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PROJECT MANAGEMENT LEADERSHIP AND INTERPERSONAL SKILLS: THE PAST, PRESENT, AND FUTURE

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ABSTRACT

The purpose of this research is to examine how interpersonal competencies have evolved in the project management profession and describe which additional skills will be needed in the future. Using an applied thematic analysis, the authors examined the past, present, and future of interpersonal skills in peer reviewed academic literature and project management textbooks. A gap analysis was used to compare the reviewed material vs. interpersonal competencies. This research concluded that project management interpersonal transferrable skills are the ones that will be most highly sought after into the future. The future of interpersonal skills will need to concentrate on those competencies that emphasize emotional intelligence, integrity, culture sensitivity, and interpersonal conflict. The academic value is that this research elaborates the interpersonal skills body of knowledge by categorizing skills as competencies. This offers a distinct viewpoint that can be used as a basis for future targeted and measurable interpersonal capability studies. The practical value is that by examining history provides a methodical mechanism to develop new knowledge and informed solutions to future problems. Examining concepts of longevity demonstrates competencies, which have stood the test of time, and therefore have been found to be of value for practitioners.

Key words- project management history; future; interpersonal skills; competency models; Harold Kerzner

INTRODUCTION

Job skills needed in the 21st century include interpersonal competencies that are transferrable. These include creativity, innovation, critical thinking, problem solving, decision-making, and metacognition, in addition to enhanced collaboration and the ability to conduct oneself in an ethical, socially responsible manner (McGunagle & Zizka, 2020).

Companies want workers who are self-motivated and work independently (Dean & East, 2019). Emerging lean workforces have resulted in more work for individuals who are spending more time on work-products with less time on worker training. This is done by drawing on the tenets of agile behavioral methods, including productivity, speed, and flexibility (Cooper & Sommer, 2018).

An average of 2.2 million new project-oriented roles will need to be filled each year through 2027 (PMI, 2017a). As a result, higher education sees the need to prepare more students for project management (Nijhuis et al., 2018). To meet this need, business schools offer degrees, courses, and certificates in project management, while devoting chapters on the discipline in textbooks (Ravinder & Kollikkathara, 2017). Ravinder and Kollikkathara maintained that those who are successful will have specific personal skills in addition to technical expertise. Those skills include leadership, the ability to foster and manage interpersonal relationships, and the ability to promote open communication among team members. Covelli (2018) notes that authenticity is an ingredient of leadership that fosters a climate of positivity and facilitates in the decision-making process, where tough calls need to be made.

Human skills are necessary for project management performance. Based on that premise the purpose of this paper is to examine how interpersonal skills have evolved in training and practice and where the profession goes from here with respect to those skills. The study examines the past, present, and future of interpersonal skills in academic literature and reputable textbooks. Specifically, this research addresses the following questions:

1. To what extent has project management literature evolved with respect to the impact of interpersonal skills on project activities?

2. Which interpersonal competencies garnered the greatest emphasis based on thematic and longitudinal analyses of project management textbooks?

This paper begins with a brief literature and review of the evolution of interpersonal skills in project management. This is followed by a description of the methodology, findings, analysis of the results and discussion, the future and implications for the profession.

BACKGROUND

As project management matured as a management discipline, there was an increasing recognition of the value of people in being able to successfully complete projects. Furthermore, inspired and motivated team members were more likely to achieve project goals than those who were not (Geue, 2017). The need to interact and network with internal and external stakeholders is recognized as an essential component of successful project management. Turner et al. (2019) identify a four step process: 1) stakeholder identification, 2) stakeholder classifications (including "internal" or "external" and high/low influence levels), 3) stakeholder analysis, and 4) stakeholder communications modes. Mastering the art of stakeholder management becomes increasingly important to organizations as projects grow in complexity, levels of information overload rise, priorities, conflict, and political pressures increase over competition for scarce resources. Additionally, Gauthier and Josien (2017) hold there is a significant relationship between mission statement content and actions regarding stakeholder groups for social ventures, and further suggested that social ventures selling to consumers would show stronger community and environmental performance than social ventures selling to businesses. The shift in managing human capital with increasing complexity has developed project management from a purely technical discipline to being viewed as a specialized field of management where leadership and interpersonal skills play a central role.

