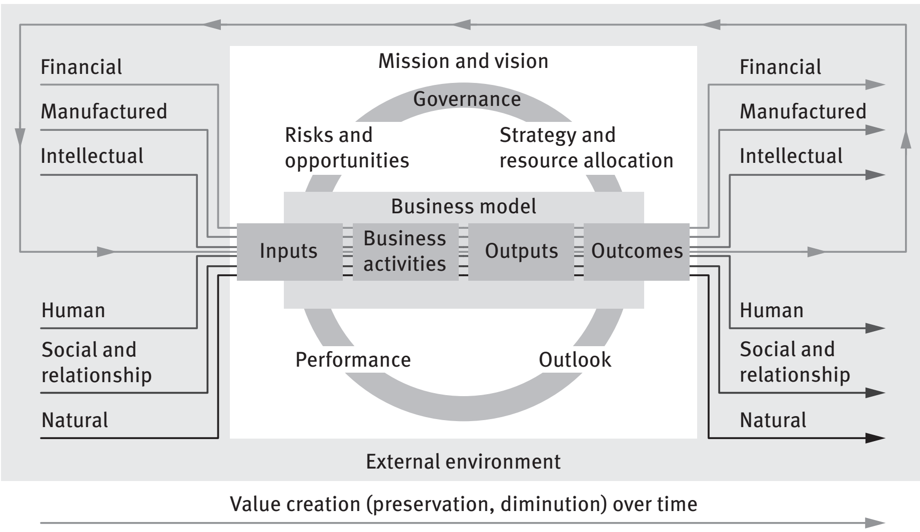

Fig. 2.1: Value creation process. Source: IIRC [15, p. 13]. Copyright © December 2013 by International Integrated Reporting Council. All rights reserved. Used with permission of IIRC.

components. An integrated report includes eight content elements: (1) organizational and external environment overview, (2) governance, (3) business model, (4) risks and opportunities, (5) strategy and resource allocation, (6) performance, (7) outlook, and (8) the basis of preparation and presentation of the integrated report. These content elements are fundamentally linked to each other and are not mutually exclusive.

However, Flower [16] claims that the IIRC has been a victim of "regulatory capture" since, in the framework, the IIRC has abandoned concepts like sustainability accounting since the IIRC's concept of value is "value for investors" and not "value for society" and the IIRC places no obligation on firms to report harm inflicted on entities outside the firm (such as the environment) where there is no subsequent impact on the firm. Initially, the IIRC proposed that the integrated report would be an organization's primary report, replacing rather than adding to existing requirements. This is the big challenge for the future: to see if there will be only a report in which companies report to society and not mainly to shareholders.

2.7 Final remarks

A long-term view of sustainability requires the integration of community involvement, stakeholder identification, interinstitutional collaboration, and communication [10]. This communication can be carried out using different communication channels, but every institution must communicate how it is meeting its CSR. However, regardless of the form of reporting, it is always driven by the immediate and strategic objectives of the corporation [9]. What companies report hides the motivation, their calculative purpose, and a message. What is produced is provided, at least in part, in response to various pressures, expectations, and social change and how the corporation interprets and prioritizes these [9]. In turn, with the act of reporting, corporations contribute to public discourse and serve to shape the public opinion to which they are responding [9]. The very act of providing accounts has the potential to change behavior. The process of reporting should serve to change management strategies and information systems and, in turn, lead to changes in management philosophy and practices [9].

Accountability is an essential component of civilized society, and sustainability is a matter of the supreme importance of the world, but past experience has yielded little fruit. Producing systematized and genuine accounts of the social and environmental impacts of corporations is not prohibitively expensive and does not need to necessary directly affect corporate behavior in any substantive way [9].

Knowledge revision

Review questions (true or false)

1. Retrieved from [6, p. 87]
   According to Rubenstein (1994:3):
   > For the first time in accounting's sleepy history, there is a growing recognition among accountants and nonaccountants alike that accounting, the value-free, balanced system of double entries, may be sending dangerously incomplete signals to businesses, consumers, regulators, and bankers.

   How does CSR accounting attempt to address the issue raised by the author that conventional accounting communicates incomplete signals?
2. Sustainable development and CSR are two different names for the same concept.
3. The main event that determined the CSR/sustainability development was the *Brundtland Report*.
4. A type of business case for CSR is the strengthening legitimacy and reputation of firms.
5. Reporting on environmental issues was the first step in reporting on CSR/sustainability.
6. Milton Friedman's view aims to support the argument that companies must contribute to solving social problems.
7. One of the rationales behind sustainability reporting is managing a company's reputation and public relations.
8. Sustainability reporting is still mainly voluntary.
9. The <IR> framework attempts to overcome the shortcomings of financial reporting.
10. One of the problems that weaken CSR/sustainability reporting is the lack of assurance on the information provided by companies.

Please see the answers at the end of the chapter.

Bibliography

[1] Carroll AB, Shabana KM (2010). The Business Case for Corporate Social Responsibility: A Review of Concepts, Research and Practice. Int J Manag Rev 12(1):85–105.

[2] Dellaportas S, Gibson K, Alagiah R, Hutchinson M, Leung P, Van Homrigh D (2005). Ethics, governance & accountability: a professional perspective. Milton, Australia: Wiley.

[3] Deegan C, Unerman J (2011). Extended Systems of Accounting: The Incorporation of Social and Environmental Factors within External Reporting. In Deegan C, Unerman J, (eds.) Financial Accounting Theory, 2nd European Edition (pp. 381–442). Berkshire, UK: McGraw-Hill Education

[4] Bebbington J, Unerman J, O'Dwyer B (eds.) (2014). Sustainability Accounting and Accountability. Abingdon, UK: Routledge.

[5] Crane A, McWilliams A, Matten D, Moon J, Siegel D (2009). The Corporate Social Agenda. In Crane A, McWilliams A, Matten D, Moon J, Siegel D (eds.), The Oxford Handbook of Corporate Social Responsibility, Oxford Uni (pp. 3–18). Oxford: Oxford University Press.
[6] Carroll AB (1979). A Three-Dimensional Conceptual Model of Corporate Performance. Acad Manag Rev 4:497–505.
[7] Schaltegger S, Burritt RL (2000). Contemporary Environmental Accounting: Issues, Concepts and Practice. Sheffield: Greenleaf Publishing.
[8] U. N. W. C. on E. and D. (UNWCED) (1987). Our Common Future (the Brundtland Report).
[9] Buhr N, Gray R, Milne MJ (2014). Histories, rationales, voluntary standards and future prospects for sustainability reporting. In Bebbington J, Unerman J, O'Dwyer B (eds.) Sustainability Accounting and Accountability (pp. 51–71). Abingdon, UK: Routledge.
[10] Leal Filho W (2005). Sustainable Development Communication: International Approaches and Practice. In Leal Filho W (ed.), Handbook of Sustainability Research (pp. 727–738). Peter Lang GmbH.
[11] Commission of the European Communities (2001). Green Paper – Promoting a European framework for Corporate Social Responsibility, COM(2001)., vol. COM(2001), no. COM(2001)366final. Brussels: Commission of the European Union.
[12] Global Reporting Initiative (2017). About Sustainability Reporting. www.globalreporting.org/information/sustainability-reporting/Pages/default.aspx. Accessed on July 24th, 2017.
[13] Kurucz EC, Colbert BA, Wheeler D (2009) The Business Case for CSR. In Crane A, McWilliams A, Matten D, Moon J, Siegel DS (eds.), The Oxford Handbook of Corporate Social Responsibility, Oxford Uni. (pp. 83–112). Oxford: Oxford University Press.
[14] Freeman RE (1984). Strategic Management: A stakeholder approach. Boston: Pitman.
[15] Global Reporting Initiative (2017). G4 Sustainability Reporting Guidelines. GRIG4 – Reporting Principles. Accessed, July 24, 2017 at https://www.globalreporting.org/information/g4/Pages/default.aspx.
[16] Flower J (2015). The International Integrated Reporting Council: A story of failure. Crit Perspect Account 27:1–17.
[17] IIRC (2017). The Integrated Reporting <IR>. integratedreporting.org/. Accessed on September 27th, 2017.

Answers to review questions

1. **True**. The statement is true since a new approach has evolved in what concerns business reporting. Nowadays, not only financial information is needed (and mandatory) as well information concerning how entity perceives its corporate social responsibility. It means that business reporting is not only devoted to shareholders but also to stakeholders.
2. **False**. Sustainable development is generally defined as a development that meets the needs of the present without comprimising the ability of future generations to meet their own needs. CSR involves companies that integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis.
3. **True**. See pages 29 to 30.

4. **True**. See page 33, §2.
5. **False**. See page 38, §7.
6. **False**. See page 34, §4.
7. **True**. See Table 2.1.
8. **True**. See page 39, §2.
9. **True**. See page 43.
10. **True**. See page 42, §5.

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3 Project management

Abstract: The main aim of this chapter is to present the essential concepts of project management, including a definition of the concept of a project, a brief history of project management, a general vision of the different methodologies used in the field, and some insights on present trends in the field. In addition, the business case concept and contents are discussed. Finally, some insights on the Project Management Body of Knowledge approach are developed, including the definition of the 42 processes involved.

3.1 Introduction

Today projects and project management are widely recognized by organizations as essential for achieving their strategic objectives [1]. Meeting organizational objectives often involves undertaking projects that bring necessary change to advance a given strategy [2]. Projects can take many forms, such as an engineering project, an information system, or a social structure. In addition, projects differ from routine organizational work, contrasting sharply with the repetitiveness and familiarity associated with ongoing operations [3]. While routines are cyclical and predictable, projects are temporary and nonrecurring. Thus, projects are chaotic by nature [4]. This chaos needs to be harnessed through project management. In a project, when an organization wants to create a new product or service, it creates a temporary organization to which resources are allocated so that it can carry out the activities required to accomplish the desired goal. During the lifetime of the project, the temporary organization needs to be managed so that the expected beneficial change can be delivered upon project completion. More specifically, project management requires initiating, planning, executing, controlling, and closing down the work of a team to achieve specific goals and meet specific success criteria at a specified time [5].

Recent years have seen significant growth in project work across different sectors and industries. Both academic research and industry reports highlight the growing adoption of project management practices in organizations [6, 7].

Project management is supported by several professional organizations around the world, which have advanced the practices in the field by establishing standards, guidelines, and certifications. These organizations have gathered and published the accepted best practices of project management as standards or bodies of knowledge (BOKs) that reflect the evolving project management profession [8]. The largest among these professional organizations is the PMI (Project Management Institute) based in the USA. The PMI is the publisher of the *PMBOK® Guide*, an internationally recognized

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standard that gives project managers the essential tools to effectively manage projects and deliver results to their organizations.

The aim of this chapter is to provide an overview of the essential principles of project management. The remainder of the chapter is structured as follows. Section 2.2 presents an overview of project management, including a discussion of the concept of a project, a brief history of project management, a general vision of the different methodologies involved in project management, and some insights on present trends in the field. In Section 2.3 the business case concept and contents are presented. In addition, the concept of a project charter and the 42 steps of the initial phase of project management are presented. Finally, Section 2.4 includes the general structure and phases and processes of the PMBOK approach.

3.1.1 What is a project?

A project can be defined as a "one-shot, time-limited, goal-directed, major undertaking, requiring the commitment of varied skills and resources" [9]. According to the *PMBOK® Guide* (PMI, p. 3), a project is a temporary endeavor undertaken to create a unique product, service, or result. The development of interactive software to enhance student learning, the construction of a building or a highway, humanitarian assistance to relieve the effects of natural disasters, or a program to improve fitness in elders – all these are examples of projects. In addition, the *PMBOK® Guide* also specifically states that besides creating a new product or service, a project can also create an improvement in an existing product or service, such as, for instance, in a Six Sigma project carried out to reduce manufacturing defects.

Based on the preceding definitions, the following characteristics of projects can be highlighted:

- *Change*: Projects are a way to introduce changes to an organization (by accomplishing the project goals).
- *Temporary*: A project has defined start and end times. Once the project starts, its end is set and the project must be accomplished as profitably as possible. The project ends when its declared objectives have been attained or when it becomes clear that they are no longer achievable. The project also ceases when the need for the project no longer exists or when the client wishes to terminate the project.
- *Unique*: Projects are unique in the sense that there is always something different in each project. For example, the same team may construct office buildings, but there may be differences in the materials, location, or design.
- *Uncertainty and risk*: All projects are prone to uncertainty and risk owing to their complexity and many variables that are beyond the control of the project manager. Uncertainty and risk are higher during the initial phase of a project and decrease over its lifetime [9]. However, successful projects have in common that the

Tab. 3.1: *PMBOK® Guide*'s definitions of project, program, and portfolio.

Level	Definition
Project	A temporary endeavor undertaken to create a unique product, service, or result.
Program	A group of related projects, subprograms, and program activities managed in a coordinated way to obtain benefits not available from managing them individually.
Portfolio	Projects, programs, subportfolios, and operations managed as a group to achieve strategic objectives.

project manager considers, and plans to some extent, the risks that are likely to be faced [10].

Cross-functional: Projects involve people from different business departments with different levels of seniority. A project may need to draw on the skills and resources of a single individual or multiple individuals, a single organizational unit or multiple units, and an individual firm or even multiple organizations.

A project is always constrained by limited resources. Resources are the means needed to achieve project objectives. These resources can be any combination of personnel, time, funds, knowledge, skills, space, equipment, materials, energy, and so forth. In addition to the variation in resource availability, the duration and criticality of project tasks are usually higher than those found in most activities of other organizations.

Another unique feature of projects is the temporary relationships that exist between the different stakeholders, which forces managers to continuously shape and reshape the positioning of the project in the relational framework [11]. Moreover, the often complex and uncertain transactions involved in a project pose challenges in establishing well-functioning coordination and cooperation routines [12].

Typically, many organizations tackle larger, more complex efforts that combine several parallel projects, namely programs and portfolios. Such undertakings require specific management approaches and, as in the case of projects, play an important role as a vehicle for achieving strategic goals. The definitions of project, program, and portfolio provided by the *PMBOK® Guide* [13] are shown in Table 3.1.

3.1.2 A brief history of project management

Since the beginning of civilization, projects have always been undertaken in one form or another. Monumental constructions such as the Great Pyramids of Egypt or the Great Wall of China echo feats of project management thousands of years ago. Although evidence of large-scale projects in ancient times is impressive [14, 15], project management as we know it today did not begin to take root as a formal field of study until the middle of the twentieth century, when organizations began to see the benefits of organizing work around projects with systematic project management principles and tools [16]. This project-centric view of the organization evolved further as organizations have become more and more complex and have understood the critical need for their employees to collaborate and integrate their work through departments, professions, and, in some cases, industries.

Four periods can be identified in the history of modern project management: (i) prior to 1958, (ii) 1958–1979, (iii) 1980–1994, and (iv) 1995 to present [17].

(i) Prior to 1958: Principles of project management transcend time

In the latter half of the nineteenth century, with the rising complexities of the business world, project management evolved from basic management tactics. The need for more structure in the construction, manufacturing, and transportation sectors gave rise to large-scale government projects that became the basis for project management methodology. Suddenly, business leaders were faced with the challenging task of organizing the manual labor of thousands of workers and the manufacture and assembly of unprecedented quantities of raw material [18].

Near the turn of the century, Frederick Taylor (1856–1915) applied a scientific approach to work to analyze and improve labor by focusing on its elementary parts. Known as the "father of scientific management," Taylor revolutionized management practices and introduced the concept of working more efficiently, rather than working harder and longer [19].

Taylor's associate Henry Gantt (1861–1919) is considered the founding father of modern management. He studied in detail the order of operations in work and developed planning and control techniques that changed the way of managing projects. One example is the creation of the Gantt chart to monitor and control the project schedule. This basic chart outlines the sequence and duration of all tasks of a project from inception to completion.

Gantt's work led to the emergence of project management as a distinct discipline. In the decades leading up to World War II, industrial psychology, marketing, and human relations began to take hold as integral parts of project management.

(ii) 1958–1979: Application of management science

After World War II project managers began to adopt two planning and control techniques to conduct and manage projects. The first technique is the program evaluation and review technique (PERT), developed in 1957 by the US Navy to calculate the shortest time in which the nuclear submarine Polaris could be constructed. PERT analyzes individual tasks by assuming a minimum amount of time for completion. Almost simultaneously, a chemical giant, Du Pont, introduced a similar technique, called the critical path method (CPM). As such, the technique is often referred to as PERT/CPM.

As the twentieth century progressed, project managers began to integrate human aspects in their projects, primarily within European organizations. Practices of communication, motivation, negotiation, conflict resolution, stress management, and leadership started to be considered as one determining factor of success [20].

(iii) 1980–1994: Computers and human resources

The 1980s were characterized by a revolutionary development of the information technology sector and the rise of the personal computer, which brought connectivity and communication to the forefront of project management. This development enabled the use of low-level multitasking computers that had high efficiency in managing and controlling complex schedules. During this period, project management software for the personal computer was made widely available by a number of companies, which made project management techniques more easily accessible [17].

(iv) 1995 to present: Rise of automation and efficiency

As information technologies grew into the 1990s, complex algorithms for project planning and control were developed, enabling project managers to complete more work in less time and with fewer errors. The Internet brought the development of web-based project management applications. The benefits of web-based project management applications include the fact that they can be accessed on mobile devices, computers, or wide-scale enterprise resource planning systems without installing software. Advances in project management software that can function over extranets are enabling project teams to place particular emphasis on communication and coordination. In many industries, continual communication and coordination has become mandatory as the time allocated for projects shrinks, project members are geographically dispersed, and projects involve external partners and suppliers [21].

Since its inception 60 years ago, the discipline of project management has undergone significant changes, from both a practitioner's and an academic's perspective.

From a practical point of view, there has been a significant increase in project work and significant progress in the professionalism of project management. This has led to the increasing importance of the discipline of project management and efficient project management processes, which are acknowledged as businesses processes that create value [22].

From an academic view, the call for an integration of project management with further academic disciplines, such as the social sciences, is growing louder [23]. One aim is to better understand and explain why approved practices in project management work in reality [24]. Even though the BOK on project management is rich and helpful [25], it has a highly practical focus and often does not address the theoretical foundations and interdependencies underlying these practices.

3.1.3 Common project management methodologies

The PMI broadly defines methodology as a system of practices, techniques, procedures, and rules used by those who work in a discipline. The structure and level of detail of project management methodologies can differ significantly. While some methodologies, like agile methodologies, simply apply principles, others, such as Prince2, define a framework of themes, principles, and processes. Some are comprehensive lists of standards with some process, like PMI's PMBOK, while others simply include processes, like Scrum.

Project management methodologies can broadly be grouped into four categories [26]: (i) traditional approaches, (ii) agile methodologies, (iii) change management methodologies, and (iv) process-based methodologies. They are described in what follows.

(i) Traditional approaches

Traditional project management methodologies are applied to projects that must be run sequentially. Common methodologies that fall into this category are the waterfall method and the CPM.

Waterfall method

The waterfall method is a project management methodology that values planning projects fully, then executes them through phases. Requirements are defined in full at the beginning. Then each phase must be completed before the next one is initiated, and phases must not overlap. Because of this single cycle approach, once a plan is approved, there is little room to reflect, revise, and adapt the plan. This approach can be useful if requirements in a project are fixed and well documented and the project is short.

Critical path method

The goal of the CPM is to map out all the tasks of a project, define the requirements to be met before each task starts, then estimate the duration of each task. With this information it is possible to calculate the longest path through the planned tasks to the end of the project, and the earliest and latest times each task can start without making the project longer. This makes it possible to prioritize tasks by identifying those that are critical and those that can be delayed. This method has been used in many types of projects. Although the original approach is no longer used, the term is generally applied in the analysis of project network logic diagrams.

(ii) Agile methodologies

Agile methodologies are based on a core set of principles of delivering value and collaborating with customers. Scrum, Kanban, eXtreme Programming (XP), and Adaptive Project Framework (APF) are examples of agile methodologies.

Scrum

Scrum is the simplest and most popular agile methodology. The project team organizes around central roles: scrum master, product owner, and development team. The product owner defines the goals and priority for the project, and the scrum master removes any obstacle in the way of the development team in order to get the work done at the right pace. Scrum calls for periodical meetings to keep the project on track.

Kanban

Introduced by Toyota in the 1950s to visually control the inventory process, Kanban is a visual approach that focuses on tasks. It aids decision-making about what, when, and how much to produce. Many agile teams use Kanban boards to visualize where their work stands in process. This visual management of the process allows teams to quickly show project obstacles, discuss them, and collaborate to get rid of them.

Extreme programming

Developed in the 1990s, this agile methodology for software development aims at enhancing quality by responding quickly to change. XP is suited for projects that have changing requirements and demand continuous feedback. XP involves four elementary activities performed within the software development process that enable change and rapid revision: coding, testing, listening, and designing. Teams organize in shorter sprints and can immediately make changes to their planned work.

Adaptive Project Framework

The APF methodology adapts to a project's goals. Before determining those goals, first the project requirements, functions, and subfunctions must be documented. The project team is organized in iterative stages rather than in sprints, and stakeholders can change the scope of the project at the beginning of each stage.

(iii) Change management methodologies

Change management methodologies are intended for project managers looking for stable ways to manage the inherent risk of every project. The methodologies include Event Chain Methodology (ECM), eXtreme Project Management (XPM), and Projects Integrating Sustainable Methods (PRISM).

Event chain methodology

ECM is an uncertainty modeling and scheduling network analysis technique that focuses on the identification of risks and their potential impact on a project's schedule. ECM improves the accuracy of project planning, simplifying the modeling and analysis of uncertainties in project schedules.

Extreme project management

XPM refers to a method for managing highly complex and uncertain projects. XPM utilizes the principles of human interaction management rather than scheduling techniques and heavy formalism. XPM is about embracing change and altering project plans, requirements, resources, budgets, and potential obstacles to meet changing needs. Most projects that fit XPM are fast-paced and require short cycles of work and openness to feedback, negotiation, and iteration.

Projects Integrating Sustainable Methods

Developed by GPM Global, this method aims at managing change focused on sustainability or reducing negative environmental or social impacts. PRISM follows six principles that are derived from the UN Global Compact's Ten Principles. This method is mainly implemented in large-scale real estate development or construction/infrastructure projects that may result in adverse environmental effects.

(iv) Process-based methodologies

Process-based methodologies are new ways of working that are seen as a theme with principles applied more to business processes than methodologies. These include Lean, Six Sigma and PRINCE2 methodologies.

Lean

Lean streamlines processes and eliminates waste to deliver more with less. It starts by identifying value and then maximizes it through continuous improvement by eliminating any type of waste (e.g., unneeded steps, resources, and budget) and optimizing the flow of value. Lean can be a helpful mind set for project managers to adopt when reviewing the project delivery process. It can strip projects back to the essentials that deliver value and eliminate the unnecessary things that do not add value.

Six Sigma

Developed by engineers at Motorola in the 1980s, Six Sigma is a disciplined, data-driven methodology for process improvement that has been adopted by many large manufacturing organizations. It seeks predictable process results to improve the quality of the final product by following a set of steps and removing the causes of defects and minimizing variability. It uses a set of quality management methods – mainly empirical and statistical methods – and requires a special infrastructure of experts within the organization to apply them.

PRINCE2

The PRINCE2 methodology is a waterfall project management methodology that includes themes, processes, and principles. Created by the UK government for IT projects in 1996, PRINCE stands for Projects IN Controlled Environments. It is a process-oriented methodology that divides projects into multiple stages, with each individual stage having its own plans and processes to follow. This methodology is based on eight high-level processes and defines inputs and outputs for every stage so that nothing is left to chance. PRINCE2 enables project managers to run large, predictable enterprise projects and ensures a focus for projects while giving teams greater control over resources and the ability to mitigate risk effectively.

3.1.4 Megatrends in project management

We live in a world in constant change. To survive and prosper, organizations need to adapt continually at a faster pace than ever to their environment's needs. Technological innovation is rewriting every industry and the way in which organizations are managed. In this world, the ever-increasing acceleration of change brings more innovations and, consequently, an increasing number of projects. Project managers must understand how these changes impact businesses from a strategic level and how projects can support business changes.

Megatrends

Megatrends can be defined as large, transformative global forces that impact everyone on the planet [27]. Megatrend analysis enables companies to build a proactive, long-term strategy to better anticipate market developments and better lead change for their industries [28]. Following an extensive study, Ernst and Young [27] identified six megatrends driving our future:

(a) Digital future

Digital technologies are disrupting all areas of the business enterprise, fueled by developments of cloud, mobile, big data, social media and tools, and opportunities that exist for companies to exploit the insight that analytics offer regarding consumer trends.

(b) Entrepreneurship rising

Technology is also enabling enterprises and individuals to become faster and more agile in their interactions with customers. Thanks to digital technology, entrepreneurs can build innovative, fast-growing, and scalable enterprises and move to a lead position in record time.

(c) Global marketplace

The world is becoming a global marketplace. The gap between emerging and advanced economies is shrinking. The disruptive digital future will enable technological innovation in all regions. With growing economies, this great shift in economic power will force major adjustments in strategy for both established multinationals and their fast-growing market challengers.