According to Donaires and Martinelli (2019), management is traditionally defined in terms of a set of activities such as planning, controlling, decision-making, organizing, and leadership of people. Further, the authors state that management is the design, control, and development of purposeful systems at higher abstract levels.

Project management has evolved over time. Whereas the iron triangle (time, budget, and quality) used to be the single guideline for project success, the views of project success now include less tangible matters such as stakeholder appreciation that result in obtaining program goals. Ahern, et al. (2016) hold the traditional view of project management is that it is an applied science grounded in technical rationality.

In 1959, project management became a focus of academic interest in the *Harvard Business Review* (Gaddis, 1959). The article highlights the underlying tension between project management's different views—whether traditional project management is an applied science grounded in technical rationality or social science that facilitates the construction and interpretation of project boundaries by project stakeholders, or a combination of both.

Hendarman and Cantner (2018) added that different types of skills are essential for innovation and companies' economic performance. *Hard* skills are teachable competencies acquired through self-study, work experience, education, or training (Yan et al., 2019). Historically, PM's competency focus has been on hard skills capability to apply typically technical acumen needed for short-term success (Dean & East, 2019).

Scholars and business professionals refer to *soft* skills with a variety of terms and phrases. These include the twenty-first-century skills, the ticket to upward economic mobility, the must master learning outcomes, interpersonal skills, survival skills, character strength, and socio-emotional skills (AbuJbara & Worley, 2018). Interest in soft skills has often focused on communication and building relationships with customers in service industries (Nickson et al., 2005). However, the importance of soft skills across many disciplines is receiving more extensive attention. Cultural diversity, globalization, and technology are factors that influence the need for enhanced soft skills in the workplace. Additionally, employers are seeking employees who are flexible, think critically, solve problems, and work in teams. Soft skills are essential for personal development, social participation, and workplace success. The literature identifies changes in the labor market, revealing a gap between college graduates and the essential soft skills required.

Interpersonal skills, which include the aforementioned soft competencies, go a step further. As businesses face a changing competitive battleground, the employee skill set needs are evolving and adding additional competencies. The 21st century workplace includes workgroups capable of interacting globally with diverse cultures (Dean & East, 2019). Consequently, the leadership competency has grown in importance because it provides encouragement, orientation for the development of trust and relationships among team members (Hendarman & Cantner, 2018). AbuJbara and Worley (2018) maintain that employers in today's world are actively recruiting employees who are socially and emotionally stable. They point out that as much as 85% of an individual's job success can be attributed to interpersonal skills, as opposed to their technical skills.

Hendarman and Cantner (2018) suggested that the borderline between the concepts relating to hard skills and soft skills is not always clear-cut, as described in their classification research. Hard skills are mainly cognitive in nature and are influenced by an individual's IQ. Consequently, IQ is a measurement of cognitive aspects that can measure skills such as conceptual thinking and problem-solving.

Prior research has identified the need for further studies regarding the linkage between hard and soft skills and project management. Gillard (2017) noted, learning and practicing ways to optimize human interaction, build trust and confidence, and effectively communicate with project team members, internal and external stakeholders, and individuals in positions of authority will lead to more efficient and effective project management. Similarly, Muszyńska (2018) further remarked that effective communication is needed to establish understanding, trust, and build coordination and support from various project personnel. Engaging stakeholders to achieve project objectives, and overcome issues and resolve conflicts is an essential factor for project success. Therefore, in this paper, the authors used the historical trajectory of project management. This includes a shift from a purely technical and mechanistic worldview to a perspective fully anchored in the human element of projects.

METHODOLOGY

This exploratory research applies a thematic analysis of literature to integrate practitioner expertise with formalized qualitative practices. This study is a type of grounded theory that allows researchers to develop a cultural model from the written words (Guest et al., 2013). This methodology draws upon a number of closely related methods, including content analysis (Bordens & Abbott, 2018; Crozby & Bates, 2018), and descriptive literature review (Corbin & Strauss, 2015) to identify common themes and identify gaps in the research domain.

The research consists of two parts. The first part includes a description of interpersonal skills, as found in recent peer-reviewed academic literature. These skills are extracted from the Project Management Institute project manager competency framework (PMI, 2017c). A more thorough discussion of the competency framework's selection is found in the findings and discussions section of this paper.

The second part consists of a thematic and longitudinal analysis from project management textbooks. Pettigrew (2013) described this as a contextualist approach to analysis that includes vertical and horizontal levels and interconnections. The vertical analysis includes a literature and textbook content review. The longitudinal literature review, as a horizontal level of analysis Grimm et al., (2017) allows the researchers to discover changes in types of interpersonal skills over the decades of project management.

Evaluated textbook sets included Gido et al. (2018), Heagney (2016), Kerzner (2017), Kloppenborg et al. (2019), Larson and Gray (2018), Lock (2013), Meredith et al. (2018), Pinto (2019), Schwalbe (2015), Wysocki (2019), and Young (2016). The Kerzner series (1979, 1984, 1989, 1992, 1995, 1998, 2001, 2003, 2006, 2009, 2013, & 2017) was selected for this study since this set provided the largest number of editions over the most extended period, with a recent final edition.

FINDINGS AND DISCUSSION

The findings and discussion section consists of two parts. First, the authors provide description of interpersonal skills as documented in the academic literature. Second, the authors review the evolution of interpersonal skills through the Kerzner textbooks.

Evolution of Interpersonal Skills through Academic Literature

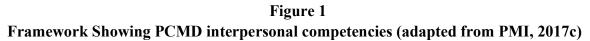
This section focuses on research question 1: 'to what extent has project management literature evolved with respect to the impact of interpersonal skills on project activities?' Over the last 100 years, there has been a progressive adjustment in categorizing leadership and interpersonal skills (Vaagaasar et al., 2019). Cintia et al. (2018) defined competence as the interconnected skills and personal characteristics employed to perform a specific task or activity. The evolution of interpersonal competencies has advanced from subjective decisions seeking leadership charisma to a significant focus on emotional intelligence capabilities (Goleman et al., 2016).

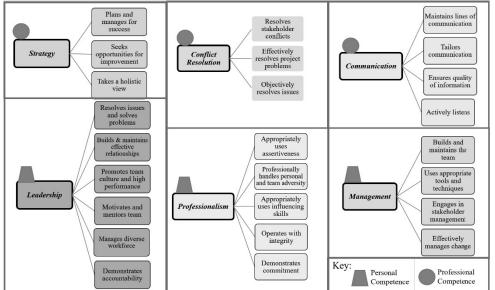
Interpersonal competency models exhibit a locus on the capabilities of current project managers rather than what is required to lead projects in a dynamic, evolving organization. Historical analysis between the interconnected elements of interpersonal skills and project success has emerged into distinct schools. The first of these include the trade school in 1930 through the 1940s, which concentrated on the leader's personalities and traits (Cullen & Leavy, 2017). During the 1960s, contingency leadership and interpersonal skills evolved. Evolving interpersonal capabilities sought to match the situation with the leadership style of the project manager (PM). Next, came the visionary school in the 1980s that delimited the leader's competence to address organizational changes. Entering the 1990s, the emotional intelligence school unfolded with a concentration on PMs to self-regulate and continuously seek methods to strengthen communication with project members.

In this paper, the authors developed a framework of six interpersonal groups. These include management, leadership, conflict resolution, strategy, professionalism, and communication. The Project Management Institute (PMI, 2017b) recognizes that project managers require specific interpersonal skills when leading projects. The PMI's Project Management Competency Development (PMCD) framework provides a structure to define, assess, and develop project management competencies and has been selected as a scholarly tool investigated by numerous researchers seeking to understand and compare competencies for project managers (Howley, 2016; McDermott, 2016). Accordingly, the PCMD was the primary investigated tool introduced into the paper exploring evolving interpersonal skills (PMI, 2017c). Figure 1, provides a graphical view of the six competency groupings and subsequent competencies. Table 1 frames the six groups bounded by 25 interpersonal competencies from the PCMD.

Evolution of Interpersonal Skills through the Kerzner Textbooks

This section focuses on research question 2: 'which interpersonal competencies garnered the greatest emphasis based on thematic and longitudinal analyses of project management textbooks?' Table 2 summarizes the results of the 12 Kerzner editions.





Note: PMI (2017b) identifies knowledge competency "pillars" that include professional (scope and time management and integration of performance tools), and personal skills (can-do attitude, integrity, and confidence).