(d) Urban world

The world is becoming more and more urban. As the number of cities grows and a rising middle class migrates to these cities, policymakers and the private sector must undertake effective planning and invest in infrastructure and telecommunications to support growing populations. Effective policy responses to the challenges that cities face, including climate change and poverty, will be essential to making cities competitive and sustainable.

(e) Resourceful planet

Population growth, an increasing middle class, and urbanization will increase the demand for natural resources. This means that we must innovate how we access and manage nonrenewable natural resources. Corporations are adopting green policies for IT, reducing their carbon footprints and leveraging natural resource inputs. In addition, governments are looking to develop more sustainable solutions to reduce our dependency on fossil fuels.

(f) Health reimagined

Healthcare is undergoing a significant transformation. To cope with increasing cost pressures and a rising middle class with greater healthcare demands, healthcare providers are looking for ways to innovate, be more sustainable, and reduce costs. The shift is to leverage patient data and trends using big data and mobile health technologies. This change means that healthcare providers can focus on healthy behaviors, prevention, and real-time care rather than on illness management.

Digital disruptors

Although each megatrend is important in its own right, the digital future megatrend is possibly the immediate impacting trend today. Digital disruptors, such as the cloud, social media, mobile, and big data, are revolutionizing the world of business and, hence, the role of project managers.

(a) Cloud

Cloud computing is a model of computing that provides access to a shared pool of computing resources (computers, storage, applications, and services) over a network, often the Internet [29]. What that means is that the cloud allows organizations to access new technology that pays for what they need and when they need it. It is preconfigured, so there is no setup time. The cloud has three models, depending on which technology is provided – infrastructure, platform, or software:

– Infrastructure as a service (IaaS). Often used to increase capacity for organizations, during a project IaaS can be used as a development arena. As companies migrate internally developed software to IaaS-based cloud alternatives, the number of project managers increases with respect to software developers because of the initiation of new projects and the reduction of internally developed software [30]
– Platform as a service (PaaS). Project teams can use it to develop in a new technology environment. Because cloud providers are vendors, the project manager's role will continue to integrate vendor management, service-level agreements, and contract negotiation.
– Software as a service (SaaS). For project managers, SaaS allows teams to work together in innovative ways. Teams can subscribe to Google Docs, share information across cloud-based file transfer systems such as Dropbox, or collaborate through SharePoint workflows.

The cloud is also changing economic models. Corporations are moving from a capital expenditure model to an operational expense model. This means that instead of spending money up front on a technology investment, they pay as they consume. The way consumers buy is changing as they expect subscription models instead of purchase models for software and services.

(b) Social media

The development of content-based marketing and social media analytics has enabled the integration of marketing and IT. Today, both business functions are virtually connected on activities such a website design, blog posting, and search engine optimization. These activities require effective communication and intense coordination between individuals with shared information.

For the project manager, social media offers new ways to communicate with project teams. Internal corporate social networks are also a great means to handle change management. For example, regular updates as to the status of a project or milestone accomplishments can keep team members engaged through changes. Finally, the project manager should include social media in communication planning, not only for team members but also for both internal and external stakeholders.

(c) Mobile

The introduction of a cloud-based PaaS model allows organizations create technologies that can be accessed on any mobile device. However, because the systems must be deployed within weeks rather than months, application development often requires project managers to apply more agile deployment methodologies.

Another critical change that project managers face is that communication with team members is rarely face-to-face anymore. Project teams usually work in globally geographically dispersed location in disparate time zones. In cases where synchronous meetings are challenging since video cameras and high bandwidths are not possible in a global team, project managers will have to take advantage of mobile technologies to enable effective communication. This entails adapting messages and content to the platform, considering smaller group meetings, and relying less on synchronous interactions.

(d) Big data

Given that customers today expect personalized service, big data are key to providing insight into consumer patterns before consumers even know. This allows organizations to push products and services that are tailored and relevant to the individual. Project managers are starting to use big data to make smarter project decisions. Their ability to capture information on team interaction, stakeholder requirements, and change management is growing through their use of social, mobile, and cloud-based technologies. As this data pool increases, it is important for the project manager to study how analytics can increase the effectiveness of future project work.

The introduction of big data has also brought about a new role: the data scientist. From a project management viewpoint, big data initiatives require project managers to coordinate multidisciplinary teams, implement new technologies, and create new processes and business relationships.

In sum, today's megatrends are changing the way we live and do business. The technology shifts toward the digital future will be particularly influential because they underline every other megatrend to some degree.

As organizations strive to remain competitive and be more adaptive to the changing market, the role of project manager becomes essential to maintaining the pace of change and delivering projects more efficiently. Cloud technologies can facilitate new forms of team communication and collaboration and help to adhere to deadlines more rapidly. Social media also allows for new engagement and communication models between teams and with external partners. These digital innovations will create new opportunities for growth as the increasing pool of data obtained can be further analyzed to improve future projects.

3.2 Business case

3.2.1 What is a business case?

The term *business case* is increasingly used in the industry. A business case is a document that outlines the justification for a project to be developed in a company. It includes the description of the business problem or opportunity, one or more available options to address the problem, the associated benefits and costs, and a recommended solution for approval.

By extension, in a business context the term business case is used to refer to the reason for developing an activity, even when it is not presented in a document. It is common to say that a certain project has a strong business case or that only projects with a strong business case will be approved, for example. We treat a business case as a formal statement of the reasons for developing a project.

The person presenting a business case wants some project to be approved; otherwise he would not propose it. He uses the business case to pitch the idea. From the point of view of the person or persons who will assess and decide whether or not it will be developed, the business case provides the information on which to base a decision.

The selection of projects to be developed is important in any organization. A department or manager has a fixed volume of resources that can be used to develop activities. To obtain more resources for specific projects, additional support must be requested. Many different projects will be competing for a limited amount of resources. Most organizations tend to allocate less funds to departments and more funds to specific projects. In addition, public authorities follow this trend. A business case must be prepared to apply for funds assigned to specific projects.

In an organization, spending time on the preparation of a business case requires an initial decision (Figure 3.1). Following this decision, the business case is developed. At this moment, it is still not clear whether or not the project will be approved. The

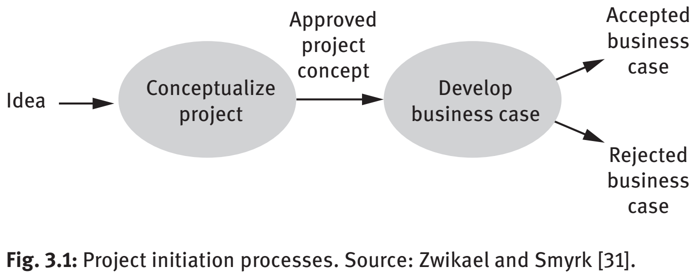

Fig. 3.1: Project initiation processes. Source: Zwikael and Smyrk [31].

business case is used to make this decision. If the project is approved, the business case will serve as the basis for project development.

3.2.2 Content of a business case

A Business case starts from a need or an opportunity, for example, a market demand, an organizational need, a customer request, a technological advance, or a legal requirement. In project management, the business case is the document that sets out the main advantages and parameters of the project. The business case includes the answers to the following questions [32].

1. Why is the project required?
2. What are we trying to achieve?
3. What are the deliverables?
4. What is the anticipated cost?
5. How long will it take to complete?
6. What quality standards must be achieved?
7. What are the performance criteria?
8. What are key performance indicators (KPIs)?
9. What are the main risks?
10. What are the success criteria?
11. Who are the main stakeholders?

The structure and level of detail of the Business case differ strongly from one organization to another. It ranges from a short statement to a complete description of all the main aspects of the project.

PRINCE2 proposes to include in business cases the blocks that are presented in Table 3.2.

In addition, in Table 3.3 an example given in the PRINCE2 training manual is presented. Even though quite a lot of details are included, they are very succinctly presented. One or more reports developing the technical aspects will be appended. Planning aspects and responsibility assignment are not included. They will be considered after approval – in PRINCE2, this statement is called the business case following approval and, in PMBOK, project charter.

3.2.3 Project charter

As mentioned earlier, the project charter includes the main aspects of the project to be developed. In particular, the concrete decisions adopted for the responsible person or committee that approves the project are specified. Table 3.4 shows the content that, according to PMBOK, the project charter must contain.

Tab. 3.2: Blocks to include in business case according to PRINCE2 [33].

Executive summary
Highlight the key points in the business case, which should include important benefits and the return on investment (ROI)
Reasons
Defines the reasons for undertaking the project and explains how the project will enable the achievement of corporate strategies and objectives
Business options
Analysis and reasoned recommendation for the base business options: do nothing, do the minimum, or do something
Expected benefits
The benefits that the project will deliver expressed in measurable terms against the situation, because it exists prior to the project. Benefits should be both qualitative and quantitative. They should be aligned with corporate or program benefits. Tolerances should be set for each benefit and for the aggregated benefit. Any benefit realization requirements should be stated.
Expected disbenefits
Outcomes perceived as negative by one or more stakeholders. Disbenefits are actual consequences of an activity, whereas, by definition, a risk has some uncertainty about whether it will materialize. For example, a decision to merge two elements of an organization on a new site may have benefits (e.g., better joint working), costs (e.g., expanding one of the two sites), and disbenefits (e.g., drop in productivity during merger). Disbenefits need to be valued and incorporated into the investment appraisal.
Timescale
The period over which the project will run (summary of project plan) and the period over which the benefits will be realized. This information is subsequently used to help timing decisions when planning (project plan, stage plan, and benefits review plan).
Costs
A summary of the project costs (taken from the project plan), the ongoing operations, maintenance costs, and their funding arrangements.
Investment appraisal
Comparison of aggregated benefits, disbenefits from project costs (extracted from project plan), ongoing incremental operations, and maintenance costs. The analysis may use items such as a cash flow statement, ROI, net present value, internal rate of return, and payback period. The objective is to be able to define the value of a project as an investment. The investment appraisal should address how the project will be funded.
Major risks
Key risks associated with project, together with likely impact and plans should they materialize.

In relation to the structure of the charter, many templates and forms are available. One of them is presented in Table 3.5.

Courses and handbooks on project management usually do not include examples, probably because it is held that all projects are unique and the imitation of previous projects should be avoided. In addition, real projects are not usually publicly available. Nonetheless, some complete examples can be consulted [31].

Tab. 3.3: Example business case document for CRM project [34].

Executive Summary
We recommend the development and implementation of a web-based customer relationship management system to allow our clients to order online, view order history, and download report information to Excel. We forecast recovery of project costs in 18 months, with a benefit of €24,000 over the following 3 years.

Reasons
The reasons for this project are as follows:
- To make it easier for clients to order and view their order history. This could also result in an increase in sales.
- One of our biggest competitors is offering such a system, and their salespeople are promoting this as a valuable service.
- To help reduce our costs, as we can cut one of our in-house salespersons.
- To reduce the errors we have today with incorrect orders.
- To make it much easier for our in-house salesperson to follow up on orders and provide the correct information to the shipping department.
- To provide better sales reporting for the sales manager with minimum effort.

Expected benefits
- Reduce sales administrative costs by 30%
- Forecast increase in sales by 5% to 10%
- Prevent loss of existing clients to another competitor
- Forecast 66% reduction in errors in the ordering process
- Provide required sales information to sales manager with minimum effort

Expected disbenefits
- Most clients will now order and track their orders online without ever having to contact administrative personnel from the company. This could have a negative effect as the administrative people in the company communicate less with customers.

Timescales
- Project time: 5 months
- Project start: February 1: start with requirements analysis
- Project finish: August 1
- Tolerance: ±3 weeks
- First benefit reviews will be 3 and 6 months after go-live

Costs
- Estimated costs: €24,000
- Estimated yearly maintenance and support: €4,000
- Change budget (20% of cost): €6,800 will be available

Investment appraisal (simple)
- Estimate costs for project: €34,000
- Estimate to save one of the two admin sales roles: €26,000 a year
- Estimate to increase sales and earn 5% profit: €12,000
- Estimated ROI: less than 18 months

Risks
- CRM provider may not be able to deliver our exact requirements using their easy-to-use configuration tools and may need to use more development services.
- All competitors may start using a similar system, which will affect our expected increase in sales.
- Clients may not like to use the system and may insist on ordering via telephone.

Tab. 3.4: Items in project charter [35].

Charter content item	What it does
Purpose and justification	Reason for project – may refer to business case, strategic objectives, or external factors
Objectives	Multiple objectives related to, for example, scope, schedule, cost, quality, customer satisfaction
Success criteria	Measureable criteria to indicate successful completion of each objective
High-level requirements	Initial high-level business and compliance requirements that meet customer expectations
Assumptions and constraints	Initial assumptions about scope, resources, funding, limitation, budget, or fixed due date
High-level project description	Summary of project deliverables and approach to budgets
High-level risks	Initial risk that will later be progressively elaborated
Milestone summary	Significant events of deliverables: phase completion, deliverables, and acceptance
Summary budget	Initial range of expenditures estimate
Stakeholder list	Initial list of people who can influence or be influenced by the project
Approval requirements	Who can approve and sign off on each deliverable and criterion for acceptance
Project manager authority on staffing, technical decisions, conflict resolution, budget management	Authority to hire, fire, discipline, accept, or reject. Authority to make technical decisions or decisions on approach, resolve conflicts within teams or external stakeholders, and commit and manage funds variance
Sponsor, project manager, and other relevant signatures	Demonstrate commitment and approval for project

3.2.4 Steps of initial phase in project management

The initial phase of the development of a project starts with a broad definition of the project and its scope and ends with the preparation of a project charter or, alternatively, with the withdrawal or rejection of the project. Each project has its own context and characteristics. However, the steps that follow can be applied to any project.

Step 1. Definition of project (project statement of work)
The first step consists in defining broadly the product, service, or results that the project intends to create and the scope of the project. This initial definition can be stated in the document called the project statement of work.

Tab. 3.5: Components of project charter [36].

1.0: General project information
1.1: Project name
1.2: Sponsor (who is funding or will be the primary benefactor of the project)
1.3: Document history (for tracking changes and version control)
2.0: Identify stakeholders and contacts (e.g., project manager, team lead)
3.0: Project description
3.1: Project purpose, business need, opportunity, or justification (problem to be solved)
3.2: Project objectives (measurable outcomes, such as cost reduction, enhanced performance, increased sales)
3.3: Deliverables or major milestones (products of project, for example, working software code, training manual, completed call center, user test document)
3.4: What the project is intended to do and not do
3.5: Risks or constraints (barriers/limitations)
4.0: Financial or resource information
4.1: Budget assumptions
4.2: Reporting strategy (frequency and format)
4.3: Type of estimate
4.4: Funding source(s)
5.0: Acceptance criteria
5.1: Approvers
5.2: Change control process

Step 2. Analysis

The different aspects of the project need to be analyzed. The analysis will include the following elements:

– Obtaining an analysis of information on alternative options, technological perspectives, and competitive aspects.
– Definition of customer or customers connected to activities under analysis, value analysis from customer's point of view, and customer experience (CX) analysis.
– Definition and analysis of main processes involved using mapping tools and continuous improvement methodologies.
– Performing the specific analyses that correspond to the project, service, or intended result.
– Analysis of the cost and financial aspects, including CAPEX forecasting; expected operational and financial results; and financial performance assessment.

Step 3. Development of business case

The next step is developing the business case, which is devoted to supporting the decision to approve or not approve the project. The business case will necessarily consider the following elements:

– The reasons why the project is necessary or advisable, including a discussion of possible alternative options;

– Expected benefits and disbenefits;
– High-level timescales, costs, necessary investment, and risks.

Technical reports to support the information provided and the recommendations will be prepared and appended.

Step 4. Developing project charter
The project charter is the outcome of the initial phase of the project and determines the conditions in which the project will be carried out. The project charter will include the following elements:
– The contents of the business case that are relevant for the development of the project;
– Resource assignment, including the internal resources that will be used, financial resources available, and other criteria in relation to resources;
– Authority and organizational aspects; the project manager or profile of the project manager and her specific functions are determined, together with other authority and organizational aspects;
– How the project will be controlled, including concrete objectives to be achieved.

3.3 The PMBOK approach

3.3.1 General structure

The systematic approach to project management led to the establishment of the PMI in 1969, which publishes and updates the standard *A Guide to the Project Management Body of Knowledge* (*PMBOK® Guide*) [3], which describes the management practices that are usually part of most projects.

PMBOK® [3] describes project management as a group of 42 classified interlinked processes according to two dimensions, the project phase, involving 5 chronological phases when the process takes place, and area knowledge, which includes 9 knowledge areas required by the process. Table 3.6 shows these 42 processes.

The phase vector is formed by a time sequence including five steps: initiation, planning, execution, controlling, and closing. However, this time sequence is not a strict one. The sequence phases overlap. For instance, execution may start even if planning has not completely finished and monitoring and controlling are performed at the same time as execution. In addition, some processes listed within one of the phases may be redone after a later phase detects new requirements or needs to do so. For instance, in the construction of a bridge, the design may be reviewed in case some new characteristics of the terrain are found when digging the foundation.

Tab. 3.6: The PMBOK® [35] Processes of project management.

			Project Phase		
Knowledge Area	**Initiation**	**Planning**	**Execution**	**Controlling**	**Closing**
Project Integration Management	– Project charter	– Project management planning	– Direct and manage	– Work control – Change control	– Close project or process
Project Scope Management		– Req. collection – Scope definition – WBS creation		– Scope verification – Scope control	
Project Time Management		– Activity defin. – Activ. sequence – Activ. requirem. – Activ. durations – Scheduling		– Schedule control	
Project Cost Management		– Estimate costs – Determ. budget		– Cost control	
Project Quality Management		– Quality plan.	– Quality assrnce.	– Quality control	
Project HR Management		– HR planning	– Acquire team – Develop team – Manage team		
Project Communi-cation Management	– Stakeholder identification	– Plan communications	– Informing – Stkhlder. mgmt.	– Report project advance	
Project Risk Management		– Plan risk mgmt. – Risk identification – Qualitative risk – Quantitative risk – Risk responses		– Risk control	
Project Procurement Management		– Procurement plan	– Procuring	– Proc. administ.	– Close procurements

Tab. 3.7: Knowledge areas and their related activities.

Knowledge area	Kind of activities included
Project integration management	All activities required for producing and maintaining the coherence of the project that matches the required characteristics.
Project scope management	Activities focused on keeping project in line with customer requirements throughout project development. It includes also the impact that any required change may have on the project scope and securing customer approval for any changes.
Project time management	All project management activities related to the scheduling and timely execution of project tasks leading to output delivery of project. These activities form the core in the planning and control phases of the project.
Project cost management	All activities of project management related to cost determination, budget setting, and control.
Project quality management	All activities related to the establishment of the quality level, determination of related quality attributes and metrics measures, and their control to ensure the desired quality level of the finished project.
Project human resources mgmt.	All activities related to acquiring the right human resources, their development as a team, and their management.
Project mgmt. communications	All activities required for proper information distribution to project stakeholders.
Project risk management	All activities related to anticipating risks that might threaten project development and that relate to planning consistent and adequate responses for diminishing, eliminating, or correcting them.
Project mgmt. procurement	All activities related to planning, conducting, controlling, and closing procurement of resources or services that might be required for project development.

On the other hand, the knowledge vector includes nine areas of knowledge that must be taken into account when developing a project. Each area includes a set of activities. Table 3.7 shows the kind of activities that correspond to each area.

Next, some details of the 42 processes are presented.

The success of any project depends on the careful formalization of documents elaborated in each of the processes, formal planning, accurate decisions, formal data updating, timely shared information, and proper human resource organization.

The next five sections will explain in more detail the time sequence phases:

$$\text{Initiation} \rightarrow \text{Planning} \rightarrow \text{Execution} \rightarrow \text{Controlling} \rightarrow \text{Closing}$$

These sections will also review all the processes within each of the phases and in all knowledge areas.

3.3.2 Phases and processes

(a) Initiation phase

The two activities that always come first in a project are the elaboration of the project charter and the stakeholder identification documents.

Project charter

As already mentioned, the project charter is a short document that explains the project in words that all stakeholders can understand. According to the PMBOK, the project charter must include the following elements:

- Reasons supporting the project initiative
- Objective of project
- Project constraints
- Overall outline of selected solutions
- Main stakeholders
- Project scope: things included and things excluded
- Main risks associated with project
- Benefits from project
- High-level budget and authority

In addition, the project charter will be used as follows:

- Authorization project document and a base document for comparison and selection among alternative projects;
- Baseline document for maintaining project coherence in future reviews;
- Plain explanation of project addressed to all people affected, in language that is clear to all relevant stakeholders.

Project stakeholders

Project stakeholders are the people or organizations affected by the project. A good practice is for the project manager, the professional in charge of managing the project, to develop the project charter in consultation with the relevant project stakeholders.

(b) Planning phase

The planning phase groups all management processes necessary for defining and planning the activities to perform, their sequence in time, their output, the resources required, purchases, subcontracts, and so forth, all in advance, so the project can be executed as quickly as possible without incident.

Project Management Plan

The Project Management Plan (PMP) documents the activities for the definition, preparation, integration, and coordination of all subsidiary plans of the project. The PMP is like the backbone of the planning phase and links all documents and processes of the phase.

Requirements collection

When the project charter is written, the project scope is described in words, using few if any numbers. The process of requirements collection establishes the actual numbers and measures of project performance. All projects must perform as desired, no more, no less. A road that is built bigger than it needs to be will have cost overruns, while one that is narrower than necessary will fail to resolve the traffic situation it was meant to address.

Scope definition (scope management)

The scope is derived from the project charter and from the information of the requirements collection document. The scope definition is a document that specifies the project's actual size, design, required materials, technology used, and so forth that are necessary for the project to perform as the requirements document demands.

The process consists of the following elements:

- Expert judgment from experienced managers;
- Decomposition of project (product or service) into conceptual parts (engineering breakdown), with an analysis of each part.
- Investigation and discussion of different alternatives for design.

The result of this process is the product scope document.

Creation of work-breakdown structure (WBS) (scope management)

The WBS is a hierarchical/logical decomposition of a project into its smaller deliverable parts that make up the project. The lowest level decompositions are called the work packages or deliverables of the project.

Definition of activities

Activity definition comprises the identification of actions and tasks to perform to produce the project deliverables. The activities are the actions to produce any of the work packages.

Sequencing of activities
Sequencing is the identification of the relations among the activities in terms of the order of their execution, meaning what activity must be done before other activities.

Estimation of activity resources
Resources are the means for performing an activity. For instance, the number of person-hours necessary to perform a certain activity would be the estimation of the required resources.

Estimating activity durations
This is an estimate of the amount of time that each activity will take.

Schedule development
All the previous processes end up in the development of schedule graphs to plan and later control the project.

Cost estimation
Cost estimation is the process of estimating the expected costs of resources required to complete each task in the project activities. These costs can be determined by measurement and calculation or by expert appraisal.

Budget determination
Budget determination is the process of aggregating all estimated costs of individual activities, resulting in the project cost baseline or project budget.

Quality planning
Quality planning is the process of identifying quality requirements or standards for a project and its components and documenting how the project will demonstrate compliance. Quality planning requires definitions of attributes and their measurement metrics.

Human resource planning
This is composed of three useful tools for structuring the organization of a project team, the hierarchy organizational chart, usually derived from the WBS, the responsibility assignment matrix (RAM), and the position descriptions.

Communications planning

To define the communications plan, the relevant stakeholders are registered; this will include complementary information like:
- Interest or level of concern of stakeholder with respect to project outputs;
- Influence or level of active involvement of stakeholder in project;
- Impact or ability of stakeholders to make changes to project planning or execution;
- Salience or ability of stakeholders to impose will, urgency, and legitimacy.

Plotting the stakeholders' power and interest in a grid will impart insight for developing communication strategies.

Procurement planning

Procurement encompasses the acquisition of products and services under the terms and conditions that fulfill the project's requirements. This activity involves signing binding legal agreements by buyers and sellers and is thus subject to one or more legal systems. Specialists involved must know and understand the technical aspects and their translation into words for legal description, understanding and judgment. Although contracts must be construed based on the legal system that will apply in case of dispute, arbitrators are usually a basic element of procurement agreements to expedite dispute settlements.

Risk management planning

The risk management plan involves making a plan indicating how, when, and by whom the work on risk management will be done.

Risk identification

Risk identification is the process of identifying risks that could affect a project and documenting their characteristics. All identified risks must be recorded in a risk registry file, even if they are later dismissed. In this case, reasons for dismissing them must be recorded.

Risk qualitative analysis

Risk qualitative analysis combines the impact and probability of occurrence for the classification. Impact is the change in any of the project's main dimensions: cost, time, performance, quality, or scope. The risk probability/impact matrix is a tool that is used to perform this analysis (Table 3.8).

Tab. 3.8: Risk probability/impact matrix.