	Table 1							
Competencies with Representative Literature Sources								
Group	Competency	Description	Source(s)					
Management	Builds & maintains the team	Rapport building & address conflict resolution Maintain collaborative functioning organization	(O'Brien & Boyle, 2019)					
	Uses appropriate tools and techniques	 Tools and techniques appropriately aligned to team Seeks environment of extroversion and emotional intelligence 	(Goleman et al., 2016; Nicolăescu, 2018)					
	Engages in stakeholder management	Sustainable stakeholder engagement Influencing support leading to project success	(Thomas, 2018)					
	Effectively manages change	 Drive organizational changes Shift needed pace of organizational delivery to global conditions 	(Bivona, 2018)					
Leadership	Resolves issues and solves problems	 Use of authentic leadership Aptitude to resolve issues between employees and stakeholders 	(Hietajärvi et al., 2017; Levý, 2020)					
	Builds and maintains effective relationships	 Address project complexities Collaborative solutions facilitated by trust and governance 	(Turner et al., 2019; Varoutsa & Scapens, 2018)					
	Promotes team culture and high performance	 Dynamic interpersonal skills Seeking high performance organizations 	(Kuhnert & Lewis, 1987; Mahajan & Toh, 2017)					
	Motivates and mentors team	 Introducing mentoring and innovation Risk taking; Increase social and emotional intelligence 	(Harrison et al., 2018; Nisha & Rajasekaran, 2018)					
	Manages diverse workforce	Overcome barriers in spoken languages and cultural behaviors Evolve skills to lead multicultural teamwork	(Medina & Medina, 2017)					

	Demonstrates accountability	Conscientiousness towards influencing success Accountability echoing commitment to the team	(Masood et al., 2018)
Conflict Resolution	Resolves stakeholder conflicts	Reinforces active employee engagement Identify personal gaps in ineffective communication	(Sutterfield et al., 2007; Zuofa & Ochieng, 2017)
	Effectively resolves project problems.	 Foundational capabilities to negotiate with stakeholders Address conflicts in a nonlinear dynamic approach 	(Zuo et al., 2018)
	Objectively resolves issues.	 Moderate and resolve individual issues with objectivity Create symbiotic relationships 	(Grove et al., 2018)
Strategy	Plans and manages for success	 Motivates team to embrace plans Design organization to strategy 	(Cannon, 1972; Lensges et al., 2018)
	Seeks opportunities for improvement	Consistently seeks project enhancements Incorporate indigenous global perspectives	(Anna-Maija et al., 2017)
	Takes a holistic view	Awareness of sensory and social experiences Increase cognitive capabilities resulting in long term relationships	(Venter et al., 2019)
Professionalism	Appropriately uses assertiveness	 Hone skills leading a diverse social-emotional organization Distinguish evolving use of assertiveness and defensive tactics 	(Săndulescu, 2019)
	Professionally handles personal and team adversity	Self-efficacy and confidence to project demands Evolve self-control	(Lloyd-Walker et al., 2018)
	Appropriately uses influencing skills	 Effectively influence and affirm team Seek common areas demonstrating professional behaviors 	(Zuo et al., 2018)
	Operates with integrity	 Exemplify trust and integrity Evolve a culture leading to alliances 	(Javed Saad et al., 2018)
	Demonstrates commitment	Consistent messaging approaches Drive commitment to customer deliverables	(Straatmann et al., 2018)
Communication	Maintains lines of communication	 Employ multidimensional communication Establish and sustain tools connecting team 	(McDermott, 2016)
	Tailors communication	 Salient and motivating characteristics Adjust interactions to dynamic work environment 	(Vaagaasar et al., 2019)
	Ensures quality of information	Build dynamic project culture Inspire need for timely, accurate data sharing	(Cimalore, 2017)
	Actively listens	· Demonstrate servant leadership	(Thompson, 2010)