	Probablity	
Impact	**High Probability**	**Low Probability**
Hight Impact	Avoid, Eliminate, Reduce Risks	Mitigate, Reduce Risks
Low Impact	Reduce, Transfer Risks	Accept Risks

Risk quantitative analysis

Risk impact can affect the five basic dimensions of any project: performance, cost, completion time, scope, and quality level. A negative impact in any of these dimensions eventually results in lower profits. In contrast, if the impact is positive, profits will increase.

The factors relevant in the evaluation of the risk quantitative analysis are, first, the value of the impact, positive or negative and measured in monetary terms, and, second, the probability of materialization. Both factors are compounded into a single variable called the expected value, which is the result of multiplying the impact value by the probability of materialization.

Risk response strategies

The strategies for risk response are as follows:

- Avoidance: Avoidance consists in eliminating the risky activity or the root cause of the risk.
- Transferral: Transferring a risk means shifting some of the negative consequences of the risk to a third party. Insurance, warranties, and guaranties, among others, are examples of this strategy.
- Mitigation: Mitigating risk means reducing the probability of risk materialization or increasing the level of response. Automatic fire extinguishing systems in a building and machines are examples of the increase in level response.
- Acceptance: Sometimes the consequence of a risk has a low impact, and its mitigation or avoidance may lead to an increase of other risks. Then the only action is to document the response in in case the risk materializes. An example of such a case would be a punched tire risk on a car project.
- Contingent response strategy: Some risk events upon materialization may require a response that entails a series of tasks. This is called a contingency plan. For instance, a contingency plan for citizens' protection may be necessary when setting up a nuclear power plant, including organization, actions, and responsibilities in case of a nuclear accident.

(c) Execution phase

The execution plan involves the following processes.

Project management and direction

The main activities within this process are as follows:
- Execute the planned activities, and build and deliver the project deliverable.
- Staff the team and manage it.
- Obtain resources.
- Implement the required standards and methodologies.
- Implement approved changes.
- Take actions to correct errors, prevent them, and repair faults.
- Manage communications with stakeholders.
- Manage and communicate progress information.
- Generate data for forecasting.
- Issue change requests, and submit them for approval.
- Manage risks and their responses.
- Manage sellers and suppliers.
- Document project development and their lessons for future projects.

Quality assurance performance

Quality assurance performance is the process of executing the project according to the guidelines set out in the quality management plan by means of quality audits and process capability assurance.

Project team acquisition

When recruiting project team members, the factors that follow are considered:
- Competence, or technical and management skills required on the project;
- Qualifications required by regulatory standards or demanded by generally accepted rules; these are norms established to ensure the execution of the project with safety, security, or design industry standards;
- Mandatory, as required by law (e.g., medical doctors in isolated work areas);
- Personality characteristics.

Project team development management

This is the process of improving team performance by developing the competence of its members, by improving the efficiency of team interactions, and by improving the project manager's skills.

Project team management

Managing the team implies the use of classical management techniques and skills:
- Observation and conversation with team members
- Project performance evaluation (periodic member evaluation)
- Conflict management

– Issue registry for future learning (recording experiences)
– Interpersonal skills like leadership, influence on team members, and effective decision-making.

Distribution of information

Information distribution is based on the communications plan, stakeholder identification, and performance reports. Distribution methods can include individual or group meetings, conferences (audiovisual), computer-based methods, and public media use. Inbound information, consisting of mailing of stakeholder correspondence and meetings records, is also considered. This information must be registered, evaluated, and handled in a systematic manner.

Management of stakeholder expectations

Stakeholders may develop concerns and expectations as a project develops. Addressing these concerns, clarifying or solving identified issues, and issuing change requests are the result of this activity. Early action response to stakeholder expectations leads to increased project support from the stakeholders and a greater probability of project success.

Procurement

Procurement varies depending on the project. Procurement includes soliciting bids, obtaining seller responses, selecting suppliers, and establishing procurement contracts with suppliers.

Selection of suppliers usually is the combined result of different supplier attributes:
– Technical capabilities
– Technical expertise in similar projects
– Production capacity of supplier
– Capacity to meet delivery deadlines
– Service (complementary to product) and contract approach
– Financial strength and terms.

To evaluate bids, they are usually requested in a certain format where the relevant required characteristics are awarded a partial score. After summing the scores, the best bid is awarded the contract.

(d) Monitoring and controlling phase

The Monitoring and Controlling Phase involves the processes that are presented next.

Monitoring and controlling work

Team members usually carry out this activity in weekly or periodic meetings. They report key information about advancement in their areas, where the team members discuss the following topics:

- Current project status
- Accomplishments in immediate period
- Scheduled activities and forecasts
- Issues that must be evaluated

Performing integrated change control

When a request for a change in project requirements or scope is approved, the implications of the change must be reviewed with respect to all parts and deliverables of the project. When this revision is completed, all project documents are updated and renamed according to the last revision.

Scope verification

Scope verification is the process of reviewing the scope and WBS deliverables of the project with customers or sponsors and obtaining their formal acceptance. Scope verification is developed in periodic meetings with the customer, resulting in conformity acts signed by customer.

Controlling schedule

The method for controlling the schedule is usually to develop a Gantt chart that reflects the actual variances of the project, which will establish a new forecast.

Controlling cost

The cost control process is a comparison between the actual cost at a given moment in time and the budgeted cost of the work performed.

Quality control

The work consists of a quality control function for the prevention of errors and inspection of work performed, sampling attributes and variables, and checking measures within admitted tolerances and control limits.

Project advance reporting

The project advance report is a periodic activity. The information and format may vary depending on the project or author. The report usually contains the following items:

- List and short description of work completed since last report or update,
- List and short description of work to be completed during the next reporting period,

- List of changes approved during the period,
- Baseline Gantt chart and actual progress Gantt chart,
- Risks status and new issues,
- Forecast Gantt chart.

Procurement administration

Project procurement administration is based on the supplier evaluation approval, purchase evaluation, and purchase documentation. Because project procurement contracts usually involve substantial sums of money, care must be given to the process by which the contract is awarded to deter unethical behavior among contract decision-makers.

Monitoring and controlling risks

Based on the risk registry, the monitoring and controlling of risks involves:
- Periodic risk review of impact, probabilities, responses, and so forth;
- Actual risk outcomes;
- New risks associated with change requests and corrective and preventive actions;
- If necessary, updates made to PMP.

(e) Closing phase

Finally, the closing phase includes project and procurement closing.

Project closing

Project closing is the process of formally checking that all project deliverables have been done, and then proceeding to:
- Archiving of project documents (e.g., PMP, risk registries, schedule, scope);
- Issuing formal closing documents of phases or project indicating conformity;
- Reviewing and classifying lessons learned for future projects.

Procurement closing

Procurement closing involves administrative tasks such as the following:
- Verifying and accepting all deliverables,
- Settling open claims,
- Opening litigation claims if necessary,
- Terminating contracts if necessary,
- Logging records for lessons learned for future projects and procurement,
- Obtaining formal closing acknowledgement from authorized supplier's managers.

3.4 Conclusions

In this chapter, we provided an overview of project management. After presenting the elements that characterize project management, a brief history of its evolution was discussed. Project management has evolved from a period of development of tools to another where automation and efficiency are the central topics. An overall vision of the tools and methods was presented. In addition, megatrends in the field and so-called digital disruptors were discussed. It was shown that the field is evolving in parallel with the fast changes that the production system and society are undergoing.

Then the concept of the business case was presented. A project begins with a proposal, the approval of this proposal, and the allocation of resources. In this context, the proposal is called the business case. A business case includes the reasons for developing the project and its main characteristics. The concept of the project charter was also presented. The project charter is the decision statement regarding the project.

Finally, the PMBOK approach was presented. The PMBOK is the most well-known project management standard. The PMBOK divides the task of planning a project into 42 interlinked processes, 5 chronological phases, and 9 knowledge areas, which were listed and described.

Knowledge revision

True/false statements

1. A project is a one-time, time-limited, goal-directed, major undertaking requiring the commitment of various skills and resources.
2. Project management is a methodical approach to initiating, planning, executing, controlling, and closing the work of a team to achieve specific goals and meet specific success criteria at a specified time.
3. Professional associations are essential for the advancement of the practice of project management because they help to develop the norms and rules that governments establish by law.
4. The megatrends driving the future of project management include automation and efficiency.
5. A business case is a document that outlines the justification for a project to be developed in a company.
6. The duration of a project is determined by the duration of the tasks that form the "critical path" and the delays in tasks of the critical path caused by the unavailability of resources because they have been allocated to other tasks going on at the same time.
7. No risk, once identified, can be accepted, however low its impact or probability of occurrence.
8. A project schedule baseline is any assumption made in scheduling a project.

9. If a risk is dismissed based on expert judgment, it is no longer necessary to include it in the risk registry.
10. The responsibility assignment matrix is a tool for self-coordination of people having responsibilities on a project.

See end of chapter for answers.

Bibliography

[1] Turner R (ed.) (2016). Gower handbook of project management. New York: Routledge.
[2] Longman A, Mullins J (2004) Project management: key tool for implementing strategy. Journal of Business Strategy 25(5):54–60.
[3] Saunders FC (2015). Toward High Reliability Project Organizing in Safety–Critical Projects. Project Management Journal 46(3):25–35.
[4] Lamers M (2002). “Do you manage a project, or what?” A reply to “Do you manage work, deliverables or resources”. International Journal of Project Management, April 2000. International Journal of Project Management 20(4):325–329.
[5] Stumpe F, Polinpapilinho FK (2017). A cybernetic ontology for project management. International Journal of System of Systems Engineering 8.1:42–73.
[6] Geraldi J, Söderlund J (2018). Project studies: What it is, where it is going. International Journal of Project Management 36(1):55–70.
[7] Winter M, Smith C, Morris PWG, Cicmil S (2006). Directions for future research in Project Management: the main findings of the EPSRC Research Network. International Journal of Project Management 24(8):638–649.
[8] Nicholas JM, Steyn H (2017). Project management for engineering, business and technology (p. 10). London: Routledge.
[9] Meredith JR, Mantel SJ (2006). Project Management: A Managerial Approach (6th edn.). New York, John Wiley & Sons.
[10] Pinto JK (2007). Project management: achieving competitive advantage. Upper Saddle River, NJ: Pearson/Prentice Hall.
[11] Sutterfield JS, Friday-Stroud SS, Shivers–Blackwell SL (2006) A case study of project and stakeholder management failures: lessons learned. Project Management Journal 37(5):26–35.
[12] Terje Karlsen J, Græe K, Jensvold Massaoud M (2008). Building trust in project-stakeholder relationships. Baltic Journal of Management 3(1):7–22.
[13] Project Management Institute (2013). A Guide to the Project Management Body of Knowledge, (PMBOK® Guide) – Fifth Edition, Philadelphia, Pennsylvania: Project Management Institute, Inc.
[14] Cleland DI, Ireland LR (2007). Project management: Strategic design and implementation (5th edn., pp. 1–15). New York, NY: McGraw–Hill.
[15] Kozak-Holland M (2011). The history of project management (Lessons from History). Lakefield, Ontario, Canada: Multi-Media Publications, Inc.
[16] Stretton (2007). A short history of modern project management. PM World Today 9(10):1–18.
[17] Kwak JH (2002). Brief history of project management. In Carayannis, Kwak, and Anbari (eds.), The story of managing projects: A global, crossdisciplinary collection of perspectives. Quorum Books.

[18] Sisk T. History of Project Management. Project Managers in Pharmaceuticals. Accessed, September 09, 2017 at www.pmi.org/learning/library/project-management-evolution-research-directions-8348, 21/09/2017.
[19] Darmody PB, Gantt HL, Taylor F (2007). The pioneers of scientific management. AACE International Transactions, PS151.
[20] Verma V (1996). The human aspects of Project Management: human resource skills for the project manager, volume two. Project Management Institute.
[21] Elton J, Roe J (1998). Bringing Discipline to Project Management. Harvard Business Review.
[22] Winch G (2000). The management of projects as a generic business process. In Lundin RA, Hartman F (eds.), Projects as business constituents and guiding motives. Boston: Kluwer Academic Press.
[23] Cicmil S, Williams T, Thomas J, Hodgson D (2006). Rethinking Project Management: Researching the actuality of projects. International Journal of Project Management 24(8):675–686.
[24] Hanisch B, Lindner F, Mueller AK, Wald A (2008). Toward theoretical foundation of Project Management: a framework and research agenda. Paper presented at PMI Research Conference: Defining the Future of Project Management, Warsaw, Poland. Newtown Square, PA: Project Management Institute.
[25] Shenhar AJ, Dvir D (2007). Project management research – The challenge and opportunity. Project Management Journal 38(2):93–99.
[26] Harned B (2014). Project management methodologies and approaches. In Team Gantt. Accessed March 03, 2018 at www.teamgantt.com/guide-to-project-management/project-management-methodologies.
[27] Ernst and Young (2015). Megatrends 2015: Making sense of a world in motion. Accessed March 03, 2018 at www.ey.com/Publication/vwLUAssets/ey-megatrends-report-2015/$FILE/ey-megatrends-report-2015.pdf.
[28] Evans M (2017). How companies can use megatrends analysis to anticipate long-term societal shifts. Forbes, 7 September 2017.
[29] Laudon KC, Laudon JP (2013). IT infrastructure and emerging technologies. In Management information systems: Managing the digital firm (13th edn.). Pearson.
[30] Bloom E (2013). 5 Megatrends that are changing the Project Management profession. IT world. Accessed March 13, 2018 at www.itworld.com/article/2701595/careers/5-it-megatrends-that-are-changing-the-project-management-profession.html.
[31] Zwikael O, Smyrk J (2011). Project management for the creation of organisational value (p. 138).
[32] Lester EIA (2014). Project Management, Planning and Control (p. 21).
[33] PRINCE2 Business Case Template.
[34] Turley F (2010). The PRINCE2® Training Manual. Practitioner Level (pp. 35–36).
[35] PMP – PMBOK 5th Edition. Complete tutorial series. Develop Project Charter.
[36] PMP Certification (2010). A Beginner's Guide. George G. Angel (pp. 103–104). McGraw-Hill.

Answers to true/false statements

1. True
2. True
3. False
4. False
5. True
6. True
7. False
8. False
9. False
10. True

Gilda Hernandez-Maskivker

4 Consumer behavior: the importance of millennials in the tourism industry

Abstract: The study of consumer behavior has become key for companies in the tourism industry to improve business performance through customer-focused strategies. This interest comes from the increasing need to understand consumption and satisfy consumers. By understanding their customers' desires and needs, companies can create better products and services, promote them more effectively, and develop marketing plans and strategies that create a sustainable competitive advantage. Over the past few years, the hospitality industry has focused its efforts on understanding millennials. Companies in the industry have been examining their products and offerings in order to satisfy customer demands. Millennials are cost-conscious and experience-focused. Based on this change in preferences, the hospitality industry is constantly looking for innovative and creative alternatives to engage them. This chapter follows the discussion on tourist behavior and contributes to the understanding of millennials' behavior in the hospitality industry.

4.1 Introduction

The literature on marketing and tourism has researched consumer behavior from a broad perspective. In today's highly technologically advanced market, customers have a great deal of choices and options. Understanding how people act helps companies predict and anticipate their customers' behaviors. Thus, the study of consumer behavior plays a critical role in satisfying customers and making profits.

Millennials have revolutionized the tourism industry. Hotels, restaurants, travel agencies, theme parks, and other tourist destinations are aware of the importance of this target market and are focusing their marketing efforts on them. They must adapt their products and services, distribution channels, and promotions to the needs and wishes of millennials.

This market segment, with its unique psychographic characteristics, has led professionals to embrace technology and innovation, memorable moments, and local and sustainable experiences. In this sense, studying millennials' characteristics and behaviors will help determine successful marketing strategies and action lines.

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4.2 Consumer behavior and tourist behavior

Many authors have defined the concept of *consumer behavior*. For instance, it has been defined as a marketing discipline responsible for analyzing customers' needs and wishes [1]. It has also been described as a simple expression of preferences [2] and explained as a comprehensive and global analysis from multiple disciplines that allows for an understanding of the person, the context, and consumption practices [3]. Swarbrooke and Horner [4, p. 434] define consumer behavior as "the study of which products people buy, why they buy these products and how they make their purchase decisions." Engel, Blackwell, and Miniard [5, p. 4] have also defined the concept: "consumer behavior is those activities directly involved in obtaining, consuming and disposing of products and services, including the decision processes that precede and follow these actions."

However, Solomon's definition is probably the most widely used: " the study of the process involved when individuals or groups select, purchase, use or dispose products, services, ideas or experiences to satisfy needs and desires" [6, p. 7]. On the one hand, the literature highlights the fact that the study of consumer behavior includes the study of both individuals and groups [4]. For individuals, this discipline enhances their levels of consciousness about decision-making and the factors that influence them. For groups, the study of their behavior contributes, for instance, to protecting them in legislation issues [6]. On the other hand, the literature mentions that the ultimate goal of consumers is the satisfaction of needs and desires [7]. Therefore, motivation and psychology are key aspects in the study of consumer behavior.

Additionally, consumer behavior is considered to be a process, not isolated phases [4]. The study of consumer behavior not only analyzes the moment when someone purchases a product or a service, but also investigates the different stages through which the consumer passes. It is the analysis of behaviors before, during, and after purchase. The decision to purchase includes the following stages: customers recognize the problem (they recognize they have a need they want satisfied), they seek out information (internal information such as prior experiences and external information such as friends' recommendations), evaluate alternatives (according to different criteria and preferences), and, finally, choose a product or service [5, 8].

Furthermore, it is necessary to consider that some purchase decisions are made regularly. For instance, almost every day customers must choose what to buy for dinner or lunch. These frequent purchases are related to low-cost products, low customer involvement, superficial analysis, and a brief search for information. Other purchase decisions are made irregularly, such as the decision to buy a car or to move to a new house. These infrequent purchases are associated with expensive goods, high customer involvement, a detailed analysis, a search for information, and time spent on the purchase. Also, other purchase decisions lie between the two extremes. Here, customers look for a limited solution to the problem [6].

When analyzing tourist behavior, the literature highlights some distinct aspects [9–12]. For example, tourists often make purchase decisions with high levels of insecurity, they search extensively for information, they perceive a high risk, they may be highly involved in the purchase process, they are often influenced by other people, they make long-term decisions, and emotional aspects have a high importance in their purchases [4, 13].

For instance, Pearce and Lee [14] explain that when tourists plan and decide to travel, they do this more in advance than when a consumer buys a product in a supermarket. A family could spend months or years thinking about their next trip. Or, if tourist buy a service, it is important to remember that their purchase and experience lasts for much longer than that of a consumer with no other tourist products. These behaviors may be related to the unique characteristics that service contexts and tourist contexts have. These are intangibility (you cannot see it, feel it, or enjoy it before you buy), inseparability (it is produced and consumed in quick succession), heterogeneity (it is usually not standardized), perishability (it cannot be stored), interconnectivity (with other products and services), dependence on external factors, and subjectivity (the client participates in the quality of the service) [15–17].

Finally, as marketing and consumer behavior research explain, consumers act according to a set of factors of influence [6, 18]. Previous literature developed several theoretical models to explain this. According to Solomon [6], there are previous antecedents (situational factors, contexts of use, time pressure, mood, purchase orientation), environmental factors (purchase experience, stimuli at the point of sale, and interaction), and processes after purchase (customer satisfaction, waste product, and alternative markets). Most of these models have also been applied to study tourist behavior [9, 20]. These models suggest both internal factors (motivation, personality, attitudes, and previous experiences) and external factors (culture, social class, reference groups) that influence consumers throughout the buying process.

For example, Um and Crompton [21] propose in their model different inhibitors and facilitators influencing the choice of a destination. Mayo and Jarvis [20] also suggest internal and external influences in travel decisions. Therefore, these models allow companies to predict and control the behaviors of individuals and groups [12]. The study of consumer behavior seeks to understand why consumers act in a certain way in order to anticipate their actions regarding marketing stimuli. The detection and analysis of what customers want, their preferences, the causes of their actions, and the factors that impact them currently and in the future permit companies to produce adequate and well-positioned services. If companies know their clients, they will be able to intervene, to improve results, target the right market at the right time, and satisfy client needs [4].

4.3 Millennials' behavior in tourism industry

Millennials have become the fastest-growing customer segment within the tourism industry [22]. Although millennials are not the majority of travel consumers at the moment, they will be within a few years [23]. Millennials as a whole have not reached their peak spending years, but they are expected to do so in 2017; however, they are already the fastest-growing segment for travel spending [24]. They are expected to be the next big group of consumers, and they travel more frequently than previous generations [25]. In addition, millennials are an important cohort to study for the tourism industry because they are the young people who are currently entering or have recently entered the workforce.

As the market for tourism and travel becomes more dynamic and complex and consumer patterns become increasingly difficult to predict [26], millennials have been widely studied on tourism. Many researchers are dedicated to studying the travel behavior and motivations of millennials [27] and the effects of this generation on tourism [28]. For instance, millennials have been described many times as an important segment within the group of independent travelers [29, 30]. They are the most important group for setting behavioral changes and driving increasing demand for independent travel [29].

Millennials, defined in this study as the generation born between the early 1980s and the early 2000s [31], are interested in pushing the boundaries of travel so that they experience something new in an unusual way. Likewise, this group likes to travel [32] and is willing to pay more for greater experiences rather than acquire objects [22, 33]. They are perceived to be civic-minded, intelligent, and active participants in today's society. They believe that they can make a difference in today's world. They are confident, assertive, and entitled [34].

In terms of traveling behavior, millennials are described as having a huge desire to see the world and, for that reason, as being more globally oriented than other generations. This is shown by a 23% higher interest in going abroad than other generations [33]. The principal reason mentioned for the annual growth in millennials' traveling has been the increased possibilities for low-budget travel and the increase in peer-to-peer businesses like Airbnb, Couchsurfing, and BlaBlaCar [35]. These peer-to-peer businesses not only make it cheaper to travel, they also add a social value to travel and can increase the cultural experience with more opportunities for different types of stays, for example [36].

In addition to having a greater interest in traveling, millennials are said to view traveling differently. Where older consumers tend to see traveling more as a luxury, millennials often see their international trips as an important life experience, fundamental for their personal development [33]. They use travel to develop themselves, believing that going abroad often offers new opportunities and experiences, like learning about other cultures. Having cultural knowledge and experience has therefore also become an important marker of affluence [37].

Another important issue is that millennials also see themselves as more adventurous and more receptive to new ideas [38, 39]. For example, the sports and outdoor adventure tourism is mentioned as one of the important new activities of millennial travelers [40]. The specific psychological characteristics of these millennial adventure travellers reveal a connection between high risk-taking and sensation-seeking scores and adventure tourism activities [41].

Furthermore, millennials are tech-savvy. They are the first to have grown up with the Internet, social media, smartphones, and other technologies [32, 42]. They are immersed in online activities daily [43]. The millennial generation is therefore a highly connected generation that interacts with people and information in ways that are very different from their parents [44]. They are flexible, responsive to changes, and adapt quickly to new technologies.

The rise of the Internet and online social networks also plays a significant role when understanding how millennials travel. They are avid users of mobile phones and social media [44], and they are more involved in online activities such as text messaging, social networks, and blogs [32]. Also, during their travels, millennials embrace the Internet and mobile technology [45]. Booking for accommodations and flights is mostly done online [46], and the number of mobile bookings is increasing considerably [47].

Millennials engage in frequent online social networking activities with peers [48]. Social media connects millennials more deeply with the world, which causes a strong desire to enrich their lives through travel [49]. Millennials want to be online at any time, without having to pay for it. They are used to sharing their activities and opinions directly with friends through social media [24]. Thus, millennials rely more on their peers for "expert" opinions [50]. They value personal travel experiences and are influenced by reviews [44].

Millennial travellers value personal travel experiences and are influenced by reviews [44]. For instance, if travel companies fail to provide real-time information on their websites, millennials will turn to Google and search for answers on review websites such as TripAdvisor. As millennials participate actively in social networking sites, Kamis [50] argues that collaboration through a digital channel is one way to reach them. This is also one of the main reasons why travel blogs are increasingly popular [51]. Travel blogs are an inexpensive means of gathering rich, authentic, and unsolicited customer feedback [52]. As research reveals, millennials are most influenced by blogs before they make a purchase [53].

Furthermore, visuals are one of the most important online influencers of travel decisions. Particularly younger travelers are more likely to be influenced by visuals than reviews. Furthermore, there are consultancy reports explaining that companies with at least one photo see an increase of 138% in travel engagement and have +225% more likelihood of booking inquiries [54]. Thus, millennials are very sensitive to events and pictures shared online by peers or travel companies, which often convinces them to join [24]. Many millennials experience the FOMO (Fear Of Missing Out) phenomenon, the fear that your peers are doing more or something better than you [55]. Millennials desire to stand out from others [34].

Added to this, millennials want to live the local life during their trip. They demand authenticity [49]. They want to be integrated into new cultures and local experiences. It is important to understand that they select and consume products that help them to define who they are, what is important to them, and what they value in life [45]. Meeting locals, living like a local, and making new memories from these experiences are the strongest motivations for millennials to travel [44]. With the increase of mobile apps, millennial travelers can seek local experiences online independently [24]. They know where to find other travelers, locals, and accommodations online for inspiration and actual bookings. Millennials are willing to spend more during trips, especially when it comes to authentic and new experiences [43]. Millennials have a strong need for self-determination, especially when it comes to travel [49].

Instant service for do-it-yourself needs, personalized services, products, and technology are the basis of millennial travelers' needs. Furthermore, their expectations for excellent services are high. They expect speed and efficiency in their travels [45]. As some reports explain, millennials expect "seamless perfection at an affordable price." They might have a preference for efficiency over "friendly" service [51].

4.4 Final remarks on how to approach this target market from a managerial perspective

Companies that target different generational groups should adapt their offerings and marketing strategies to those different groups. Differentiated marketing is key to success. A clear separation of messages to different groups can help professionals create a good strategy to reach groups differently and create different types of customer relationships. Establishing a clear segmentation and positioning may generate a higher value for their products, increasing customer satisfaction and willingness to pay for services and products.

Professionals that work with millennials as a target market should offer products and services that fit well with millennials' motivations. For example, companies should offer unique memories and experiences, such as active sports tourism activities with a higher level of thrill and adrenalin involved and where certain challenges exist that can be overcome. Gamification is one of the best ways to engage millennials [42].

Because these customers are "experience-hungry," marketing should also be experiential. Experiential marketing, a new approach to marketing, is one of the fastest growing fields in marketing and advertising. It brings advertising to the consumer with direct hand-to-hand sampling or interactive displays, allowing customers to experience the brand and offering a holistic and pleasurable experience [56].

By providing memorable, enjoyable experiences and unique moments, companies might involve customers and stimulate repetitive purchase behaviors. For instance, as millennials look for short-term rewards instead of points-driven loyalty programs, it could be more attractive to reward them with some instant recompense, such as a free breakfast or a special activity. Millennials are not long-term brand-loyal customers [45]. From this, companies should focus on brand equity and trust as key factors in increasing attachment to their brands [43, 45].

Knowledge revision

Review statements (true or false):

1. When companies analyze consumer behavior, they focus just on the purchase intention and motivations.
2. Internal and external factors influence how consumers behave.
3. Tourist services have specific characteristics such as tangibility, separability, heterogeneity, perishability, connectivity, independence of external factors, and objectivity.
4. The study of tourist behavior helps to achieve the main goal of marketing strategies: satisfy demands and wants of consumers.
5. A purchase decision includes need/desire recognition, search for information, evaluation of options, and, finally, choice of a product or service.
6. Experiential marketing is part of the traditional marketing approach.
7. Millennials are changing the way companies promote their products and services.
8. Differentiated marketing strategies are useful when companies want to appeal to different target groups.
9. Millennials prefer to maintain their habits and routines while traveling. That is authenticity for them.
10. For millennials, travel blogs are an inexpensive means to gather rich, authentic customer feedback.

See answers at end of chapter.

Bibliography

[1] Schiffman L, Kanuk L (1997). Comportamiento del consumidor (5th ed.). México: Prentice Hall Hispanoamericana.
[2] Samli A (1995). International consumer behavior: Its impact on marketing strategy development. Westport, CT: Quorum Books.
[3] Gil Hernández C, Torres Estrada I, López Torres Z (2013). Dimensión integral e interdisciplinaria del concepto de comportamiento del consumidor. Anagramas 11:22.

[4] Swarbrooke J, Horner S (2007). Consumer behaviour in tourism. Amsterdam Boston: Butterworth-Heinemann.
[5] Engel J, Blackwell R, Miniard P (1995). Consumer behavior (8th edn). New York: Dryden Press.
[6] Solomon MR (2008). Comportamiento del consumidor. México: Pearson Educación.
[7] Faison E (1977). The neglected variety drive: A useful concept for consumer behaviour. Journal of Consumer Research 4:172–175.
[8] Kotler P (2000). Marketing management (millennium). Upper Saddle River, NJ: Prentice Hall.
[9] Moutinho L, Ballantyne R, Rate S (2011). Consumer behaviour in tourism. In L. Moutinho (Ed.), Strategic management in tourism (2nd edn., pp. 83–126). Oxfordshire: CAB International.
[10] Moutinho L (1993). Consumer behaviour in tourism. European Journal of Marketing 21(10):5–44.
[11] Pearce PL (2005). Tourist behaviour: Themes and conceptual schemes (pp. 241). Clevedon, UK, Buffalo, N.Y.: Channel View Publications.
[12] Pizam A, Mansfeld YE (1999). Consumer behavior in travel and tourism. New York: Haworth Press, Inc.
[13] Sirakaya E, Woodside AG (2005). Building and testing theories of decision making by travellers. Tourism Management 26(6):815–832.
[14] Pearce PL, Lee U-I (2005). Developing the travel career approach to tourist motivation. Journal of Travel Research 43(3):226–237.
[15] Edvardsson B (2005). Service portraits in service research: A critical review. International Journal of Service Industry Management 16(1):107–121.
[16] Gabbott M, Hogg G (1994). Consumer behaviour and services: A review. Journal of Marketing Management 10(4):311–324.
[17] Gronroos C (1978). A service-orientated approach to marketing of services. European Journal of Marketing 12(8):588–601.
[18] Kotler P, Cámara D, Grande Esteban I (1995). Dirección de marketing. Madrid: Prentice Hall.
[19] Gilbert DC, Cooper CP (1991). An examination of the consumer behaviour process related to tourism. Progress in Tourism, Recreation and Hospitality Management 3:78–105.
[20] Mayo EJ, Jarvis LP (1981). The psychology of leisure travel. Effective marketing and selling of travel services. CBI Publishing Company, Inc.
[21] Um S, Crompton JL (1990). Attitude determinants in tourism destination choice. Annals of Tourism Research 17(3):432–448.
[22] Rauch R (2014). Top 10 Hospitality Industry Trends in 2015. Accessed November 10, 2017 at www.4hoteliers.com/features/article/8736
[23] Mettler L (2015, January 27). Millennial Appeal: 5 Ways Hotels Are Engaging Gen Y. US News. Accessed November 10, 2017, at travel.usnews.com/features/Millennial-Appeal-5-ways-hotels-are-engaging-Gen-Y/
[24] Lee T (2013). Top 10 Trends of the Next Geneartion of Travel: The Millennials. New York: HVS Global Hospitality Services.
[25] Li X, Li X, Hudson S (2013). The application of generational theory to tourism consumer behaviour: An American perspective. Tourism Management 37:147–164.
[26] Poon A (1993). Tourism Technology and Competitive Strategies. C.A.B. International.
[27] Polzin SE, Chu X, Godfrey J (2014). The impact of millennials' travel behaviour on future personal vehicle travel. Energy Strategy Reviews 5:59–65.
[28] Benckendorff P, Moscardo G, Pendergast D (2010). Tourism and Generation Y. Wallingford: CAB International.
[29] Mohn T (2014). The Rising Wave Of Millennial Travelers. Forbes. Accessed November 10, 2017, at www.forbes.com/sites/tanyamohn/2014/11/08/the-rising-wave-of-millennial-travelers/#6861085b3715

[30] Hyde K, Lawson R (2003). The Nature of Independent Travel. Journal of Travel Research 42(1):13–23.
[31] Garikapati VM, Pendyala RM, Morris EA, Mokhtarian PL, McDonald N (2016). Activity patterns, time use, and travel of millennials: a generation in transition? Transport Reviews 36(5):558–584.
[32] Nusair K, Bilgihan A, Okumus F, Cobanoglu C (2013). Generation Y travelers' commitment to online social network websites. Tourism Management 35:13–23.
[33] Barton C, Haywood J, Jhunjhunwala P, Bhatia V (2013). Traveling with Millennials. BCG perspectives. Accessed November 10, 2017, at www.bcgperspectives.com/content/articles/transportation_travel_tourism_consumer_insight_traveling_with_millennials/#chapter1
[34] Twenge JM (2014). Generation Me – revised and updated: Why today's young Americans are more confident, assertive, entitled-and more miserable than ever before. New York: Atria Books.
[35] Osterwalder A, Peigner Y (2010). Business Model Generation: A handbook for visionaries, game changers and challengers. Wiley Press.
[36] Godelnik R (2017). Millennials and the sharing economy: Lessons from a 'buy nothing new, share everything month' project. Environmental Innovation and Societal Transitions 22:1–94.
[37] Swartz L (2016). What You Need to Know About Millennial Travelers. Millennial marketing. Accessed November 10, 2017, at www.millennialmarketing.com/2016/05/what-you-need-to-know-about-millennial-travelers/
[38] Deal JJ, Altman DG, Rogelberg SG (2010). Millennials at work: What we know and what we need to do (if anything). Journal of Business and Psychology 25(2):191–199.
[39] DeBard R (2004). Millennials coming to college. New Directions for Student Services 106:33–45.
[40] Cain R (2016). Demographic destiny: The generational divide. Tourism Travel and Research Association: Advancing Tourism Research Globally (Vol. 14). Accessed November 10, 2017, at scholarworks.umass.edu/ttra/2013marketing/Presentations/14
[41] Pizam A, Jeong GH, Reichel A, van Boemmel H, Lusson JM, Steynberg L, Montmany N (2004). The relationship between risk-taking, sensation-seeking, and the tourist behaviour of young adults: A cross-cultural study. Journal of Travel Research 42(3):251–260.
[42] Prensky M (2001). Digital Natives, Digital Immigrants. On the Horizon 9(5):1–6.
[43] Bilgihan A (2016). Gen Y customer loyalty in online shopping: An integrated model of trust, user experience and branding. Computers in Human Behaviour 61:103–113.
[44] WYSE Travel Confederation Report (2014). Millennial traveller report. Amsterdam: WYSE Travel Confederation.
[45] Ordun G (2015). Millennial (Gen Y) consumer behaviour, their shopping preferences and perceptual maps associated with brand loyalty. Canadian Social Science 11(4):40–55.
[46] Michel C (2015). A revolution in the hostel sector: Millennial travelers and trends in youth travel accommodation. Wyse Travel Confederation.
[47] Beccari D, Maillard F (2014). Travel Flash Report: Online travel's never looked so mobile. New York: Criteo H1.
[48] Howe N, Strauss W (2007) The next 20 years: How customer and workforce attitudes will evolve, Harvard Business Review. Accessed November 10, 2017, at hbr.org/2007/07/the-next-20-years-how-customer-and-workforce-attitudes-will-evolve
[49] Morrison G (2016). Millennial traveller report: Why millennials will shape the next 20 years of travel. UK: Expedia. Future Foundation Report
[50] Kamis A (2011). An Explanatory model of collaborative online travel planning by millennials. Proc., 44th Hawaii International Conference on System Sciences (HICSS): Hawaii, EEUU.

[51] Schmallegger D, Carson D (2007). Blogs in tourism: Changing approaches to information exchange 14(2):99–110.
[52] Pan B, Crotts JC (2007). Travel Blogs and Their Implications for Destination Marketing. Journal of Travel Research 46(1).
[53] Schawbel D (2015). Elite Daily And Millennial Branding Release Landmark Study on The Millennial Consumer. Millennial Branding. Accessed November 10, 2017, at millennialbranding.com/2015/millennial-consumer-study/
[54] Gonzalo F (2014). Why Visuals are Key in Travel Marketing. Accessed November 10, 2017, at fredericgonzalo.com/en/2014/12/23/why-visuals-are-key-in-travel-marketing/
[55] Barker E (2016). This is the best way to overcome fear of missing out. Time. Accessed November 10, 2017, at time.com/4358140/overcome-fomo/
[56] Schmitt BH (2010). Experience marketing. Concepts, frameworks and consumer insights. Foundations and Trends in Marketing 5(2):55–112.

Answers to review statements

1. False (Section 1)
2. True (Section 1)
3. False (Section 1)
4. True (Section 1)
5. False (Section 1)
6. False (Section 3)
7. True (Sections 2 and 3)
8. True (Section 3)
9. False (Section 2)
10. True (Section 2)

Ana Lúcia Rodrigues, Carolina Feliciana Machado

5 Performance appraisal: a critical tool in effective human resource management

Abstract: Performance appraisal plays an important role in human resource management (HRM) because it represents an integrative tool for various practices and at the same time enhances the effectiveness of organizations through the development of their human capital. Based on an analysis and description of functions, objectives are formulated, while at the same time skills that are critical for the professional success of each employee are identified. These become the assessment target of all those in professional contact with the assessed. In what concerns HRM, performance appraisal has played a special role in terms of potential productivity effects, whether through performance monitoring or through its integration with selection, development, promotion, and compensation processes in organizations.
Emphasizing that performance appraisal should make it possible to analyze more clearly the contributions of each employee to the fulfillment of the established organizational objectives, in this chapter we aim to contribute to a better understanding of the importance of implementing a performance appraisal system, in other words, the creation of an instrument that measures the relationship between performance and the gathering of training needs, the development of employees, remuneration, recruitment, and selection of future employees of an organization.

5.1 Introduction

Human capital currently represents the most important asset of organizations because of their capacity for differentiation and creation of value that can hardly be imitated permanently, for example, through innovation or relationships with customers or intangible and (potentially) renewable products [1].

Managing people today means managing the ultimate, true, competitive advantage factor of organizations, the only factor that is able to change, evolve, learn, know, innovate, and teach others. In short, people represent a resource that can develop, grow, adapt, and multiply, with a high degree of resistance to imitation [1].

In a labor market characterized by constant technological change and determined to achieve excellence, the quality of human resources of an organization is paramount, assuming that the more motivated and committed employees are, the higher the productivity level of the organization [2]. In terms of human resource management (HRM), performance appraisal "is a powerful tool of solving performance problems and improving the quality of work and quality of life within organizations" [3, p. 223].

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Performance appraisal is understood as “a process by which an organization measures the efficiency and effectiveness of its employees. In general, the process serves as a tool for auditing and controlling the contribution to the objectives and/or results of organizational participants” [4, p. 15]. It consists, then, in the “systematic appraisal of the individual’s behavior in the function he occupies, supported by the objective analysis of man’s behavior at work, and communication to the same of the result of the evaluation” [5, p. 120]. Establishing a clear link between organizational mission and performance measures is a critical aspect of performance management. Thus, performance appraisal becomes a measurement instrument that allows organizations a form of self-regulation that guarantees the identification of deviations between the desired and effectively realized.

Although the significant consequences of performance appraisal for productivity, either by the process of performance monitoring or by its relation to selection, training, development, promotion, and compensation processes in the organization [6], are diverse, the problems are associated with its application. As stated by Caetano [7], performance appraisal undermines the regular functioning of any organization by increasing the anxiety level of both the evaluated and the evaluator.

Over the decades, research has focused on the various dimensions of performance appraisal. Although some aspects remain problematic, we now have more knowledge about the main factors associated with the failure of performance appraisal systems. A lack of equity, the valuation of irrelevant elements, and the devaluation of important dimensions, as well as their low acceptability and practicability, continue to weaken the robustness of these systems.

A performance appraisal system should be designed based on criteria and measures capable of distinguishing important contributions from medium or weak contributions [7] in such a way that it makes it possible to appreciate and compare the work developed by coworkers in an organization [6].

5.2 Performance appraisal in human resource management

The twentieth century witnessed several changes in the importance of human resources in organizations. It is now known that, over time, workers were given greater importance and the concern in organizations went from machines to humans, while at the same time it was verified that increases in production were critical to worker satisfaction. In this way the premise emerged that HRM is a determinant factor in organizational success.

Today, organizations need to be at the forefront, not only for their goals but, above all, to keep up with the competitiveness that globalization spurs. At the HRM level, performance appraisal makes companies homogeneous in terms of their present and future objectives since employees will be aware of the goals of their position and, consequently, will adopt a holistic view of the business, organization, and the importance of each activity, so that their company can succeed. In its essence, performance appraisal entails a process of guiding, developing, and motivating an organization's employees, so it aims to add value and continuously improve the organization's effectiveness. Thus, the performance appraisal process starts to play a fundamental role in HRM by measuring the effectiveness of its contribution to the achievement of organizational goals [7, 8].

Traditionally, performance appraisal focused only on the personal characteristics of employees who performed roles in the middle or upper management of large organizations. Currently, appraisals have evolved to the point where they are designed for all members of an organization based on the behaviors manifested by employees and the results achieved by them [8].

Research on performance appraisal has been carried out based on certain assumptions that can be condensed into three main metaphors: *the metaphor of the test, the metaphor of the information processor, and the political metaphor*.

The first metaphor dominated much of twentieth-century research and assumes that performance appraisal can be equated to psychological tests, such as are used in professional selection [7]. A performance appraisal should be able to produce accurate judgments of the target person using well-constructed evaluation tools [6]. Thus, the efficacy of the evaluation would depend fundamentally on the degree to which the errors of classification could be minimized, something that caused researchers' to focus their efforts on analyzing the psychometric problems of the scales used. This concern resulted in a great diversity of scales and evaluation methods, with different degrees of validity [7].

The 1980s saw the publication of research that no longer concerned itself with comparisons of evaluators' quotations with external criteria but rather with analyses of the evaluators' cognitive processes so as to understand the sources and causes of biases (metaphor of the information processor). Understanding the performance appraisal process requires a better understanding of the cognitive functioning of evaluators, specifically at the level of the rules of elaboration of their judgments [6]. Research carried out under the influence of this metaphor allowed researchers to conceptualize attention, perception, and memory as interdependent, mutually influencing processes that affected the judgments and behaviors of the actors in the evaluation [7]. From the produced research, the difficulties individuals have in producing judgments with accuracy have been demonstrated.

The political metaphor of organizations considers that they represent scenarios of confrontation of competing interests of individuals and groups. Regarding performance appraisal, this metaphor emphasizes the relevance of interest games and the organizational context in constructing judgments about the performance of individuals [8]. Following this line of thought, all organizations are political entities, and decisions are developed with a view to protecting key players. This metaphor emphasizes the existing influence strategies in the relationship established between evaluators and evaluated, relating the performance appraisal to processes of social validation of judgments and classifications [7].

Adopting an integrative reading of the various perspectives explored here, it can be affirmed that the organizational context is an important element in the evaluation process, highlighting the work environment, the organizational and hierarchical elements, the technological aspects, and, above all, the strategy and organizational culture [7].

The articulation and validation of the performance appraisal system is essential for more effective and integrated HRM. The demanding design of the performance appraisal system, especially with regard to its concrete and real objectives and its relationship with organizational strategy, the methods adopted for the evaluation, and the procedures that guide the implementation of the evaluation, is fundamental in producing impactful consequences. Following Fernandes and Caetano [6], we can consider, in general terms, that any system of performance appraisal can be conceptualized on the basis of three fundamental central vectors: **objectives**, **instruments**, and **procedures**.

5.2.1 Performance appraisal objectives

Performance assessment is used in organizations for a wide variety of purposes [9, 10]. As an essential tool, performance appraisal in management has as its main objectives to improve employee productivity, motivation, and performance; assist in organizational decisions, such as salary increases, promotions, transfers, and training needs; and provide feedback to evaluatees on their performance and to help improve bad results [2, 4, 11–13].

McGregor (1957, quoted in [6]) postulates that organizations use performance appraisals to meet three needs, one at the organizational level and two at the individual level. With regard to organization, performance appraisal helps in administrative decision-making processes (such as transfers and remuneration). This tool allows individuals to know that their performance is appreciated, allowing, at the same time, the evaluator to offer guidance about their professional path.

Rocha [5] also adds that the information resulting from performance appraisal should contribute to several objectives: professional selection and orientation (through internal recruitment processes), vocational training (allowing an inventory of weaknesses and developing a training program tailored to specific needs), and promotion (support for career advancement policies). Along the same lines, Costa [1] advocates that any performance management system should serve the following purposes:

1. Validate the methods of “adding people”: when assessing employee performance, we simultaneously assess the organization’s ability to recruit people who perform adequately.

2. Strengthen the internal mark: performance and recognition/reward must be associated with the organization's values and the objectives of the business.
3. Facilitate reward management: Performance management systems, when well structured, lay the foundation for a fair and clear distribution of rewards.
4. Lead development: By identifying areas of improvement or opportunity, by detecting potential talent, performance appraisal promotes and facilitates career management.

On the other hand, Fernandes and Caetano [6], in an analysis of the different objectives that performance appraisal fulfills, confirm that these can be integrated into three main classes: objectives that aim at the maintenance and development of the organization, objectives that aim at individual development, and objectives focused on rewards management. The first class, organizational objectives, includes determining training needs at the organizational level and organizational development needs, ascertaining the degree of achievement of objectives, and negotiating objectives for the next period. The second, individual objectives, refers to the recognition of individual performance, identification of performance gaps, and feedback on employee performance. Finally, the third class of objectives fulfilled by performance appraisal refers to decisions on the awarding of prizes, other benefits, or remuneration.

In summary, performance appraisal will align employees' performance and their individual objectives with the organization's strategy; provide management indicators that facilitate decision-making processes for remuneration, training, and development, and possible transfers; and provide feedback to employees on their individual performance [1, 4, 7, 12–14].

5.2.2 Performance appraisal instruments

For a correct and strict classification of performance, an organization must first know and examine the functions in it in order to select the evaluation model that best fits its specificities. "Performance is evaluated based on criteria and measures that aim to differentiate high contributions from average or weak contributions to the organization" [7, p. 32]. In fact, performance measurement seems to be one of the most sensitive issues in the performance appraisal system. The evaluation can be conducted by adopting several methods that, in a simplified way, can be distributed along four large dimensions. Following Caetano [7], the instruments will vary according to their primary focus: (1) on people, (2) behaviors, (3) in comparison with others, or (4) on results.

5.2.2.1 Approaches focused on people

The people-focused or personality-centered approach focuses on personality traits or attributes. The use of quantified scales, anchored in personality traits, places the evaluator in the role of observer of worker performance, evaluating the traits of his personality such as creativity, leadership, responsibility, or integrity. It is therefore up to the evaluator to position the worker on a scale where the traits are presented according to adjectives or figures. This type of instrument involves rapid construction and application and facilitates a comparison of the results obtained by each of the workers, showing their greatest strengths. However, its use has fallen into disuse given its scientific weaknesses. The measurement of performance through judgments regarding the personality traits of those being evaluated was gradually faded out in the 1970s, partly due to the subjectivity inherent in such judgments [7, 15].

5.2.2.2 Approaches focused on behaviors

As an alternative to earlier systems, about thirty years after the emergence of personality-centered scales, several types of scales were developed that sought to ensure the validation of qualities missing in previous tools. The behavioral approach focuses its assessment on behaviors. Several instruments were proposed for the evaluation of behavioral performance. What follows are some of the notable tools that were developed.

(i) List of critical incidents
Such a list consists of the notes taken by the evaluator during the period in which the evaluation takes place regarding performances that stand out, positively or negatively, to be discussed subsequently with the worker being evaluated. One of the main advantages of this methodology is the ease of giving feedback to the assessed, based on specific behaviors that serve to illustrate and sustain the evaluator's judgments while avoiding the usual psychometric limitations. However, the temporal requirement on the part of the evaluator is not infrequently a single type of incident [6]. On the other hand, there is no way to control the evaluator's choice of incidents, and the possibility of interindividual comparisons is also constrained.

(ii) Forced choice
Forced-choice scales have sets of two, four, or six items that include either all statements with positive descriptions or all statements with negative descriptions. Following this methodology, in each block of sentences, the evaluator should choose one that best corresponds to the worker's performance [16]. The evaluator's choices will result in a profile or the calculation of a score, the process for which should be unknown to the worker. The most obvious advantage of this instrument is that the evaluator cannot distort the scores he assigns to each of his appraisers. By contrast, the disadvantage is that feedback is not given to employees owing to the secrecy of the evaluation [4, 7].

(iii) Scales anchored in behaviors
Scales anchored in behaviors consist of dimensions describing a particular behavior and a vertical scale describing the various levels of performance with respect to each of the dimensions. In the construction of these scales it is intended that the evaluations of the evaluators be based on the behavior of those being evaluated. For this, all levels of the scale should accurately describe the possible behaviors for each dimension. The scales of evaluation fall on the dimensions of work, such as responsibility, technical knowledge, and quality and quantity of work produced. The evaluator should therefore focus on the frequency and quality of respondents' behaviors. Some of the advantages indicated consistently in these instruments are their psychometric qualities, the possibility of quantifying performance, and the possibility of giving feedback to workers [7, 15].

(iv) Scales of mixed behavioral patterns
Like the instrument previously discussed, these scales express three distinct levels of performance for each dimension: upper, middle, and lower. Its main advantage lies in the possibility of obtaining global scores and, simultaneously, specific scores for each dimension evaluated. However, its use requires a lot of time on the part of the evaluator and does not allow for feedback and suggestions for improving performance to the evaluatee [7].

(v) Behavioral observation scales
These are five-point scales where the evaluator must indicate how often a given behavior arises as the evaluatee performs her work. The sum of the scores will quantify the performance of the evaluatee. These scales allow the evaluator to give specific feedback to each evaluatee, considering the evaluator as an active element in the process of constructing the instrument [4, 15, 17].