	Table 2							
~	Competencies as Defined in Kerzner Textbooks							
Group	Competency and Section Count*	Longitudinal Assessment By Edition	Strength Assessment					
Management	Builds and maintains the team (15)	Added sections on managing virtual teams in 10 th ; Added decision making with teams in 11 th	GREEN					
	Uses appropriate tools and techniques (13)	Centered on planning and time management in the earliest editions; minor enhancements gradually added beginning with the 8th, but specifics were lacking; by the 12th, sections were removed indicating the proliferation of tools and difficulty in including a comprehensive tool list in textbook; overall strong discussions until later editions	YELLOW- GREEN					
	Engages in stakeholder management (10)	Introduced relatively late with early focusing simply on internal relationships; 8th expanded to include sponsor and external sponsorships, with the full stakeholder set introduced in 11th	GREEN					
	Effectively manages change (3)	Cursory discussion in 2nd as a variable for success; resistance to change added in 7th; specifics for managing change absent until the 8th; change management as a decision-making mechanism added in 11th	RED					
	Resolves issues and solves problems (14)	Handling disagreements with sponsors added in the 8th, with additional conflict resolution added in the 11th	GREEN					
Leadership	Builds and maintains effective relationships (8)	Notable additions included discussion of virtual teams in the 10th, and the role of sponsorship in the 11th.	GREEN					
	Promotes team culture and high performance (7)	Focus primarily on team and corporate culture, and lacked a compete discussion of the skills necessary for high performance in global environment.	YELLOW- GREEN					
	Motivates and mentors team (5)	Complex topics better addressed in other sources such as Jyoti & Rani (2019) and Luna (2018)	YELLOW					

	Manages diverse workforce (4)	Only received passing treatments.	RED
	Demonstrates accountability (2)	Only received passing treatments; term "accountability" was added in the 12th, but a complete discussion is still lacking.	RED
Conflict Resolution	Resolves stakeholder conflicts (17)	Added in the 9th through 11th on managing stakeholder relations and conflicts and the need for human behavior education; resolving project problems was not added until the 11th	GREEN
	Effectively resolves project problems (16)	Key sections were added in the 9 th (professional responsibilities), and in the 11 th regarding predicting the outcome of decision.	GREEN
	Objectively resolves issues (5)	Only received passing treatments.	RED
Strategy	Plans and manages for success (15)	While planning and managing for success received good treatment, the focus on the strategic perspective was only marginal throughout	GREEN
	Seeks opportunities for improvement (10)	Most significant addition was made in the 7th with a section on continuous improvement. Sections on using best practices as part of improvement, and project decision making were added in the 7th and 11th respectively; overall good foundation, but could be enhanced	YELLOW- GREEN
	Takes a holistic view (3)	Cursory discussion	RED
Professionalism	Appropriately uses assertiveness (6)	Cursory discussion	YELLOW- RED
	Professionally handles personal and team adversity (6)	Cursory discussion	YELLOW- RED
	Appropriately uses influencing skills (4)	Cursory discussion	RED
	Operates with integrity (2)	Treated only minimally	RED
	Demonstrates commitment (0)	Introduced late, but then removed from the textbooks in the 12th ; weak to non- existent	RED
Communication	Maintains lines of communication (6)	Communication with the functional manager was added in the 7th.	YELLOW
	Tailors communication (4)	Communication with the functional manager was added in the 7th; modeling the communication environment added in 12th.	RED
	Ensures information quality (2)	Only mentioned the 2nd and 11th	RED
	Actively listens (2)	Only fully developed starting with 11th; number of sections on active listening is small, but treatment is comprehensive.	YELLOW

is small, but treatment is comprehensive.
 * The number in parentheses identifies the number of sections related to competency based on an in-depth analysis of the 12 Kerzner textbooks.

The *management* competencies have adequate content, except for managing change. For *leadership*, most competencies were addressed beginning with the 1st or 2nd editions. Sections devoted to leadership were reasonably stable from 2nd to 6th editions with some additions thereafter. *Conflict resolution* was primarily addressed beginning with the 1st or 2nd editions, demonstrating the foundational nature of these competencies in project management. The number of sections devoted to conflict was reasonably stable from 2nd to 6th editions with a large number of additions later. The 7th edition includes addressing conflict during political, social, and economic times, and includes a discussion of conflict resolution modes. In the 11th edition, a broader set of conflicts was addressed, including political. Next, the *strategy* steadily evolved coverage in each edition.

The analysis does identify the minimal content in the areas of *professionalism* and *communication*. A project manager's ability to assertively handle personal and team adversity, commitment, and influence stakeholders. Professionalism can be argued as vital to program interpersonal success (Zuo et al., 2018). Likewise, a project manager's ability to establish, tailor, and validate information (communication) is essential to achieving the project life cycle (Lloyd-Walker et al., 2018).