(vi) Checklists
Checklists are lists of behaviors or traits in which the evaluators must choose the items that best characterize the evaluatees. Its simplicity and ease of application are its main advantages; its main inconvenience lies in the difficulty of providing adequate feedback to the worker [4, 7].

5.2.2.3 Approaches focused on comparisons with others

In this method, comparisons of workers to be evaluated are made. Thus, the starting point for this method is that it may be possible to obtain a measurement standard that results from a comparison of a set of individuals who perform complementary or concurrent work [7, 16].

This approach is common to methods of comparison that produce evidence that ground some decisions at the level of HRM (e.g., promotions). However, the lack of evaluation based on concrete behaviors and the impossibility of giving adequate feedback to evaluatees are the main limitations of the method. In addition, the evaluator must face the difficulty of justifying or defending a certain position in the hierarchy of the evaluatees, such that the evaluator must clearly identify the level of the absolute performance achieved by the employee in order to reinforce the comparative evaluation [15].

Caetano [7] and Almeida [4] point out the following methods:

(i) Simple ordering
Using the simple ordering method, the performance of the evaluated individuals is compared to obtain a list ranking individuals from best to worst. This ordering can be done in two distinct ways: sometimes starting from the overall performance and arranging the evaluatees in order to determine the individual with the best performance, then second best, and so on; or through the establishment of previous dimensions that support the ordering of the evaluatees for each of these dimensions [7].

(ii) Comparison by pairs
This method entails comparing each worker with all others, forming pairs; the evaluator must then select the best in each pair.

(iii) Forced distribution
Forced distribution also aims to compare evaluatees with each other. However, in contrast to ordering them, this instrument groups people by performance.

(iv) Allocation of points
This consists in assigning a fixed amount of points among several evaluatees, with more points being given to those with a better performance.

5.2.2.4 Results-focused approaches

In these approaches, one starts from the performance results and evaluates the extent to which these results are in accordance with the performance standards or with the objectives previously established for a given period.

The following instruments are highlighted:

(i) Performance standards
For a given period, employees' results are compared with the standard previously defined for their functions, their past performance, or the performance of other employees with similar positions. This instrument seeks to determine deviations from the standards and suggest improvements. The major advantage of this instrument is that it makes it possible to identify the areas in which action needs to be taken to improve performance, coupled with simplicity of application and the possibility of peer comparison. The disadvantages are related to costs and dependence on evaluator judgments [7].

(ii) Management by objectives
In the case of management by objectives, according to Cenzo and Robbins (1996, quoted in [6]), it happens in four fundamental stages: the formulation of objectives, action planning, self-control, and periodic reviews. The method is commonly used to evaluate company managers and seeks to assess performance

against the results achieved versus previously defined objectives. This method implies defining the key areas, mission, and objectives that the company seeks to satisfy, and these will give rise to the specific objectives for departments, managers, and supervisors. The objectives should be defined based on some assumptions: they must be verifiable, quantifiable, achievable, and timed so that they can be objectively measured. There is also room for periodic review and possible adjustment over the evaluation period. This method makes it possible to provide specific and frequent feedback to employees and to quantify the evaluation. However, the fact that employees do not have effective control over the various aspects that influence their performance constitutes the greatest disadvantage in this method [2, 4, 7].

(iii) Balanced Scorecard
The balanced scorecard, developed by Robert Kaplan and David Norton, is an organizational performance measurement tool that adds to the traditional financial perspective, customer components, internal processes, and learning and growth. In all of these perspectives, the objectives, indicators, goals, and initiatives that allow conclusions to be drawn about the performance and to align this with the strategy established by top management [16, 18] should be defined. It is, by excellence, a performance appraisal method supported by results, typically used to evaluate business units and managers [16].

5.2.3 Performance appraisal procedures

In what concerns the procedures governing the application of performance appraisal, there are a number of important issues that relate, first, to the source of performance appraisal and, second, to the training given to performance appraisal participants, and, finally, to the interview that is carried out to give feedback to employees about their performance [6].

5.2.3.1 Appraisal sources

The main source of evaluation has traditionally been the immediate hierarchy of the evaluatee, with some intervention or validation of the following hierarchy [7, 16].

At present, most systems consider the evaluated of oneself as an important source (self-evaluation), such that the use of three sources is very generalized: the target of the evaluation (the assessed), that person's immediate hierarchy, and the next hierarchy. In some organizational units that are structured in work teams, peer evaluation may be used. According to the analysis of Bretz Jr. and collaborators [19], self-assessments may prove to be an interesting development tool, promoting the improvement of performance through a commitment that workers establish with themselves. The same authors affirm that this tool better serves developmental rather than evaluative purposes, given its high tendency for bias.

We can now highlight the main appraisal sources:

a. Direct superiors
   Predominant source of evaluation. In its role as evaluator, management is considered the source that in a privileged way best knows how to analyze and classify the performance of subordinates, which determines whether certain positions are well or poorly served, and that in turn determines the degree of execution of the established objectives [2, 4, 7].
b. Subordinates
   Subordinates represent the best source for assessing the supervisory behaviors (e.g., leadership) of hierarchical superiors. However, it should be pointed out here that this source is often discredited owing to the tricks supervisors pull to deceive their teams and owing to their consequent resistance to honesty in classifications [15].
c. Self-assessment
   Self-assessment is often used concomitantly with evaluation by hierarchical superiors. This allows employees to analyze themselves, taking an active role in defining their strengths and weaknesses. The differences and similarities of the evaluations of supervisors and subordinates are discussed later in the evaluation interview, with the objective of identifying the strengths to be nourished and the weaknesses to be overcome by the evaluatee [4, 7, 15]. In addition, self-assessment can be a good predictor of future performance since it represents a set of self-efficacy judgments that can motivate workers [19, 20].
d. Pairs
   According to Caetano [7], peer evaluation can be very effective in a more participatory management system by fostering professionalism and a group spirit, reducing conflict and improving communication skills and trust. However, this source of evaluation is rarely adopted in organizations, given the predominance of top-down business management. The fear of retaliation and the subjectivity inherent in the evaluation are two variables that can strongly compromise the reliability of the evaluation [7, 15].
e. 360 degrees
   All those who are in professional contact with an evaluatee and have the chance to observe her behaviors and skills participate in the process of evaluation at 360 degrees (360°). According to Lepsinger and Lucia [21], 360 degree feedback can enhance the effectiveness of the performance evaluation system. According to the authors, this will depend on the organization's use of information in promotion processes and compensation structure. Thus, the employee receives feedback from all the organization's stakeholder groups, supervisors, peers, clients, suppliers, and others that are in direct contact with her, offering multiple perspectives about her performance [16].

5.2.3.2 Training of evaluators and evaluatees

The introduction or deep reformulation of a performance appraisal system constitutes a change project that directly interferes with organizational dynamics. It is therefore essential that all members of the organization be duly informed, both at the design stage of the system and before its implementation, with its objectives, possible relationships with other systems and change projects, their overall characteristics, and what is expected from all involved being clearly outlined.

Training should focus on the following elements:

(i) objectives of system and its relationship with other people management systems, objectives, and overall strategy;
(ii) evaluation criteria and dimensions to be used;
(iii) type of measurement to be used;
(iv) biases and cognitive errors that can occur in the collection, storage, and retrieval of information;
(v) specific procedures to be followed;
(vi) structuring and conducting of interviews;
(vii) formalization of evaluation and subsequent stages; and
(viii) some kind of system application simulation that includes familiarization with the system [7].

5.2.3.3 Appraisal and planning interview

The interview or evaluation meeting is one of the most important moments in the evaluation system and should therefore be given special prominence. For a successful outcome, evaluators should create a neutral climate and friendly atmosphere, use clear and understandable speech, state the evaluatee's strengths before moving to the most sensitive areas, create an environment conducive to dialogue, and use concrete data rather than abstractions or generalizations [4, 22].

With a view to systematizing information, we can adopt Caetano's suggestion [7] and subdivide this stage into two important moments: preparing the interview and conducting the interview.

As for the first point, there are several aspects to consider. First, the evaluator should not surprise the evaluatee, so a bet must be placed on the effective performance management process. At the same time, the evaluator should be concerned with assessing the most relevant, positive, and negative aspects and not with evaluating overall performance. A third aspect corresponds to the content of the assessment: it should meet stipulated and duly substantiated criteria. Fourth, the evaluator should focus on the rigorous preparation of the objectives that will be established for each employee for the following period, scrupulously adopting the rules for defining well-designed objectives. Lastly, it should be stressed that the interview will be essential for obtaining the social validation of assessments and objectives.

Regarding the conduct of the interview, it is important to follow a script that includes (i) a description and review of the responsibilities and work objectives of the interviewee, (ii) a time to ask questions and listen to opinions, (iii) analysis and suggestions for enhancing the interviewee's strengths, (iv) suggestions for improvement, (v) objectivity in comments, (vi) implementation of the evaluation through observed behavior, (vii) agreement of the objectives of evaluator and evaluatee, (viii) a plan concerning the manner and frequency of follow-up for the next period, and finally (ix) an evaluation form to be signed [7]. In the view of Meyer, Kay, and French [23], employee participation in the performance interview can lead to a more favorable position of the employee regarding the evaluation and contribute to the achievement and acceptance of the performance objectives. Roberts [24] adds that, from a motivational point of view, employee participation is a key element that facilitates worker growth and development.

5.3 Steps to create a performance appraisal system

Performance management, as stated earlier, is a continuous process [16]. A critical concern to the success of a performance appraisal system relates to its planning and implementation. A performance appraisal system is a process that must consistently integrate strategy, organizational goals, and individual objectives, skills, and competencies [25].

When the system is first implemented, the process is developed following a series of stages: (i) knowing the strategy and the functions, (ii) performance appraisal planning, (iii) implementation of the performance appraisal, (iv) performance appraisal, (v) review of the evaluation, and (vi) adjustment of the evaluation system [26]. Each of the stages will be described in more detail in what follows.

It should be noted that employee participation is a constant element throughout the process. Employees need to make an active contribution to the development of job descriptions, performance standards, and the creation of a quote form [26].

5.3.1 Knowledge of strategy and functions

Determining the success of a performance appraisal system hinges on the alignment of this process with the organization's mission and strategy [16]. Caetano [7, p. 90] argues that "the first question to be answered is whether the organization really needs a performance appraisal system or whether performance management can be performed with other people management alternatives." According to the author, regarding the need to implement a performance appraisal system, its relation with the overall strategy of the organization should be clarified.

In the same vein, Aguinis [26] and Cunha and collaborators [16] affirm that there are two important and necessary prerequisites for the implementation of a performance appraisal system: knowledge of the organization's strategy and objectives and knowledge of the function in question.

Aguinis [26] argues that if there is any lack of clarity between the organization's mission and strategies, as well as in defining the goal that the organization intends to achieve, it will not be clear to all employees what they need to do to achieve their goals. Thus, once the organization's goals are set, similar goals will be "cascaded" across departments and hierarchies until each employee has a set of goals compatible with those designed for his or her department and organization. Regarding this point, Caetano [7, p. 93] states that "the evaluation system does not exist for the human resources department; it exists to facilitate the coordination and development of people throughout the organization." Performance appraisal therefore becomes a strategic tool guided by a philosophy that is expected across all organizational processes: continuous improvement.

At the same time, it is important to understand the function in question. This is achieved through an analysis of functions, which consists in determining the key components of a given function, including activities, tasks, products, services, and processes. According to Aguinis [26], the analysis of functions is a fundamental requirement for a performance evaluation system. Without it, it will be difficult to understand what should be done in a given function, what needs to be assessed, and how to do it.

5.3.2 Performance appraisal planning

This second stage of the implementation process of the performance appraisal system essentially aims to give employees a deep knowledge of the evaluation system. According to Cunha and collaborators [16], managers and collaborators discuss (i) the results to be achieved, (ii) the behaviors to be adopted, and (iii) the action plan to be followed.

5.3.2.1 Results to be achieved

According to Aguinis [26], objectives are the affirmations that contemplate the important and measurable results to be achieved. For the author, the result refers to what needs to be done or what should be produced, including also the specific objectives the employees will achieve in fulfilling their responsibilities and the performance standards (used to evaluate how well employees reached each of the objectives). The performance pattern produces information on acceptable and unacceptable performance (e.g., quality, quantity, cost, time).

5.3.2.2 Behaviors to adopt

Aguinis and Cascio [27] argue that while it is important to measure results, emphasizing them exclusively can provide an incomplete picture of employee performance. For some functions, it may become difficult to set precise goals and standards. For other functions, employees may have greater control over how to perform their functions but not about the results of their behavior. Behaviors, or how a job is done, are a key component of the planning phase. Considering behaviors includes discussing competencies that are measurable clusters of knowledge, skills, and attitudes that determine how outcomes will be achieved.

5.3.2.3 Action plan

For Reyna and Sims [28], one of the important steps in the performance appraisal implementation process is the supervisor-employee agreement on the action plan. According to the authors, this plan (which should encompass the results and behaviors to be adopted) should include areas that need improvement and also goals to be achieved in each area. Fulfillment of the objectives established in the action plan allows employees to maintain openness to change in their profession. In summary, individual development plans allow employees to answer a number of questions, such as: (i) How can I learn continuously and grow next year? or (ii) How can I do better in the future? [26].

In a study by Boswell and Boudreau [29] on how perceptions of the use of performance appraisal relate to employee satisfaction, with both assessment and evaluator, the authors suggest that the inclusion of action plans that identify employee strengths and weaknesses, as part of the performance appraisal system, has beneficial effects on satisfaction with the system.

A tool that has become valuable to employees, especially those who play supervisory roles, is the 360 degree feedback system for collecting information from different groups [30]. These systems are called 360 degree systems because information is gathered from individuals who “surround” the developer (e.g., supervisors, peers, clients, and subordinates) [26]. As a rule, this information is anonymous to minimize the inflation of the results, and the employees themselves also self-evaluate in several dimensions of their performance. Subsequently, it is possible to compare the self-perceptions with the information provided by others, and this information is used in the development plan.

5.3.3 Performance appraisal development

According to Cunha and collaborators [16] and Aguinis [26], in this phase, the employee has the responsibility to act in accordance with the previously planned by the organization in what concerns its performance. The employee then begins to produce results and engage in the previously agreed upon behaviors, as well as to work on developmental needs.

Despite the employee's greater role at this stage, supervisors have a responsibility to observe and document their evaluation, update the plan in case of changes, provide feedback, furnish the resources needed for good performance, and praise or draw attention to particular behaviors [2, 16].

5.3.4 Performance appraisal

At this stage, both the supervisor and the employee are responsible for assessing the extent to which the intended behaviors have been demonstrated and the desired results have been achieved. Although many sources of evaluation can be used to collect information (e.g., peers and subordinates), in many cases the direct supervisor provides this information. In sum, the degree to which the objectives were or were not achieved is detailed at this stage of the evaluation [16]. The involvement of the supervisor and the employee in the evaluation enhances the quality of the information that can be used in the review phase. When the employee and the supervisor are active participants in the evaluation process, the information is more likely to be used productively in the future [10, 24].

5.3.5 Performance appraisal review

This stage concerns the meeting between the supervisor and the employee at which the evaluations will be reviewed. The evaluation meeting is very important because it provides a formal environment in which the employee receives feedback on her performance. Despite its importance, this moment is often the "Achilles heel" of the whole process [26]. According to Aguinis [26], this is due to the discomfort that supervisors feel in the role of evaluators and in the moment of feedback, especially when performance is deficient. High levels of discomfort often result in anxiety and aversion to the interview. Effectively assigning feedback is extremely important because this leads not only to performance improvement but also to employee satisfaction with the system.

Overall, Grossman and Parkinson (2002, quoted in [26, p. 25]) make six recommendations for conducting effective evaluation interviews:

(i) "Identify what the collaborator did well and poorly by citing positive and negative behaviors;
(ii) Ask the employee for feedback about these behaviors; listen for explanations and reactions;
(iii) Discuss the implications of changing, or not changing, behaviors. Positive feedback is better, but the employee should be aware of what might happen if poor performance is maintained;

(iv) Explain to the employee how the skills used in previous jobs can help him overcome any performance problem;
(v) Agree on a plan of action; encourage employees to improve their performance; and
(vi) Establish a meeting to follow and agree on the behaviors, actions and attitudes to be evaluated."

Let's see a concrete situation.

5.4 Performance appraisal in company X

The present practical example aims to design a proposal for a performance appraisal system for a company, company X, identifying the critical factors in its design and implementation, as well as its implications for the management of the company.

5.4.1 Methodological approach and procedures in information gathering

In the field of management, the most frequent information-gathering techniques are questionnaires, interviews, documentary collections, and observations. In the case of the documentary collection, we can carry out a survey of the information available in the organization that is considered of interest for the work to be developed. Once this survey is completed, it is possible to deepen one's knowledge about the organization and improve the methodology to be adopted.

The implementation of a performance appraisal system, based on the resulting information, has, in our practical example, exclusively entailed the use a action research methodology.

Action research can be described as a research methodology based on postpositivist foundations that envisages in action an intention to change and in research a process of understanding.

Action research refers to the generic term that designates any process that seeks to improve practice by the systematic oscillation between action in the context of study and research on it. Thus, a change is planned, implemented, described, and evaluated to improve the practice, gathering knowledge about the practice itself and the research that results from it.

The process of action research alternates cyclically between action and critical reflection, which in a continuous way investigates its methods, in the collection of information and in the interpretation that develops in light of the understanding of the situation in question. It is, therefore, an emerging process that takes shape in a progressive understanding of the problem and that, being iterable, converges to a better understanding of what happens.

In a simplified way, we can affirm that action research is a research methodology oriented toward the improvement of practice in the various fields of action, aiming at the improvement of practices through change and learning from the consequences of these changes and allowing the participation of all those involved.

Thus, to materialize an action research process, it is necessary to diagnose or discover the "problem" to construct a plan of action, to act and observe the effects of the action, and, finally, to reflect on, interpret, and integrate the results obtained.

It is therefore a systematic process of practice-oriented learning, requiring that it be tested and justified on the basis of actual real-world practice, through an argument developed, proven, and scientifically examined.

Action research, owing to the characteristics it brings together and the imprecision of its instruments and limits, can be viewed both as great exigency, rigor, and difficulty, as can be a path of facilities, superficialities, and illusions. Given its characteristics and the imprecision of its instruments and limits, action research can be understood with great exigency, rigor and difficulty, as well as easy, superficial and illusory According to Almeida [4, p. 176], there are great advantages in the practice of this research methodology: "It implies the abandonment of non-reflexive practice, favouring inter professional collaboration and multidisciplinary practice – when not interdisciplinary or even transdisciplinary – and undoubtedly promotes the improvement of the interventions in which it is used."

Since in the action research methodology adopted here researchers not only observe but also participate in the phenomena they study, participation is an objective necessity in action research, where in the evaluation process it can be counted with the collaboration of all participants.

In what follows, we will explore in detail the actions developed and the reflections carried out throughout the implementation process of the performance appraisal system at Company X. Following Aguinis's proposal [26], we must first investigate the company's strategy and the functions of the staff that make up its organizational structure. What follows is a description of the performance appraisal planning, performance appraisal per se, and the performance appraisal review.

5.4.2 Company X strategy

We now turn to the question that Caetano [7] raises about the effective need for a performance appraisal system in an organization, in this particular case, at Company X.

Over the years, Company X has bet on an increasingly professional and qualified structure to ensure the services and commitments assumed. Given the current context, a labor market that aims to achieve excellence becomes a priority for improving the efficiency of the organization and, consequently, the integration of existing HRM practices. The evolution of the company impels its leaders to strategically think about HRM, considering this step as an important contribution to the achievement of the mission that the organization proposes. The importance of HRM largely stems from the company's recognition that the competitive advantage of an organization derives from the best possible use of its human resources in order to add value; those resources are unique, difficult to imitate, and irreplaceable.

As Cardoso [31, p. 53] suggests, "The first step in formulating the strategy is the identification of the mission and objectives. The mission involves the definition of what the organization is, what it proposes to do, in what business it operates; the objectives relate to what a person want to achieve through their activities, in certain period(s) and in selected variables."

Defining the mission and objectives of Company X, and assuming the position of Mahoney and Pandian [32], that different strategies require workers with different skills and that a competitive advantage will be easier to establish when human resources are oriented toward strategy, it will be necessary to study the functions that make up the structure of the company that allows it to determine the tasks, transversal competencies, and specific competencies required for each one.

In the context of the performance appraisal, a function analysis allows for the identification of the duties/responsibilities assigned to each function that make it possible to determine the standards to be achieved and the specific activities to be developed by workers [16]. Aiming at this objective for each organic unit/function performed in each of the organic units of the company, a table was prepared that gathers information regarding the following elements:

- Organic unit,
- Function,
- Tasks performed,
- Specific competencies.

For example, see Table 5.1 below concerning the case of the Human Resource Technician role:

Functional analysis is considered by many the "dorsal spinal" of HRM [16]. The reason for this analogy is that the analysis of functions is based on practices such as recruitment, selection, and performance appraisal itself. However, it should be noted that the idea that the position has a rigid and fixed a priori functional content is now outdated.

5.4.3 Performance appraisal planning

After analyzing and describing all the existing functions in the company, the need arises to develop and plan the performance appraisal system to be implemented.

In the proposed model, all the professional workers who assume functions in the company will be evaluated. It was also agreed that the performance evaluation tools to be used should focus on the results achieved in terms of the objectives outlined and the competencies (transversal and specific).

Tab. 5.1: Description of functions developed in HR Office: Human Resource Technician.

Organic unit	HR Office
Function name	HR Technician
Tasks	– Provide information on employability and employment/training/volunteer programs – Promote training actions, workshops, sessions of clarification – Perform personalized service, fill in database – Provide support in career guidance and curriculum enrichment – Recruit and select employees – Manage company training and human resources: survey training needs, plan and monitor execution of company training activity, ensure design and implementation of training and similar initiatives for users – Capture and disseminate job offers and qualification – Refer candidates for job offers and qualification – Report quarterly activities – Provide support to companies in recruitment and selection of candidates – Coordinate and implement performance appraisal system
Requirements	Bachelor's degree in Behavioral Science or equivalent
Specific competencies	– Knowledge of employment and training programs – Public/face-to-face and telephone meetings – Organization and planning – Ability to think critically – Attention to detail – Knowledge of HRM – Conducting meetings – Ability to motivate – Capacity to influence/persuade – English (intermediate level)

At this level, it should be noted that the following general competencies, common to all employees, have been defined by the company management:
- Diligence,
- Punctuality,
- Autonomy,
- Responsibility,
- Communication,
- Interpersonal relations,
- Initiative,
- Teamwork,
- Information and communication technologies,
- Openness to continuous learning, and
- Persistence.

As a central objective of performance appraisal systems, when aligning employees' activities with the organization's strategic objectives [7], it is important at this stage to determine the objectives that should be pursued by the company's employees and to validate the specific competencies that contribute to the success of a given function in light of the defined strategy.

For the definition and validation of the individual objectives of the various professionals in the company we can use "key informants," that is, people with insider and relevant information to the process in question.

In parallel with the identification of the results to be achieved by company employees, the sources of evaluation that would be in a better position to evaluate the fulfillment of these same objectives were also identified. Given the functional structure and specificity of the organization, it was understood that employee performance should therefore be commented on by multiple sources of evaluation. In general, the evaluatee, the hierarchical superior (managers), suppliers, clients, peers, and some strategic partners of the company will serve as sources of evaluation. The election of each of the evaluators was discussed among the several key informants, and it was concluded that for each objective, we will use an evaluator who interacts with the employee with respect to a given matter in a privileged way. The figure of a "global evaluator" was also established; this is a person who is simultaneously the hierarchical superior (leader) and who compiles all the information obtained from the multiple evaluators, develops and follows the evaluation, and triggers and conducts the performance appraisal interview. Then the "global appraiser" responsible for these tasks is also identified for each employee.

For example, the objectives defined for the HR Technician, the specific and transversal competencies inherent in the function being performed that are critical to success, and the sources of evaluation for each of the objectives outlined will be presented. The particular case presented is extendable to other company employees (see Table 5.2 below).

Owing to the complexity of the 360 degree evaluation, which was chosen in this example, this methodology lacks strong planning and organization to be implemented, so it must be used in a judicious way [15, 33–35]. However, given the nature of the functions performed by the company's employees, it is of extreme interest for the employee to receive feedback on various dimensions of their performance from different perspectives. This methodology allows respondents to have more rigorous knowledge about the impact of their work on different interlocutors, contributing in a more concrete way to the delineation of the performance improvement plan [7].

A self-evaluation was also included as a source of evaluation. With this procedure, the employee evaluates his or her own performance through self-analysis, identifying strengths and weaknesses, thereby enhancing the perception of impartiality in the evaluation process [15].

For an analysis of the performance by all the sources of evaluation involved in the system, the measurement that focused on results was adopted by means of the

Tab. 5.2: Description of competencies and objectives for HR Technician with indication of evaluator(s) for each objective.

Function name	**HR Technician**	
	Objectives	***Evaluator(s)***
	– Clarify issues related to employment/training submitted by users (no more than 2 working days following request for information)	Clients
	– Verify compliance with service rules (reception, response, final availability)	Quality manager
	– Develop and deliver training actions/monthly workshops on job search techniques	Clients
	– Recruit and fast-forward applicants who meet the requirements presented in the job/work offers by the entity of interest	Entities
	– Ensure compliance with company's employee training process	Quality manager
	– Coordinate and implement performance appraisal system	Managers
	– Ensure compliance of training management processes and HRM of company's quality management system (QMS)	Quality manager
	– Train and motivate clients for success in sending applications and conducting interviews	Clients
	– Collaborate actively in fulfillment of projects launched by company	Managers
	– Capture/disseminate 15 job offers/programs/month	Quality manager
	– Encourage 60 meetings (annual) to attract job offers	Evaluated
Specific competencies	– Knowledge of employment and training programs – Public/face-to-face and telephone meetings – Organization and planning – Ability to think critically – Attention to detail – Knowledge of HRM – Conducting meetings – Ability to motivate – Capacity to influence/persuade – English (intermediate level)	
Transversal competencies	– Diligence – Punctuality – Autonomy – Responsibility – Communication – Interpersonal relations – Initiative – Teamwork – Information and communication technologies – Availability for continuous learning – Persistence	

objectives established for the period of time that was the object of evaluation and, simultaneously, the measurement that focused on behaviors, namely, the scales of behavioral observation. The scales were designed to measure the level of execution of the defined objectives and the level of performance for each of the competencies required for the function. Since the scales were divided into three components – results, general skills, and specific competencies – it was decided to assign different weights to each of these dimensions in the final classification, as follows: results: 60%; general skills: 20%; specific competencies: 20%. It is also important to clarify that the final evaluations will be obtained using a "global evaluator" as a result of the evaluations of multiple evaluators, and each of the evaluators (e.g., peers, suppliers, clients) will analyze the objective(s) that are directly associated with themselves as well as all the competencies (transversal and specific) of the position that the employee occupies.

In view of all the separate units of the organization and the performance appraisal system presented here, different forms were designed for each employee, each evaluator, and each global evaluator. Recall the previous example. For the function of HR Technician, the following approach was designed:

- 1 self-assessment form
- 1 form for clients
- 1 form for managers
- 1 form for entities
- 1 form for the quality manager
- 1 form for the global evaluator

Each of the forms was duly identified with the "category" of the evaluator to facilitate the compilation of information by the global evaluator. Completion of the forms was anonymous for all evaluators, except the employee and the global evaluator.

Each employee's own performance analysis (on the self-assessment form) will be included at the time of review of the performance appraisal, which will be discussed in what follows. The following forms are then presented, in the same order, referring to the evaluation of the HR Technician.

Form 1 - Self-assessment form

Company X	**Employee performance appraisal** **<u>Self-evaluation form</u>** (to be completed by evaluatee)

Evaluatee	
Organic unit	HR Office
Function	HR Technician

Period in evaluation	From____/____/_____ to ____/____/______

Framework

The organization mission is: ……………….

a. **GENERAL OBJECTIVES OF ORGANIZATION**

b. **SPECIFIC OBJECTIVES OF ORGANIZATION**

1. Parameters of evaluation

1.1. Results

At what level would you put your performance in terms of achieving the objectives set out for you? (Mark with X)

Description of objectives (to be completed at beginning of evaluation period)	Evaluation (to be completed at end of evaluation period)		
	Goal passed (5 points)	Goal achieved (3 points)	Goal not reached (1 point)
Clarify employment/training issues submitted by clients (maximum 2 working days after request for information).			
Develop and deliver training actions/monthly workshops on job search techniques.			
Follow rules of service (reception, answers/information, final availability).			
Quickly recruit and forward candidates who meet the requirements given by entity in job/job description.			
Streamlining XX meetings (annual) to capture job offers.			
Capture/disseminate XX offers/employment programs/month.			
Collaborate actively in fulfillment of projects launched by company.			
Train and motivate clients for success in submitting applications and conducting interviews.			
Ensure compliance of training management processes and HRM of company's QMS.			
Coordinate and implement company's performance appraisal system.			
Ensure compliance with company employee training process.			

Comments

1.2. Competencies

Note: The description of each competency and the behaviors associated with it in the attached table (see appendices) refers to the average required performance standard (demonstrated competency).

1.2.1. General

For each competence, at what level do you think your performance was assessed over the evaluation period? (Mark with X)

General competencies (to be completed at beginning of evaluation period)	Evaluation (to be completed at end of evaluation period)		
	Demonstrated competence at a high level (5 points)	Demonstrated competence (3 points)	Did not demonstrate competence (1 point)
Diligence			
Punctuality			
Autonomy			
Responsibility			
Communication ability			
Interpersonal relationship			
Initiative			
Teamwork			
Information and communication technologies			
Openness to continuous learning			
Persistence			

Comments

1.2.2. Specifics

For each competence, at what level do you think your performance was assessed over the evaluation period? (Mark with X)

Specific competencies (to be completed at beginning of evaluation period)	**Evaluation** (to be completed at the end of the evaluation period)		
	Demonstrated competence at high level (5 points)	Demonstrated competence (3 points)	Did not demonstrate competence (1 point)
Telephone service			
Customer service			
Knowledge of employment and training programs			
English (intermediate level)			
Written communication			
Critical direction			
Attention to detail			
HRM knowledge			
Conducting meetings			
Ability to motivate			
Capacity to influence/persuade			
Organization			
Planning			

Comments

2. Balance

Brief overview of global performance level on:

a. Achievement of objectives

b. Strong points

c. Weaknesses

3. Proposals

(Training, professional relocation, and others)

Signature of appraisee: ____________________________________
Date___/___/________

Received

Global evaluator/appraiser signature: ______________________________
Date___/___/________

Form 2 - Form for clients

Company X	**Employee performance appraisal** **Evaluation form** (to be completed by client)

Evaluatee	
Organic unit	HR Office
Function	HR Technician

Period in evaluation	From____/____/_____ to ____/____/______

Framework

The organization mission is: ………………

a. GENERAL OBJECTIVES OF ORGANIZATION

b. SPECIFIC OBJECTIVES OF ORGANIZATION

1. Parameters of evaluation

1.1. RESULTS

At what level do you put the performance of the evaluatee in terms of meeting the objectives set out? (Mark with X)

DESCRIPTION OF OBJECTIVES (to be completed at beginning of evaluation period)	Evaluation (to be completed at end of evaluation period)		
	Goal Passed (5 points)	Goal Achieved (3 points)	Goal Not Reached (1 point)
Clarify employment/training issues submitted by clients (maximum 2 working days after request for information).			
Develop and deliver training actions/monthly workshops on job search techniques.			
Train and motivate clients for success in submitting applications and conducting interviews.			

Comments

1.4. COMPETENCIES

Note: The description of each competency and the behaviors associated with it in the accompanying table (see appendices) refers to the average required performance standard (demonstrated competency).

1.4.1. GENERAL

For each competency at what level do you put the performance of the employee being assessed over the assessment period? (Mark with X)

GENERAL COMPETENCIES (to be completed at beginning of evaluation period)	Evaluation (to be completed at end of evaluation period)			
	Demonstrated competence at a high level (5 points)	Demonstrated competence (3 points)	Did not demonstrate competence (1 point)	Not applicable
Diligence				
Punctuality				
Autonomy				
Responsibility				
Communication ability				
Interpersonal relationship				
Initiative				
Teamwork				
Information and communication technologies				
Openness to continuous learning				
Persistence				

Comments

1.4.2. Specific

For each competency, at what level do you put the performance of the employee being assessed over the assessment period? (Mark with X)

Specific competencies (to be completed at beginning of evaluation period)	**Evaluation** (to be completed at end of evaluation period)			
	Demonstrated competence at a high level (5 points)	Demonstrated competence (3 points)	Did not demonstrate competence (1 point)	Not applicable
Telephonic service				
Customer service				
Knowledge of employment and training programs				
English (intermediate level)				
Written communication				
Critical direction				
Attention to detail				
HRM knowledge				
Conducting meetings				
Ability to motivate				
Capacity to influence/persuade				
Organization				
Planning				

Comments

2. Final comment

In ___/___/________

Form 3 - Form for managers

Company X	**Employee performance appraisal** **<u>Evaluation form</u>** (to be completed by manager)

Evaluatee	
Organic unit	HR Office
Function	HR Technician

Period in evaluation	From____/____/_____ to ____/____/______

Framework

The organization mission is: ……………

a. **GENERAL OBJECTIVES OF ORGANIZATION**

b. **SPECIFIC OBJECTIVES OF ORGANIZATION**

1. Parameters of evaluation

1.1. RESULTS

At what level do you put the performance of the evaluatee in terms of meeting the objectives set out? (Mark with X)

DESCRIPTION OF OBJECTIVES (to be completed at beginning of evaluation period)	Evaluation (to be completed at end of evaluation period)		
	Goal Passed (5 points)	Goal Achieved (3 points)	Goal Not Reached (1 point)
Collaborate actively in fulfillment of projects launched by company.			
Coordinate and implement company's performance appraisal system.			

Comments

1.2. Competencies

Note: The description of each competency and the behaviors associated with it in the attached table (see appendices) refers to the average required performance standard (demonstrated competency).

1.2.1. General

For each competency, at which level do you consider the performance of the employee over the assessment period? (Mark with X)

General competencies (to be completed at beginning of evaluation period)	**Evaluation** (to be completed at end of evaluation period)			
	Demonstrated competence at a high level (5 points)	Demonstrated competence (3 points)	Did not demonstrate competence (1 point)	Not applicable
Diligence				
Punctuality				
Autonomy				
Responsibility				
Communication ability				
Interpersonal relations				
Initiative				
Teamwork				
Information and communication technologies				
Openness to continuous learning				
Persistence				

Comments

1.2.2. Specific

For each competency at what level do you put the performance of the employee over the assessment period? (Mark with X)

SPECIFIC COMPETENCIES (to be completed at beginning of evaluation period)	EVALUATION (to be completed at end of evaluation period)			
	Demonstrated competence at a high level (5 points)	Demonstrated competence (3 points)	Did not demonstrate competence (1 point)	Not applicable
Telephone service				
Customer service				
Knowledge of center employment and training programs				
English (intermediate level)				
Written communication				
Critical direction				
Attention to detail				
HRM knowledge				
Conducting meetings				
Ability to motivate				
Capacity to influence/persuade				
Organization				
Planning				

Comments

2. FINAL COMMENT

In ___/___/________

Form 4 - Form for entities

Company X	EMPLOYEE PERFORMANCE APPRAISAL **EVALUATION FORM** (to be completed by organization)

Evaluatee	
Organic unit	HR Office
Function	HR Technician

PERIOD IN EVALUATION From____/____/_____ to ____/____/______

FRAMEWORK

The organization mission is: …………

a. **GENERAL OBJECTIVES OF ORGANIZATION**

b. **SPECIFIC OBJECTIVES OF ORGANIZATION**

1. PARAMETERS OF EVALUATION

1.1. RESULTS

At what level do you put the performance of the employee in terms of meeting the objectives set out? (Mark with X)

OBJECTIVES DESCRITION (to be completed at beginning of evaluation period)	**EVALUATION** (to be completed at end of evaluation period)		
	Goal Passed (5 points)	Goal Achieved (3 points)	Goal Not Reached (1 point)
Quickly recruit and forward candidates who meet requirements presented by the entity in job/job description.			

Comments

1.2. Competencies

Note: The description of each competency and the behaviors associated with it in the attached table (see appendices) refers to the average required performance standard (demonstrated competency).

1.2.1. General

For each competency at what level do you put the performance of the employee over the assessment period? (Mark with X)

General competencies (to be completed at beginning of evaluation period)	**Evaluation** (to be completed at end of evaluation period)			
	Demonstrated competence at a high level (5 points)	Demonstrated competence (3 points)	Did not demonstrate competence (1 point)	Not applicable
Diligence				
Punctuality				
Autonomy				
Responsibility				
Communication ability				
Interpersonal relations				
Initiative				
Teamwork				
Information and communication technologies				
Openness to continuous learning				
Persistence				

Comments

1.2.2. Specific

For each competence at what level do you put the employee performance over the evaluation period? (Mark with X)

Specific competencies (to be completed at beginning of evaluation period)	Evaluation (to be completed at end of evaluation period)			
	Demonstrated competence at a high level (5 points)	Demonstrated competence (3 points)	Did not demonstrate competence (1 point)	Not applicable
Telephone service				
Customer service				
Knowledge of center employment and training programs				
English (intermediate level)				
Written communication				
Critical direction				
Attention to detail				
HRM knowledge				
Conducting meetings				
Ability to motivate				
Capacity to influence/persuade				
Organization				
Planning				

Comments

2. Final Comment

In ___/___/________

Form 5 - Form for Quality Manager

Company X	EMPLOYEE PERFORMANCE APPRAISAL **EVALUATION FORM** (to be completed by quality manager)

Evaluatee	
Organic unit	HR Office
Function	HR Technician

PERIOD IN EVALUATION	From____/____/_____ to ____/____/______

FRAMEWORK

The organization mission is: ……..

a. **General objectives of organization**

b. **Specific objectives of organization**

1. PARAMETERS OF EVALUATION

1.1. RESULTS

At what level do you put the performance of the employee in terms of meeting the objectives set out? (Mark with X)

DESCRIPTION OF OBJECTIVES (to be completed at beginning of evaluation period)	Evaluation (to be completed at end of evaluation period)		
	Goal Passed (5 points)	Goal Achieved (3 points)	Goal Not Reached (1 point)
Capture/disseminate XX job offers/programs / month.			
Follow rules of service (reception, answers/information, final availability).			
Ensure compliance of training management processes and HRM of company's quality management system.			
Ensure compliance with company employee training process.			

Comments

1.2. Competencies

Note: The description of each competency and the behaviors associated with it in the attached table (see appendices) refers to the average required performance standard (demonstrated competency).

1.2.1. General

For each competency at what level do you put the performance of the employee over the assessment period? (Mark with X)

General competencies (to be completed at beginning of evaluation period)	Evaluation (to be completed at end of evaluation period)			
	Demonstrated competence at a high level (5 points)	Demonstrated competence (3 points)	Did not demonstrate competence (1 point)	Not applicable
Diligence				
Punctuality				
Autonomy				
Responsibility				
Communication ability				
Interpersonal relationship				
Initiative				
Teamwork				
Information and communication technologies				
Availability for continuous learning				
Persistence				

Comments

1.2.2. Specific

For each competence at what level do you put the employee performance over the evaluation period? (Mark with X)

Specific competencies (to be completed at beginning of evaluation period)	**Evaluation** (to be completed at end of evaluation period)			
	Demonstrated competence at a high level (5 points)	Demonstrated competence (3 points)	Did not demonstrate competence (1 point)	Not applicable
Telephone service				
Customer service				
Knowledge of center employment and training programs				
English (intermediate level)				
Written communication				
Critical direction				
Attention to detail				
HRM knowledge				
Conducting meetings				
Ability to motivate				
Capacity to influence/persuade				
Organization				
Planning				

Comments

2. FINAL COMMENT

In ___/___/_________

Form 6 - Form for global evaluator/appraiser

Company X	**Employee performance appraisal** **<u>Evaluation form</u>** (to be completed by global appraiser)

Evaluatee	
Organic unit	HR Office
Function	HR Technician

Appraiser	
Organic unit	President
Function	Treasurer

PERIOD IN EVALUATION	From____/____/_____ to ____/____/______

FRAMEWORK

The organization mission is: ……….

a. **GENERAL OBJECTIVES OF ORGANIZATION**

b. **SPECIFIC OBJECTIVES OF ORGANIZATION**

1. Parameters of evaluation

1.1. Results

At what level do you put the performance of the employee in terms of meeting the objectives set out? (Mark with X)

Description of objectives (to be completed at beginning of evaluation period)	Appraiser	Evaluation (to be completed at end of evaluation period)		
		Goal Passed (5 points)	Goal Passed (5 points)	Goal Passed (5 points)
Clarify employment/training issues submitted by clients (maximum 2 working days after the request for information).				
Develop and deliver training actions/monthly workshops on job search techniques.				
Follow the rules of service (reception, answers/information, final availability).				
Quickly recruit and forward candidates who meet requirements given by entity in job/job description.				
To stimulate XX meetings (annual) to capture job offers.				
Capture/disseminate XX job offers/programs/month.				
Collaborate actively in fulfillment of projects launched by company.				
To train and motivate clients for success in sending applications and conducting interviews.				
Ensure compliance of training management processes and HRM of company's quality management system.				
Coordinate and implement company's performance appraisal system.				
Ensure compliance with company employee training process.				

Parameter score (add scores and divide by number of objectives listed)	

Comments

1.2. COMPETENCIES

Note: The description of each competency and the behaviors associated with it in the attached table (see appendices) refers to the average required performance standard (demonstrated competency).

1.2.1. General

For each competency at what level do you put the performance of the employee over the assessment period? (Mark with X)

GENERAL COMPETENCES (to be completed at beginning of evaluation period)	Appraiser	Evaluation (to be completed at end of evaluation period)		
		Demonstrated competence at a high level (5 points)	Demonstrated competence (3 points)	Did not demonstrate competence (1 point)
Diligence				
Punctuality				
Autonomy				
Responsibility				
Communication ability				
Interpersonal relationship				
Initiative				
Teamwork				
Information and communication technologies				
Availability for continuous learning				
Persistence				

Parameter score (add scores and divide by number of competences listed)	

Comments

1.2.2. Specific

For each competence, at what level do you put the employee performance over the evaluation period? (Mark with X)

Specific competences (to be completed at beginning of evaluation period)	**Appraiser**	**Evaluation** (to be completed at end of evaluation period)		
		Demonstrated competence at a high level (5 points)	Demonstrated competence (3 points)	Did not demonstrate competence (1 point)
Telephonic service				
Customer service				
Knowledge of center employment and training programs				
English (intermediate level)				
Written communication				
Critical direction				
Attention to detail				
HRM knowledge				
Conducting meetings				
Ability to motivate				
Capacity to influence/persuade				
Organization				
Planning				

Parameter score (add scores and divide by number of competences listed)	

Comments

2. Balance

Personal balance of employee (e.g., achievement of objectives, strengths/weaknesses)

3. Next appraisal period

From ___/____/_______ to ___/___/______

4. Objectives for next evaluation period

Objectives	Deadline
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	

5. Training and human resources

a. Training/development actions

(Analysis of competencies required for function and acquired by employee)

b. Resources

(Resources needed to achieve objectives outlined)

6. Global performance assessment

Evaluation parameters	A	B	C (AxB)
	Punctuation	Weighting	Weighted score
Results		60%	
General Competences		20%	
Specific Competences		20%	
		Total	

Total score	Qualitative scale	Final classification (mark with X)
Between 1 and 1.4	Insufficient	
1.5 to 2.4	Needs development	
2.5 to 3.4	Good	
3.5 to 4.4	Very good	
4.5 to 5	Excellent	

7. Comments

Appraiser:
Rated:

8. Communication of attributable evaluation

I became aware of my evaluation in an evaluation interview in ____ / ____/ _______.

Appraisee ____

Appraiser ____

It should be noted that the forms presented here were accompanied by a map describing all the skills on the forms of the company's employees (see appendices, Fig. 1) in order to minimize their subjective interpretation. According to Caetano [7], to control the diversity of interpretations, some care must be taken to objectify evaluation scales, so as to guarantee the homogeneity of perception of performance among the various evaluators.

The introduction of a performance appraisal system constitutes a change project that produce effects on organizational life, according to its objectives and characteristics [7]. In that sense, it is crucial to inform and adequately prepare all members of the organization, clarifying the performance appraisal objectives, their relationships to other HRM practices, and their overall characteristics, as this preparation contributes to the effectiveness of the system itself, and promoting the involvement of all participants.

In the preparation meetings held with the collaborators, which essentially focused on the presentation of the system, it was clear that the evaluation would have a 360 degree character, which is why the contribution of the evaluatees would be fundamental for identifying the various interlocutors with whom the employees interact during the review period, with a view to subsequent contact between the global evaluator and the other evaluators.

Training meetings were also held with the global evaluators to raise awareness of the evaluation process and to explore in a more systematic way the evaluation instruments that had been designed. The meetings went by the following agenda:
- Phases of company's performance evaluation system,
- Sources of evaluation,
- Role of global evaluator,
- Forms to be used,
- Errors and biases in evaluation,
- Evaluation interview: importance of it and care to have on this interview.

It should be highlighted that at this stage it was also clarified that global evaluators would monitor and assign constructive feedback to those assessed over the evaluation period for effective performance management.

5.4.4 Review of performance evaluation

The interview between the global evaluator and the employee is designed to guarantee a space that privileges a frank and open discussion between both about the performance of the evaluatee in the observation period and enable them to discuss together the evaluatee's limitations and potential for professional growth.

The result of the discussion obtained in the interview is documented in the global evaluator's form, which is subsequently signed by both parties.

5.4.5 Conceptualization of a company's performance appraisal system

Performance management is a fundamental tool in promoting a culture of merit, in the development of employees, and in improving the quality of services provided to the community. From the demanding design of a company's performance appraisal system, especially with regard to its conceptualization, and based on the pilot study developed, the following conclusions may be drawn.

5.4.5.1 Goals

Develop a results-oriented and continuous-improvement management culture, assuming clear objectives aligned with the organization's strategy. In this sense, the performance appraisal system should essentially facilitate the following aspects of a company:

– Improve employee productivity, motivation, and performance by mobilizing employees around the essential mission of the service, guiding their activity in light of clear objectives and transparent evaluation criteria;
– Support decision-making processes, especially at the level of raises/promotions, recognizing merit and ensuring the differentiation and enhancement of the various levels of performance;
– Give feedback to evaluated employees, promoting effective communication among hierarchies and establishing as essential instruments in the process of performance appraisal: the annual interview and self-assessment;
– Facilitate the development of general and specific skills, encouraging the professional development of employees, through the identification of training needs, for consideration in the preparation of service training plans;
– Integrate the HRM practices that the company already performs; and
– Contribute more clearly to the fulfillment of the mission/strategy to which the organization subscribes.

5.4.5.2 Tools

Measuring performance is one of the most sensitive issues in a performance appraisal system. Regardless of the method adopted, criteria and measures should be able to discriminate between high performances and low and medium performances. According to the model proposed in this practical case, the approaches adopted are based on behaviors and results.

The designed performance appraisal forms, which directly support the evaluation of the performance of the company's employees and are the vehicle for reaching the objectives outlined, are made up of dimensions that describe behaviors. Specifically, the forms presented suggest the evaluation of the general and specific competences of all professional company employees, supported by a list of skills descriptions attached to all distributed forms. For each of the competencies indicated on the forms, the description appearing in the accompanying list must correspond to score level 3 ("demonstrated competency"). When the employee or the evaluator understands that the behavior has gone beyond the description presented, then a score of 5 ("demonstrated competence at a higher level") should be highlighted, or, if the opposite is true, the score of 1 ("skills not shown") is highlighted. Thus, to each competence corresponds a horizontal scale that describes the various levels of performance.

The same format was adopted for the evaluation of results, taking into account the objectives previously defined. In each form, for each goal outlined, a horizontal scale was also made that makes it possible to underscore the performance achieved, namely: score 5 – "objective exceeded"; score 3 – "goal achieved"; score 1 – "objective not achieved".

The global evaluators should, on their form, underscore each of the assessment parameters (results and specific and general competencies) by determining the arithmetic mean of the scores obtained in the various identified objectives/competencies. At the end of the form, the evaluations of each parameter will be requested, and, in light of the weights assigned to each one, the evaluator obtains the overall and final scores of the evaluatee's performance. Assuming this result, the evaluator should also position the final evaluation of the employee on a qualitative scale duly constructed for this purpose.

5.4.5.3 Procedures

Regarding the procedures that govern the application of the performance appraisal, it is important to highlight three vectors: the evaluators, the training of employees (evaluated) and evaluators, and the evaluation interview. Given the particularities of the company, it is proposed to use multiple evaluators (each one will evaluate the aspects that it observes the best), that is, a diversity of actors that affect and are affected by the performance of the collaborator in the organization. Specifically, from the 360 degree evaluation we propose here, the evaluators are as follows:

- Hierarchical superiors/managers/global evaluators
- Pairs
- Suppliers
- External customers
- Evaluatees.

The rationale for this method of evaluation is that it is possible for evaluatees (employees) to receive feedback on the various dimensions of their performance based on different perspectives, which may enhance their behavioral change in a more remarkable way.

With regard to the training of evaluatees (employees) and evaluators, meetings are held for both stakeholders, particularly aimed at:
- Clarifying the purpose and phases of the performance appraisal system;
- Presenting the evaluation instruments, type of measurement, dimensions, and method of evaluation;
- Demonstrating the relationship of the performance appraisal system to HRM systems, objectives, and mission;
- Cautioning against cognitive errors and biases that may occur during the transfer of the information for the evaluation; and
- Underline the importance of the evaluation interview, pointing out the aspects critical to its success.