Professionalism was sparsely addressed beginning with the 2nd edition, stable from 2nd to 8th, and included minor additions after that. The only significant addition was in the 9th edition with a discussion on professional responsibilities and politics. However, in the 11th edition, the

sections are brief and lack actionable detail. *Communication* received a relatively weak treatment in Kerzner. Three competencies (not including active listening) were marginally addressed beginning with the 2nd edition. While the number of sections devoted to communication was stable from 2nd to 8th editions there were only a few additions in later editions. To further demonstrate the weakness and late evolution of this grouping, a section on the project manager as a communicator was not added until the 12th edition.

Figure 2 addresses the longitudinal nature of the groupings. Note that the first edition was significantly shorter (487 pages vs. average 1000+ of all editions) simply to explore project management as a profession. Only the most fundamental topics of the time were addressed in that edition. In contrast, the 11th edition appears to be an anomaly in that many topics in that edition were subsequently removed in the 12th edition. One may assume that the 11th edition (at 1264 pages) became unwieldly as a useable guide and was reduced to a manageable number of sections and pages in the 12th edition.

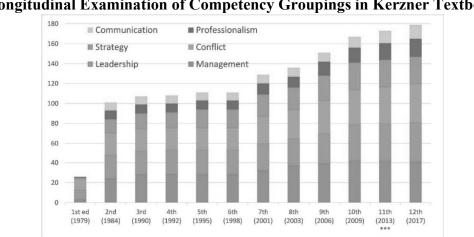


Figure 2 Longitudinal Examination of Competency Groupings in Kerzner Textbooks

***The sections in the 11th editions are treated as anomalous and adjusted as the average of the 10th and 12^{th.}

FUTURE AND IMPLICATIONS

The final section of this paper is comprised of two parts. First, it includes an assessment of the interpersonal skills expected to impact project management in the future, based on the competencies that received a larger share of coverage during the analysis. Finally, it provides a brief discussion at the impact of COVID-19 and how it has affected how project management work is performed with respect to interpersonal skills.

The Future of Interpersonal Skills in Project Management

This section focuses is on the extent to which the gap analysis identifies the future interpersonal skills in project management and what interpersonal skills will be needed to be successful. Using the Kerzner gap analysis, specific antecedents of the six competency

groupings were found to have received less than adequate coverage. Under the management competency, this includes effectively managing change. In the leadership competency, this includes managing diversity and the ability to demonstrate accountability. Finlay et al. (2017) also point out how the global environment today places a great demand on leadership that is able to function in varying global environments, further emphasizing the need to successfully manage diversity. At the same time, Love (2018) notes the challenge of linking diversity initiatives with business results. In conflict resolution, the ability to objectively resolve conflicts was found to have received weak coverage. In strategic competency, taking a holistic view included only a discussion. Appropriate use of influencing skills, operating with integrity, and demonstrating commitment were areas that all received a cursory discussion. Finally, under the communications competency, the discussions on tailoring and providing quality communication were inadequate.

Interpersonal transferrable skills will be sought in the 21st century (McGunagle & Zizka, 2020; Sandlin et al., 2018). The study's gap analysis exposes that the future of interpersonal skills will concentrate on competencies that emphasize emotional intelligence, integrity, cultural sensitivity, and the ability to manage and resolve interpersonal conflict.

The background section apprises the body of knowledge of the increasing urgency of the PM to deal with people. Project members are assigned with varying skills and personalities. The PM will require the development of personal skills such as trust-building, listening, counseling, appropriate utilization of power, and conflict resolution. The capabilities to apply the professional tools are to be bounded by the aptitude to influence a project team grounded on persistence and patience. The shift in managing human capital with increasing complexity has developed project management from a purely technical discipline to being viewed as a specialized field of management where leadership and interpersonal skills play a central role in succeeding in future project enterprises.

The Impact of COVID-19 on Interpersonal Skills in Project Management

The global impact of the COVID-19 pandemic has not been seen in nearly 100 years (Wilson, 2020). The result has been profoundly changed every aspect of how we live, work and play. Many institutions have adopted a distributed model in terms of work, where the business is transacted virtually. Our study results provided insights into the significance of interpersonal skills needed for 21st century project management. The analysis can serve as a starting point for future research in this area on the sociocultural behaviors organizations will need to adapt to achieve and maintain competitive sustainability.

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