Regarding the evaluation and planning interviews of the next performance appraisal period, the global evaluators (who are responsible for carrying out this stage of the process) first prepare the interview, focusing on the most relevant aspects of performance and considering carefully and attentively multiple evaluations, resulting from multiple evaluators' perspectives. At the time of the evaluation interview, the following agenda is followed:
- Review of objectives and competencies identified as central to the evaluation process of the evaluatee;
- Gathering of opinions, through some open-ended questions (e.g., "What is your perception of how the performance appraisal went?");
- Supporting strengths;
- Suggestions for improvement/constructive feedback;
- Analysis and implementation of evaluation (discussion between evaluator and evaluatee of the analysis made regarding the effectively demonstrated behavior);
- Construction and agreement on objectives for next assessment period and monitoring frequency; and
- Signatures on assessment sheet.

5.5 Conclusions and guidelines for the future

The central and advantageous role that performance appraisal assumes as a tool in people management, as well as its ease of integration with other management practices, has, from the outset, supported the belief in the usefulness and viability of the project in the unit being studied.

Following the performance management model suggested by Shields (2007, quoted in [36]), and as a conclusion of what was presented in the course of this chapter, the following key elements were assumed:

Element/stage	Essential topics
System development and implementation	– Align values, organizational objectives, mission, and strategy; – Make decisions regarding the focus of the system and its dimensions; – Develop appropriate tools and forms; – Develop the skills of the actors involved in the evaluation process.
Performance appraisal criteria	– Make decisions on skills, behaviors, and expected results (or their combination); – Adapt the chosen criteria against the organizational objectives defined.
Monitoring and informal feedback	– Ensure the transmission of feedback throughout the evaluation cycle.
Formal evaluation and review	– Use a transparent and easy-to-apply system; – Apply the assessment instruments in an adjusted manner; – Discuss performance, results, and action plans.
Action planning	– Design individual goals that are compatible with organizational objectives; – Enable personal and professional development/training.
Learning and development	– Implement employee development plans; – Facilitate the development of professional competencies for the performance of current and future functions.

In our view, the main contribution of this work lies in the design of the set of instruments for performance evaluation, as well as in the description of functions. If, on the one hand, these tools contribute to the development of people management, under managers' responsibility (as essential tools to help improve HRM practices, specifically recruitment and selection, training/development, and remuneration, and on the grounds of decision-making processes relating to HRM); on the other hand, we consider that they are of equal importance and usefulness to employees themselves, as they enable employees to continuously monitor their performance and contribute to continuous improvement in the quality of service provided. The evaluation system we develop gives employees the opportunity to discuss their performance, plan the evaluation period that follows, and identify development opportunities.

The role of the performance appraisal system is further highlighted in an unequivocal integration of existing HRM practices, as well as an expected improvement in the organization's effectiveness.

With regard to the recruitment of new employees, the company now has all the relevant information that allows recruitment of candidate(s) that are best suited to the job requirements, as well as their selection, based on the competencies (transversal and specific) required for proper performance in the open position.

At the level of the training process, the performance appraisal system facilitates the identification of performance gaps/deficits that can be resolved with adequate training. Thus, areas of intervention that increase the efficiency and productivity of the organization will be highlighted.

At the level of remuneration, the decision-making process is facilitated whereby employee(s) should be given salary increases or, if justified, another type of reward.

We believe that, in this way, the practice of performance appraisal will, in the future, play a fundamental role in the pursuit of continuous improvement and professional excellence, to which companies are committed, since by knowing closely its employees, their strengths and weaknesses, the organization can, on the one hand, make them more productive, allowing them to fulfill their mission and ensuring excellence in the services provided, and, on the other hand, continually align their employees' performance to respond to the instability that affects the labor market.

Knowledge revision

True/false statements

1. Traditionally, performance appraisal only focused on the personal characteristics of employees who performed roles in the middle or higher levels of management in large organizations.
2. Regarding performance appraisal, the information processor metaphor emphasizes the relevance of interest games and the organizational context in formulating judgments about the performance of individuals.
3. Following Fernandes and Caetano, we can consider that any system of performance appraisal can be conceptualized from three fundamental central vectors: objectives, instruments, and procedures.
4. Performance appraisal will achieve the following objectives: align employees' performance and individual objectives with the organization's strategy; provide management indicators that facilitate decision-making processes for remuneration, training and development, and possible transfers; and provide feedback to employees on their individual performance.
5. The behavioral approach focuses on personality traits or attributes.
6. Scales anchored in behaviors consist of dimensions describing a particular behavior and a vertical scale describing the various levels of performance with respect to each of the dimensions.
7. In results-focused approaches, one starts from the performance results and evaluates the extent to which these results are in accordance with the performance standards, or with the objectives previously established for a given period.
8. According to Caetano, self-assessment can be very effective in a more participatory management system by fostering professionalism and a group spirit, reducing conflict and improving communication skills and trust.
9. A performance appraisal system is a process that must consistently integrate strategy, organizational goals, and individual objectives, skills, and competencies.
10. Despite supervisors' greater role at the performance appraisal development stage, employees have a responsibility to observe and document evaluation, update the

plan in case of changes, provide feedback, furnish the resources needed for good performance, and praise or draw attention to particular behaviors.

See answers at end of chapter.

Bibliography

[1] Costa R (2003). PERSONA, Manual Prático de Gestão de Pessoas. Lisboa: Bertrand Editores.
[2] Câmara P, Guerra P, Rodrigues J (2010). Novo Humanator: Recursos Humanos e Sucesso Empresarial (2a Ed.). Lisboa: Publicações Dom Quixote.
[3] Chiavenato I (2004). Gestão de Pessoas (2ª Ed. totalmente revista e actualizada). Rio de Janeiro: Editora Elsevier – Campus.
[4] Almeida FN (1996). Avaliação de desempenho para Gestores. Lisboa: McGraw-Hill.
[5] Rocha J (1999). Gestão de Recursos Humanos. Lisboa: Editorial Presença.
[6] Fernandes A, Caetano A (2007) A Avaliação de Desempenho. In Caetano A, Vala J (ed.), Gestão de Recursos Humanos: Contextos, Processos e Técnicas (pp. 357–387). Lisboa: Editora RH.
[7] Caetano A (2008). Avaliação de desempenho – O essencial que avaliadores e avaliados precisam de saber. Lisboa: Livros Horizonte, Lda.
[8] Beaumont PB (1993). Human Resource Management: Key Concepts and Skills. London: Sage Publication.
[9] Cleveland J, Murphy K, Williams R (1989). Multiple Uses of Performance Appraisal: Prevalence and Correlates. Journal of Applied Psychology 74(1):130–135.
[10] Cawley B, Keeping L, Levy P (1998). Participation in the Performance Appraisal Process and Employee Reactions: A Meta-Analytic Review of Field Investigations. Journal of Applied Psychology 83(4):615–633.
[11] Caetano A (1998). Avaliação de desempenho – Metáforas, Conceitos e Práticas. Lisboa: Editora RH.
[12] Peretti JM (1998). Recursos Humanos (2a ed.). Lisboa: Edições Sílabo.
[13] Coutts L, Schneider F (2001). Police officer performance appraisal systems. Policing International Journal of Police Strategies & Management 27(1):67–81.
[14] Bilhim J (2006). Gestão Estratégica de Recursos Humanos (3a ed.). Lisboa: Instituto Superior de Ciências Sociais e Políticas.
[15] Kline T, Sulsky LM (2009). Measurement and Assessment Issues in Performance Appraisal. Canadian Psychology 50(3):161–171.
[16] Cunha M, Rego A, Cunha R, Cabral-Cardoso C, Marques C, Gomes J (2010). Manual de Gestão de Pessoas e do Capital Humano. (2aEd.) Lisboa: Edições Sílabo.
[17] Schraeder M, Becton JB, Portis R (2007). A Critical Examination of Performance Appraisals. The Journal for Quality & Participation 30(1):20–25
[18] Pinto F (2007). Balanced Scorecard – Alinhar Mudança, Estratégia e Performance nos Serviços Públicos (1a ed.). Lisboa: Edições Sílabo.
[19] Bretz R Jr., Milkovich G, Read W (1992). The Current State of Performance Appraisal Research and Practice: Concerns, Directions an Implications. CARHS Working Paper Series, Paper 298.
[20] Lane J, Herriot P (1990). Self-ratings, supervisor ratings, positions and performance. Journal of Occupational Psychology 63:77–88.
[21] Lepsinger R, Lucia A (1997). 360°Feedback and Performance Appraisal, Training 34(9):62–70.
[22] Losyk B (2002). How to Conduct a Performance Appraisal. International Journal of Business and Management 84(3):8–12.

[23] Meyer H, Kay E, French J Jr. (1965). Split Roles in Performance Appraisal, Harvard Business Review, 123–129.
[24] Roberts G (2003). Appraisal System Participation: A Technique that Works. Public Personnel Management 32(1):89–98.
[25] Jun M, Wang X (2008). The performance appraisals systems types and their applicability: case and application. Journal of US-China Public Administration 5(3):12–18.
[26] Aguinis H (2009). An expanded view of performance management. In Smither JW, London M (eds.), Performance Management: Putting research into practice (pp. 1–44). San Francisco, CA: Jossey-Bass/Wiley.
[27] Aguinis H, Cascio W (2008). Staffing Twenty-first-century Organizations. The Academy Management Annuals 2(1):133–165.
[28] Reyna M, Sims R (1995). A Framework for Individual Management Development in the Public Sector. Public Personnel Management 24(1):53–65.
[29] Boswell W, Boudreau J (2000). Employee satisfaction with Performance Appraisals and Appraisers: The role of perceived appraisal use. Human Resource Development Quarterly 11:283–299.
[30] Morgeson F, Mumford T, Campion M (2005). Coming Full Circle – Using Research and Practice to Address 27 Questions About 360-Degree Feedback Programs. Consulting Psychology Journal: Practice and Research 57(3):196–209.
[31] Cardoso L (1999). Gestão Estratégica das Organizações – Como vencer os desafios do século XXI (4ªed. Atualizada). Lisboa: Editorial Verbo.
[32] Mahoney J, Pandian J (1992). “Best Pratice” human resource management: perfect opportunity or dangerous illusion? The International Journal of Human Resource Management 2(6):1104–1121.
[33] Amsterdam CE, Johnson RL, Monrad DM, Tonnsen SL (2005). A Collaborative Approach to the Development and Validation of a Principal Evaluation System: A Case Study. Journal of Personnel Evaluation in Education 17(3):221–242.
[34] Hooft E, Flier H, Minne M (2006). Construct Validity of Multi-Source Performance Ratings: An Examination of the Relationship of Self-, Supervisor-, and Peer-Ratings with Cognitive and Personality Measures. International Journal of Selection and Assessment 14(1):20–25.
[35] Gesme DH, Wiseman M (2011). Performance Appraisal: A Tool for Pratice Improvement. Journal of Oncology Practice 7(2):131–134.
[36] Becker K, Antuar N, Everett C (2011). Implementing an Employee Performance Management System in a Nonprofit Organization. Nonprofit Management & Leadership 21(3):255–271.
[37] Cabral-Cardoso C, Estêvão C, Silva P (2006). Competências Transversais dos Diplomados do Ensino Superior – Perspetiva dos Empregadores e Diplomados. Guimarães: TecMinho.

Answers to true/false statements

1. True
2. False
3. True
4. True
5. False
6. True
7. True
8. False
9. True
10. False

Appendices – Competency Description Grid

Competency name	Competency description
Communication and information technologies	Use of computers (hardware and software), namely, word processing, spreadsheets, presentations, databases, electronic mail, and Internet.
Written communication	Write effectively so that recipients of writing understand the message.
Oral communication	Transmit information to others effectively.
Team work	Build and develop appropriate relationships with colleagues, customers, and suppliers at all levels of an organization.
Problem resolution	Identify problems and review related information to evaluate and develop options and implement solutions.
Numeracy	Ability to add, subtract, multiply, or divide quickly and correctly.
Foreign languages (English)	Ability to express oneself orally and in writing in English.
Autonomy	Ability to face and solve problems without having to question other people.
Innovation/creativity	Ability to present unusual ideas on a particular topic or situation or develop creative ways to solve problems.
Leadership	Ability to manage a team, in the sense of achieving common goals.
Planning/organization	Ability to plan one's own tasks and allocate resources, schedule events, programs, and activities, as well as the work of others (when applicable).
Critical spirit	Ability to judge the advantages and disadvantages of a given situation, product, idea, or procedure.
Attention to detail	Capacity to perform tasks taking into account all the areas involved, regardless of whether the task is small or large.
Influence/persuation	Ability to lead others to adhere to their proposals, through logical and supported arguments.
Interpersonnal relations	Ability to communicate effectively with others, communicating assertively, in order to gain their trust and cooperation, reducing the possibility of destructive conflicts.
Initiative	Ability to identify opportunities and be proactive in promoting ideas and potential solutions.
Persistence	Ability to pursue goals despite obstacles and setbacks.
Motivating others	Ability to lead others to engage in tasks by making them feel the importance of their results.
Diligence	Capacity to comply with regulatory rules in performing a service, in particular with regard to regular presence in the workplace.
Punctuality	Capability to comply with regulatory rules in performing a service, in particular with regard to working hours.
Self-control	Ability to think before reacting to a less positive situation.
Openness to continuous learning	Having an ongoing interest in attending training actions and learning/knowing things, both related to their function and to areas other than their own.

Competency name	Competency description
Primavera knowledge Excel knowledge Knowledge of all activities promoted by Company X Knowledge of ISO 9001	Ability to apply, in an appropriate way, the professional knowledge and experience essential to the performance of tasks and activities, identifying and using materials, instruments, and equipment
Cleaning techniques Cooking techniques CAM Conducting meetings Knowledge of photocopying machines Knowledge of entrepreneurship Marketing knowledge Knowledge of business plans Budget management capacity Knowledge of HRM Knowledge of labor legislation Knowledge of accounting Knowledge of taxation	Ability to apply, in an appropriate way, the professional knowledge and experience essential to the performance of tasks and activities, identifying and using materials, instruments, and equipment

Note: The foregoing competency description was adapted from [37].

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6 Job analysis: an application in a knowledge-intensive, high-performance SME

Abstract: For a decade, Creative-Knowledge-Company[1] has successfully provided consultancy services, targeting soft funding instruments of research and development projects, to a wide portfolio of clients across around nine European countries. In 2016, the company began facing the challenges associated with growing a high-performance, knowledge-based team, in different dimensions, from one office and one nationality to three offices in three countries and from five nationalities.
The staff's experience transfer into new processes or tools is hampered by the dispersed state of existing knowledge, which is generated individually or across offices/geographic locations.
Considering the close links between human resource management (HRM) and knowledge transfer practices, it is easy to conclude that human resources are at the base of Creative-Knowledge-Company's success, as well as the source of the company's challenges. This study focuses on an initial approach to address this topic through a systematic job analysis of the different positions at Creative-Knowledge-Company.

6.1 Introduction

For a decade, Creative-Knowledge-Company has successfully delivered consultancy services, targeting soft funding instruments of research and development (R&D) projects, to a wide portfolio of clients, currently spread across nine European countries. In 2016, the company began facing the challenges associated with growing a high-performance, knowledge-based team, in all its different dimensions (e.g., cultural, technical, geographical), from one office and one nationality to three offices in three countries (Denmark in 2006, Portugal in 2009, and Norway in 2014) and five nationalities.

With hundreds of projects archived and countless field experiences, the generated knowledge has significant potential to improve the company's internal management processes, leading to further valorization and optimized exploitation of resources and talent, generating more value to clients.

1 Creative-Knowledge-Company is a fictitious name given to preserve the company's anonymity.

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Addressing this situation systematically will allow the company to overcome the following challenges:

- Creative-Knowledge-Company is in the small to medium-sized enterprise (SME) category and enjoys a unique market position between freelancers and big consultancy companies;
- Its main asset, which forms the basis of its services, is knowledge;
- The company is growing very fast organically (almost doubling size in the past 2 years), with organizational bottlenecks and a lack of appropriate processes to grow sustainably cropping up;
- It has a multicultural staff distributed across various countries;
- Its high-performance team has achieved superlative results.

As a well-known company of Scandinavian origin, Creative-Knowledge-Company's organizational structure has remained flat over the years [1], with the partners of the company at the top and all other consultants at the same level. The typical profile of the consultants is that of someone with a technical or business background, with very good analytical skills, average IT literacy (user perspective), and a capacity to work in a multicultural environment (on both sides of activities, meaning with both clients and colleagues). All consultants work flexibly across all the different business areas of the company, with experience and availability being the core criteria for task assignment. This concept is aligned with recent descriptions that jobs in knowledge-based companies are designed in broad terms to promote innovation, autonomy, participation in decision-making, and continuous improvement [2]. This allows staff members to develop their own skills, but it also makes organizations more dependent on individual skills and abilities. Whereas socially such a setup is conducive to a very friendly work environment, as the company grows, it is not sustainable not to have an organizational architecture that is more structured and that adds some layers of specialization to internal procedures.

The aim of this chapter is to make an initial diagnostic on the company's organization in terms of human resources by conducting a job analysis. With all consultants recognizing the need for these changes and the relevance of the situation, the specific objective of conducting this job analysis is to better understand the current formal workflow of the company. This is expected to highlight potential synergies and identify gaps and information needs.

The outcome of the study will mainly support managerial decisions on the organizational architecture of the company to allow for continuous growth and success. An additional outcome of the study will be to support the definition of performance indicators related to knowledge management, so that once the structure is in place, the team can take one step further and focus on optimizing knowledge sharing, to enhance overall performance.

6.2 Theoretical background

The current global economic climate and the emergence of a knowledge-based society impose new challenges for human resource management (HRM) [2]. It is no longer enough to implement HR processes that were designed to meet the needs of industrialization in organizations. Companies are now "born global," hold intangible competitive drivers, and face unprecedented demand for new ways of organizing work structures and sustaining innovation. Worker skills and knowledge are now the most valuable asset of companies and have unprecedented levels of impact on organizational performance [2]. Therefore, strategic human resource management (SHRM) is considered a key element in promoting innovation capacity [3], and effective HRM has emerged as a determining factor in achieving and sustaining organizational success [4]. Best practices in the field of SHRM of competitive companies include selective recruitment, team work and mobility, competence development and information sharing, autonomy, and attractive compensation packages [5].

In this scenario, SMEs are significantly different from large organizations that shape HRM practices, which is to say that studies conducted and frameworks developed at large institutions do not fully apply to SMEs [6]. In addition to being largely dependent on their human resources [7], SMEs typically have simpler organizational structures and lower levels of decentralization and specialization [8], which translate into short distances (between colleagues and management) [9] and informal procedures [7]. Taken together, these intrinsic features of SMEs are the same elements that hamper the growth sustainability of a multicultural and geographically dispersed team.

Creative-Knowledge-Company's context, thus, is of a dual nature. While the company acknowledges its workers' individual skills and talent as the main source of its competitive advantages, at the same time, diversity and dispersion become more complex to manage in a sustainable way. This complexity highlights the need for analyzing different elements in the development of a new organizational architecture, departing, with this study, from its core element – human resources. In fact, the way corporate governance is organized has direct implications not only in a company's performance and operations but also, importantly, in organizational knowledge transfer [10] and in SHRM [11].

Understood as a critical tool of any organization due to its innumerable uses, job analysis assumes a great relevance when implemented proactively owing to its positive relation with organizational performance, deserving, in this way, special attention from HR professionals, top management, and line managers [12]. Also, Suthar, Latha Chakravarthi, and Pradhan [13, p. 166] share the opinion that "A regular or proactive job analysis practices help [sic] to identify factors that shape the employees' motivation and job satisfaction." In other words, despite the many criticisms of job analysis due to increasing demands placed on many positions and the need to continuously update job contents, which are the result of the dynamic and ongoing evolution of the organizational environment (internal and external) (e.g., [14–16]), this HR practice, developed in a strategic and proactive way [12], still assumes a great relevance and critical role in organizational effectiveness.

Over the years, a number of job analysis methods have been developed; some are described as task-oriented, others more behavior-oriented or attribute-oriented [17]. Looking, nowadays, at job analysis from a strategic and proactive perspective, authors still build their approaches to it based on models composed of different steps. Indeed, Campbell [18] used a job analysis schedule that provides a framework of 12 items organized into 4 sections to report job analysis information. Chang and Kleiner [19] defined five main steps in the process of job analysis. Schneider and Konz (1989, cited in [20]), in turn, identified eight stages in the implementation of job analysis; in addition, these authors provide their own contribution as in their final stage they emphasize a reevaluation of job requirements by comparing the existing ones to the expected changes in the job, injecting more dynamism into the process. In the same line of thought of these authors, Baruch and Lessem [21] also take into account the business environment dynamism, highlighting the differences that can exist between job analysis for lower-level jobs and for managerial positions. For these authors, while in lower-level jobs traditional job analysis methods can give excellent results, in what concerns managerial positions (which, by comparison, can't be described in very specific terms), other methods are needed, namely what they call "spectral management theory," leading to the "spectral management type inventory (SMTI)" [21, p. 4]. This method, based on three traits of a person, such as cognitive, affective, and behavioral characteristics, can lead to eight different types of management style.

In sum, owing to its critical relevance, job analysis continues to serve as the foundation for managing organizations and HR because it represents the essence of general management.

6.3 Approach and methodology

As in most types of management research studies, this case study is no exception; it covers applied research, oriented toward problem solving, that is, a problem is identified in a company, and we wish to sort it out in a systematic way.

As stressed earlier, job analysis consists of a process to gather information related to tasks and requirements that identify the specific contents of a job. It includes personal features and outlines technical requirements and skills needed to perform the job, and, beyond describing to workers what their roles are, it serves as support for different HR processes such as training, performance assessment, recruitment, definition of incentives, and occupational health, among others.

Following the literature (e.g., [18, 19]; Schneider and Konz (1989, cited in [20]), we note that job analysis consists of four stages:
- Stage 1 – defining the scope of the study, including objectives and targets;
- Stage 2 – defining the methodology, deciding what type of data is needed, their sources, and how they can be collected;
- Stage 3 – collecting and analyzing data, which are ultimately communicated to the organization and periodically evaluated;
- Stage 4 – assessing results and methodology, when the organization compares results against predefined criteria.

Because this work is part of an internal project that is broader in scope, this study will only cover the first three stages and end with communication to the organization about the findings. Since stage 4 of the job analysis is beyond the scope of this work, the methodology covered in all tasks will be predominantly descriptive, entailing the gathering of information from different sources at the company and relating features and processes. In what follows, methods and procedures defined for stages 1 to 3 are described in more detail.

Stage 1

While the objective of the study was described earlier, the population target will be all permanent staff at Creative-Knowledge-Company (23 persons).

Stage 2

Four tasks were defined to achieve the objective of this study:
1. Review the company's HR policy to gather information on overall working conditions. This will be done using the latest version of Creative-Knowledge-Company's staff handbook (an internal document that, because of its size and the conditions of anonymity imposed by the organization, will not be discussed in this chapter).
2. Conduct a staff inventory to gather information on the personal traits of the consultants, as well as on the tasks developed. This will be done by gathering information from individual contracts and will include only staff working at Creative-Knowledge-Company at the end of 2016 and exclude people who once worked at Creative-Knowledge-Company but no longer do.
3. Map the company's operational processes to gather information on tasks to be executed. This will be done by direct observation and description based on the experience of consultants. In addition to establishing the map for the basic workflow (several other products and assignments can be regarded as particular cases of the basic workflow), for each step of the process tasks, responsibilities, and information needed to perform tasks will be outlined. This map (Figure 6.1) was drawn using XMind version 7.5.

4. Analyze the formal flow of information with the current organizational architecture based on network theories. Three people are assigned to each full project Creative-Knowledge-Company takes on: a project writer, a backup, and a project manager. Departing from a resource assignment spreadsheet, where these resources are assigned to projects, a one-mode social network was computed by converting project coparticipation into ties among human resources. Tie strength (or width in the graphical representation of Figure 6.2) reflects the frequency of those coparticipations and can be interpreted as a proxy for information flow. Tie strength was determined based on the workload assigned to each project, assuming that 3% of the project time was spent between writer and backup, 1% between backup and project manager, and 1% between writer and project manager. Cases of reflective ties (e.g., the backup and the project manager are the same person) were not considered. Only 19 staff members and projects carried out between 2015 and 2016 were included in this analysis. The justification for this narrow timeframe relates to data availability, as the assignment spreadsheet was only fully operational as of mid-2015. The analysis was performed using UCINET [22] v.6, and the image was rendered in NetDraw v.2.

Stage 3

Findings of the different tasks are reported in the following section. Specific data for the analysis of the formal flow of information are presented in Tables 6.4 and 6.5, and an integrated map of processes, including tasks, project manager, and information needs is presented in Figure 6.1 and Table 6.3.

Previous actions took place to engage all team members around the problematic of organizational architecture and internal knowledge management. A briefing on this study's results will also be held to ensure collaboration.

6.4 Findings and discussion

Common features and conditions

Based on a review of the company's staff handbook, it can be observed that good practices of HRM are at the heart of Creative-Knowledge-Company values and top management concerns, as the company aims to set a high professional standard and to be socially and ethically responsible:

– *Creative-Knowledge-Company is a workplace with room for ambition where mutual respect, innovation, and knowledge sharing are fundamental values.*
– *Creative-Knowledge-Company will grant responsibility to competent employees and provide opportunities for personal development as well as a salary to match the results.*

– *The company aims to create the best conditions for its employees in order for them to be able to develop and advance in their careers. Career development is to be understood in a broader sense than just rising up in the system toward a management position.*

In practice, all permanent staff at Creative-Knowledge-Company are full-time employees, based in office spaces with schedule flexibility and the ability to work from home if needed. Expenses incurred outside the office on external assignments are covered. In terms of equipment, all staff have a laptop, a mobile phone with an international communication package included, and a hydraulic-ergonomic desk. All three offices have shared kitchen areas.

Staff inventory

Creative-Knowledge-Company's staff inventory is presented in the list below (Table 6.1).

Creative-Knowledge-Company's current staff is composed of a young gender-balanced team of 24 individuals, aged between 22 and 52 and from 5 different nationalities. Most academic backgrounds (15 out of 23) include a PhD, with the majority in engineering and natural sciences, while others have an academic background related to political and economic sciences. The team is spread out between 3 locations as follows: 6 people in Denmark, 16 in Portugal, and 1 in Norway. New hires mainly took place in 2015 and 2016 (11 out of 24), and 5 team members have enrolled in various external training events upon request.

The notable net growth of the Portuguese office can be explained not only by the availability of highly qualified labor, but also by the dynamics of the Scandinavian labor market. Over the years there have been more hires in Denmark; however, employee retention is far from those levels seen in Portugal. This reflects both cultural and economic aspects. People in Portugal are more reluctant to change jobs and, hence, are less vulnerable to the risk that entails [1], whereas the latest reports from the EU show higher vacancy rates in Northern Europe [23] owing to the better economic conditions. In such markets, unique job requirements in knowledge-based organizations have also created a shortage and increased competition for talented workers [2]. This reality has shaped Creative-Knowledge-Company's organic growth.

Six different positions were identified, with some team members rising to management positions. A summary of the job of each position is described in what follows, and the relationship between the different positions, in terms of supervision, dependency, autonomy, and synergies, is also outlined (Table 6.2).

The tasks of each position, and underlying responsibilities, are better understood in the light of the company's core workflow. The operational workflow that serves as a basis for all services delivered by Creative-Knowledge-Company is presented in what follows (Figure 6.1), followed by a description of the tasks, responsible person, and in-

Tab. 6.1: Creative-Knowledge-Company's staff inventory.

ID	Born	Nationality	Gender	Position	Admission	Location	Background	External training
AP	1986	DK	F	Project developer	2014	DK	MSc in Innovation and Business development	N
AA	1976	PT	F	Project developer	2015	PT	PhD in Chemical and Biological Engineering	N
BF	1983	PT	M	Project developer	2016	PT	PhD in Chemical and Biological Engineering	N
CC	1978	PT	M	Senior Consultant	2013	PT	PhD in Chemical and Biological Engineering	N
DB	1986	PT	M	Project developer	2015	PT	PhD. Double in Biomedical Sciences and Engineering	N
DF	1984	PT	F	Senior Consultant	2011	PT	PhD in Bioengineering Systems	N
EP	1982	BR	M	Project developer	2016	PT	PhD in Chemical and Biological Engineering	N
KG	1972	DK	M	Partner, CEO, Head of DK	2006	DK	MSc in Political Science, MBA	N
LL	1980	PT	M	Project developer	2013	PT	PhD in Chemical and Biological Engineering	Y
MM	1977	PT	F	Project developer	2016	PT	PhD in Biomedical Engineering	N
MC	1982	PT	F	Manager	2016	PT	PhD in Health Science, MBA	N
MG	1980	PT	F	Project developer	2012	PT	PhD in Chemical and Biological Engineering	Y
Mha	1978	NO	F	Project developer	2016	NO	MSc in Culture, Environment and Sustainability	N
MH	1964	DK	M	Chief Consultant	2013	DK	MSc in Theoretical Physics and Computer Science, MBA	N
MP	1985	PT	M	Project developer	2015	PT	PhD in Marketing and Strategy	N
MK	1972	DK	M	Partner, Head of PT	2006	PT	MSc in Political Science and MAP	N
OR	1987	SE	F	Researcher	2015	DK	BSc in International Business and Politics	N
PS	1980	PT	F	Project developer	2012	PT	PhD in Immunology	Y
PG	1979	PT	M	Chief Consultant	2010	PT	PhD in Chemical and Biological Engineering	Y
RS	1978	PT	F	Chief Consultant, Head of NO	2009	PT	PhD in Chemical Engineering	Y
RR	1979	PT	M	Senior Consultant	2011	PT	PhD in Chemical and Biological Engineering	N
SL	1988	PT	F	Project developer	2016	PT	PhD in Health Sciences	N
SS	1994	DK	F	Researcher	2016	DK	Student of Sustainable Biotechnology	N
TK	1973	DK	M	Partner	2006	DK	MSc in Political Science	N

Tab. 6.2: Job descriptions of different positions at Creative-Knowledge-Company.

Project developer (12)	Involved in delivery: development of project proposals, research on project topics, research on rules and formalities, contact with clients for gathering information, contact with funding authorities
Senior consultant (3)	Involved in delivery and quality control and sales: development of project proposals, research on project topics, research on rules and formalities, contact with clients to gather information and scout for new opportunities, contact with funding authorities, negotiating and drafting contracts
Chief consultant (3)	Involved in quality control and sales: research on rules and formalities, contact with clients for scouting opportunities, contact with funding authorities, negotiating and drafting contracts, managing key accounts
Partner (3)	Involved in quality control, sales, and strategic management; shareholder
Researcher (2)	Supports activities for delivery and management
Manager/Head (4)	Overall internal organization: support of operations and strategic management (financial control, accounts, HR, internal organization)

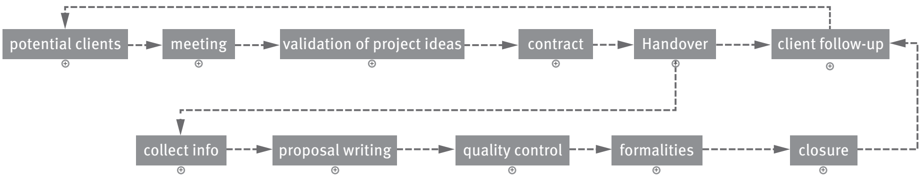

Fig. 6.1: Creative-Knowledge-Company's core operational workflow scheme. Operations are divided into sales (top line) and delivery or project writing (bottom line).

formation requirements for each step (Table 6.3). A first observation that can be made about these results is that the company has grown organically to mainly locate delivery in Portugal and sales in Denmark and Norway.

All tasks performed at Creative-Knowledge-Company evolve around specific projects that have seasonal delivery deadlines. For each project, a small team of two to three people is assigned. There is a wide range in the frequency of deadlines, with some projects being due quarterly and others only once a year. This frequency is defined by external stakeholders, and Creative-Knowledge-Company has no control over it.

With extensive consultants' profiles and broad job descriptions generically used at Creative-Knowledge-Company, the mapping of processes contributes to a formalization of procedures and tacit knowledge, currently available only through informal media, such as word of mouth, within the small teams assigned to each project. In this way, instead of hesitant actions, performance can be structured in a way that facilitates control and knowledge transfer.

Tab. 6.3: Breakdown of tasks, manager, and information requirements for each step of the process map.

Process	Tasks	Person responsible	Info requirements
Potential client	– Scan potential client lists – Contact clients – Create vcards – Create new entry in sales sheet	– Salesperson	– Vcards – Previous contacts – Potential clients lists – Sales sheet
Meeting	– Prepare meeting (Sales ppt + cases) – Conduct meeting – Collect info for contract and project – Update vcard – Update sales sheet with result of meeting	– Salesperson	– Sales ppt – Relevant cases
Validation of project ideas	– Comparison of info and funding opportunities – Discussion with client – Check for preaward opportunities – Update sales sheet wit result	– Sales or project manager	– Validation form – Info from client – Sales sheet
Contract	– Assess resources needed and ensure availability – Negotiate contract – Generate contract number – Ensure no conflict of interest – Draft AGR and PRO and send with standard terms – Get AGR signed – Open e-conomic entry – Update sales sheet	– Salesperson – Resources – MK – Templates and prices – TK – E-conomic – MC	– Contract templates and standard terms – Price list – Contract number sheet – Sales sheet
Handover	– Resource assignment – Inform client about delivery responsible – Book kick-off meetings – Send available info to project writer	– MK – Salesperson – Project writer	– Delivery sheet – Skype contacts or zoom availability – Available info from client – Proposal templates
Client follow-up	– After submission, check for other possible sales – Send/request ESR	– Salesperson or project writer	– Upcoming calls
Collect info	– Meeting with client – Desk research	– Project writer	– Previous examples – Call text – Evaluation criteria
Proposal writing	– Plan delivery – Draft preaward – Draft proposal	– Project writer	– Proposal templates – Good examples – Internal advanced template – Relevant contacts

Tab. 6.3: (continued)

Process	Tasks	Person responsible	Info requirements
Quality control	– Assign reviewer – Review – Internal discussions – Client feedback – Rewrite proposal	– Project writer – Reviewer	– Availability of reviewers – Call text – Evaluation criteria
Formalities	– Collect A forms – Register project online (ECAS) – Check for formalities – Submission	– Project writer – Internal coordinator	– Access to ECAS – Formal requirements
Closure	– Confirm submission with client – Send questionnaire – Upload final versions on SP – Internal closure (discussion) – Update e-conomic	– Project writer	– Questionnaire – SP access – Internal meeting – e-conomic

Formal flow of information

When considering knowledge management in virtual organizations, measuring the formal flow of information can reveal positive and negative aspects of the current organizational architecture. Given the degree of dispersion at Creative-Knowledge-Company, the behavior of the team of consultants can be described in the form of a network, aiming to realize advantages from diversity and collaboration [24]. The results of the model are presented in Tables 6.4 and 6.5 and Figure 6.2 in what follows.

The network density ranges from 0 to 1 and is calculated by the sum of existing ties divided by the number of potential ties (Nodes × Nodes – 1). While the existing ties increase linearly, the potential ties increase exponentially, which results in lower densities for larger networks. Therefore, at the network level, and for a single component with 19 nodes, the density of Creative-Knowledge-Company's formal network is high (0.497, which mean half of the possible ties, or coparticipations, took place in the period of analysis). However, the network centralizes around just five nodes (KG, MH, MK, RS, and TK), as a result of these nodes being selected very often for the role of responsible or backup. These 5 nodes have an in-degree equal or above to 15, which means that 15 or more network members reported to them on at least one project. In total, these nodes control 49.4% of all in-degree ties, which could reflect the expected hierarchy associated with internal quality control processes since these members are either partners or chief consultants. At the tie level, four of the five strongest ties in the network reported to TK (from MH, DB, RR, and PS, in descending order of magnitude), which may reflect growing interdependencies among these members.

Tab. 6.4: Matrix of interactions based on project coparticipation (one-mode network).

	AA	AM	CC	DB	DF	EP	KG	LL	MG	MH	MK	MM	MP	PG	PS	RR	RS	SL	TK
AA	0	0	2.25	0	0	0.6	1.6	0.3	0	1.08	0.62	0	0	1.05	0	0.36	1.22	0	0.1
AM	0	0	0.3	0	0	0	1.32	0.6	0	1.72	0	0	0	0.6	0	0	0	0	0.3
CC	0.09	0	0	0	0	0	3.16	0	0	2.07	1.7	0	0	0.26	0	2.07	0.48	0	1.17
DB	0	0	0.87	0	0.84	0	1.78	0	0.6	0.1	0.19	0	0	0.42	0.9	0.56	1.72	0	4.529999
DF	0	0	0	0.18	0	0	2.03	0	1.86	0.7	0.11	0	0	0.3	0.02	0.01	0.8	0	1.04
EP	0	0	1.08	0	1.29	0	2.56	0.3	0	0.78	0.08	0	0.05	0	0.3	0.45	1.65	0	2.23
KG	0	0	0	0.15	1.2	0	0	0	0	0	2.22	0	0	0	0.12	0	0	0	0.2
LL	0.3	0	0	0.24	0	0	0.2	0	0	0.32	0.61	0	0	0.3	0	1.5	1.57	0	2.74
MG	0	0	0.32	0.3	1.3	0	0.37	0	0	1.77	0.52	0	0	0.49	0	0.48	0.08	0	1.26
MH	0	0	0	0.27	0.15	0	1.12	0	0.3	0	1.09	0	0.3	0.27	0.09	0	0.02	0	8.550001
MK	0	0	0.25	0.12	0	0.24	0.42	0	0	2.71	0	0	0	0	0	0.12	0.92	0	0.92
MM	0	0	0	0.3	0	0.6	0.4	0	0	0.6	0	0	0.05	0	1.35	0	0.2	0	0.35
MP	0	0	0.6	0.3	0.6	0	1.67	0	0.3	2.03	0.18	0	0	0	0.3	0	0.41	0.3	1.35
PG	0	0	0.18	0	0	0	2.44	0.1	0.12	1.36	0.7	0	0.15	0	0.21	0	0.42	0	1.43
PS	0.3	0	0	0.24	0.51	0	0.83	0	0	0.15	0.15	0.75	0	1.32	0	0.2	1.48	0	2.87
RR	0.3	0	0.33	0.09	0	0	0.44	0	0.3	0.64	1.96	0	0.09	0	0.45	0	0.03	0	3.07
RS	0	0	0	0	2.4	0	0.14	0	0	0.1	0.31	0	0	0	0.84	0	0	0	0.89
SL	0	0	0	0.72	0	0	0.45	0	0.6	0.2	0	0	0	1.5	0	0	0.34	0	0.37
TK	0	0	0.05	0	0	0	0.07	0	0.05	0.42	0.15	0	0	0	0.12	0.21	0.07	0	0

One-mode social network computed using UCINET.

Tab. 6.5: In- and out-degree centrality of network nodes.

	Out-degree	In-degree
AA	10	4
AM	6	0
CC	8	10
DB	11	11
DF	10	8
EP	11	3
KG	5	18
LL	9	4
MG	10	8
MH	10	17
MK	8	15
MM	8	1
MP	11	5
PG	10	10
PS	11	11
RR	11	10
RS	6	16
SL	7	1
TK	8	18
	Density	0.497076

One-mode social network computed using UCINET

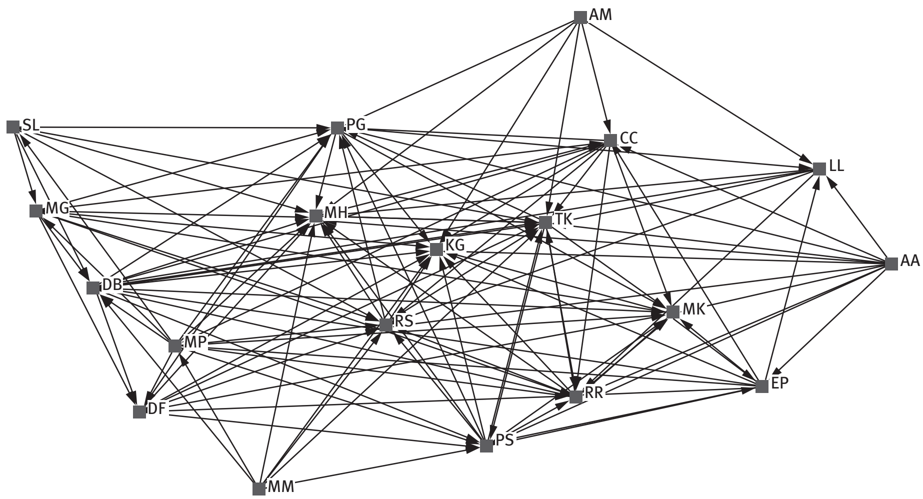

Fig. 6.2: Formal delivery relationships at Creative-Knowledge-Company (line width: tie strength).

The results suggest that to improve internal knowledge transfer at Creative-Knowledge-Company, the overall density of the network should be increased while at the same time avoiding centralization. Any deliberations and suggestions for new organizational architectures or for new forms of organizing work management should therefore consider stimulating cooperation between peripheral nodes. This requires that direct "reporting-to" is spread across more members, and preferably not so frequently to those five central nodes.

Having a measurable indicator of the network performance and corresponding formal information flow is of utmost importance because it can support management in developing strategies promoting knowledge sharing, and it would make it possible to measure the impact of any changes to be made.

Furthermore, in the near future, the goal is to compare these findings with another study focusing on informal information flow. Being able to compare the two will provide invaluable insights into potentially fragmented aspects of knowledge management, namely those related to collaboration among team members and how that can be used to frame structures, work processes, and HR practices [25].

6.5 Concluding remarks

Creative-Knowledge-Company's core asset is knowledge and, inherently, human resources. For a number of years, HR best practices implemented and the distance between team members were just enough to perform knowledge transfer successfully, establishing a solid business leveraged by diversity. With the company's expansion and growth, this distance is perceived as a barrier to knowledge transfer and long-term sustainability, in a number of ways, as previously described. The company finds itself in a vortex of change in many interdependent areas. Adjusting HRM practices, which by its nature includes knowledge management, to the company's strategy can be the basis for the design of an organizational architecture tailored to performance sustainability.

This study, as part of a project of broader dimensions, elucidates the current formal workflow of the company and serves as a diagnostic of the staff's operational performance. Formalizing processes at Creative-Knowledge-Company to this level of detail was deemed necessary only after the company had experienced exponential growth for the past 2 years, and so it can be considered an organizational advancement on its own. Since inappropriate internal processes can hamper sustainable growth, which is especially critical in a discussion of virtual teams, this diagnostic, to be presented to all staff in the near future, establishes a point of departure for supporting management decisions on new forms of organizing work that can improve knowledge sharing within a team.

These findings also reveal a scenario where more research is needed to investigate the informal knowledge sharing network of the team and compare it with the formal network analyzed in this study. In any case, and anticipating the changes that are universally recognized as necessary, the relevance of having tangible data and measures to support those changes becomes a key instrument of justification and engagement of staff, which are crucial for the implementation of a flexible corporate strategy.

The definition of metrics and key performance indicators of a broad nature, which are not necessarily objective, would also be another key step in this project. This would enable measurements of the impact of different decisions/changes taken around the four pillars of knowledge management [26]: (a) management and organization, (b) infrastructure, (c) people and culture, and (d) content management systems.

One limitation of this study was that the person conducting it is part of the team; however, all methods were kept as descriptive and objective as possible, and in addition this team member is, with the exception of the partners, the person who has been at the company for the longest, which makes her familiar with all processes and staff. Another limitation is that the time allocated in the resource assignment spreadsheet does not necessarily reflect the actual amount of time that consultants have been working together on the same project. As such, for future work another internal tool, which reflects exactly how much time each person has worked, will be used to measure the formal workflow interactions (data not available at the time of this study).

To conclude, this study contributes to the implementation of a knowledge management system at Creative-Knowledge-Company that, given the specific nature of the company, is completely integrated in a quality management system. Ultimately, an improved management system, which includes SHRM, can serve as a basis for the company's strategic and sustainable growth, raising the already high standards of service quality and efficient work environment of an intelligent organization.

Knowledge revision

True/false statements

1. Creative-Knowledge-Company is an SME with unique market positioning, between freelancers and large consultancy companies.
2. Worker skills and knowledge are now the most valuable asset of companies and have unprecedented levels of impact on organizational performance.
3. SMEs typically have complex organizational structures and high levels of decentralization and specialization.
4. Baruch and Lessem (1995), taking into account the dynamism in a business environment, highlight the similarities that can exist between job analysis in lower-level jobs and in managerial positions.
5. Job analysis continues to be the foundation for managing organizations and HR, since it is the essence of general management.

6. A job analysis consists of a process for gathering information related to tasks and requirements that identify the specific content of a job.
7. Following the literature, we can say that a job analysis consists of seven stages.
8. Creative-Knowledge-Company is a workplace with room for ambition where mutual respect, innovation, and knowledge sharing are fundamental values.
9. When considering knowledge management in virtual organizations, measuring the formal flow of information can reveal positive and negative aspects of the current organizational architecture.
10. Results suggest that to improve internal knowledge transfer at Creative-Knowledge-Company, the overall density of the network should be decreased and centralization avoided.

See answers at end of chapter.

Bibliography

[1] Meyer E (2014). The Culture Map: Breaking Through the Invisible Boundaries of Global Business. PublicAffairs.
[2] Stone DL, Deadrick DL (2015). Challenges and opportunities affecting the future of human resource management. Human Resource Management Review 25(2):139–145.
[3] Aryanto R, Fontana A, Afiff AZ (2015). Strategic Human Resource Management, Innovation Capability and Performance: An Empirical Study in Indonesia Software Industry. Procedia – Social and Behavioral Sciences 211:874–879.
[4] De Oliveira Marques Veloso AL (2007). O Impacto da Gestão de Recursos Humanos na Performance Organizacional. Universidade do Minho, Braga, Portugal.
[5] Machado C (2016). Human Resource Management: An Operational Perspective (Chapter 3, pp. 77–103). In Machado C, Davim JP (eds.), MBA: Theory and Application of Business and Management Principles. Springer: Germany.
[6] Melo P, Machado C (2015). Gestão de Recursos Humanos nas Pequenas e Médias Empresas – Contextos, Métodos e Aplicações (1st ed.). Lisboa: RH Editora, Ed.
[7] Prado Marques S, Machado CF (2016). Human Resource Sustainable Management in Small- and Medium-sized Entreprises. In Machado C, Davim JP (eds.), Management for Sustainable Development (pp. 111–124). Danmark: River Publishers.
[8] Vinten G, Lane DA, Hayes N (1997). People Management in Small and Medium Sized Enterprises. Management Research News 20(11):1–66.
[9] Cragg P, Caldeira M, Ward J (2011). Organizational information systems competences in small and medium-sized enterprises. Information & Management 48(8):353–363.
[10] Rhodes J, Hung R, Lok P, Ya-Hui Lien B, Wu C (2008). Factors influencing organizational knowledge transfer: implication for corporate performance. Journal of Knowledge Management 12(3):84–100.
[11] Martin G, Farndale E, Paauwe J, Stiles PG (2016). Corporate governance and strategic human resource management: Four archetypes and proposals for a new approach to corporate sustainability. European Management Journal 34(1):22–35.
[12] Siddique CM (2004). Job analysis: a strategic HRM practice. The International Journal of Human Resource Management 15(1):219–244.

[13] Suthar BK, Latha Chakravarthi T, Pradhan S (2014). Impacts of job analysis on organizational performance: an inquiry on Indian Public Sector Entreprises. Procedia Economics and Finance, Elsevier 11:166–181. https://doi.org/10.1016/S2212-5671(14)00186-5

[14] Olian J, Rynes S (1992). Making total quality management work. Human resource management 30(3):303–333.

[15] Stewart GL, Carson KP (1997). Moving beyond the mechanistic model: an alternative approach to staffing for contemporary organizations. Human Resource Management Review 7(2):157–184.

[16] Ariss RT, Rezvanian R, Mehdian SM (2007). Cost efficiency, technological progress and productivity growth of banks in GCC countries. International Jourrnal of Business 12(4):471–487.

[17] Papadopoulou A, Ineson EM, Wilkie DT (1995). Convergence between sources of service job analysis data. International Journal of Contemporary Hospitality Management 7(2/3):42–47. https://doi.org/10.1108/09596119510079981

[18] Campbell CP (1989). Job analysis for industrial training. Journal of European Industrial Training 13(2):2–58. http://dx.doi.org/10.1108/EUM0000000000187

[19] Chang I-W, Kleiner BH (2002). How to conduct job analysis effectively? Management Research News 25(3):73–81. https://doi.org/10.1108/01409170210783133.

[20] Singh P (2008). Job analysis for a changing workplace. Human Resource Management Review 18(2):87–99. https://doi.org/10.1016/j.hrmr.2008.03.004.

[21] Baruch Y, Lessem R (1995). Job analysis: can it still be applied? Indications for various organizational levels. International Journal of Career Management 7(6):3–9. https://doi.org/10.1108/09556219510098055.

[22] Borgatti SP, Everett MG, Freeman LC (2002). Ucinet 6 for Windows: Software for Social Network Analysis. Harvard, MA: Analytic Technologies.

[23] Van der Ende M, Walsh K, Ziminiene N (2014). European Vacancy and Recruitment Report 2014. (European Commission, Ed.). Luxembourg: Publications Office of the European Union.

[24] Kanter RM (1994). Collaborative Advantage: The Art of Alliances. Harvard Business Reviews 71(4):96–108.

[25] Cross R, Borgatti SP, Parker A (2002). Making Invisible Work Visible: Using Social Network Analysis to Support Strategic Collaboration. California Management Review 44(2):25–47.

[26] Uriarte FAJ (ed.) (2008). Introduction to Knowledge Management. Jakarta, Indonesia: ASEAN Foundation.

Answers to True and False Questions

1. True
2. True
3. False
4. False
5. True
6. True
7. False
8. True
9. True
10. False

Index

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