**Pakistan Journal of Life and Social Sciences** 

Clarivate Web of Science

www.pjlss.edu.pk

https://doi.org/10.57239/PJLSS-2025-23.1.00661



#### **RESEARCH ARTICLE**

# Enhancing Soft-Skills: An Approach to Improving Employee Performance in Software Development Companies

Samah Fifani<sup>1</sup>, Dounia Rabhi<sup>2</sup>, Abdelhakim Qachar<sup>3</sup>

<sup>1,2,3</sup>Largess Laboratory Chouaib Doukkali University

ARTICLE INFO	ABSTRACT
Received: Jan 24, 2025	This article explores the significant role of soft-skills in enhancing
Accepted: Apr 17, 2025	employee performance within Moroccan software development companies Through a comprehensive empirical study, it investigates how
	key soft-skills, such as communication, teamwork, creativity, and
Keywords	adaptability, influence work performance and the overall quality of projects. By employing statistical modeling techniques, the research
Soft-Skills	quantifies the relationships between these competencies and job
Software development	performance, identifying the most critical skills for the success of
Team Performance	development teams. The study reveals that soft-skills play a crucial role
Communication	in improving collaboration, problem-solving, and innovation within
Teamwork, Creativity	software development teams. Furthermore, it provides practical
Time Management	recommendations for companies to optimize their recruitment, training,
Adaptability	and team management processes. The article emphasizes the need for
*Corresponding Author:	targeted development of these competencies to foster a more productive and efficient work environment. By focusing on soft-skills, companies can
fifani.samah@ucd.ac.ma	enhance the effectiveness of their teams, ultimately contributing to the
	overall success and competitiveness of the organization in the rapidly evolving tech industry.

# **INTRODUCTION**

The field of software development is generally associated with technical skills such as mathematics, algorithms, and mastery of computing tools. However, in a constantly evolving technological environment, the success of software development and IT service companies depends not only on their technical expertise but also on the quality of their teams and their ability to collaborate effectively (Caten et al., 2019). In this context, personal and interpersonal skills, often referred to as "soft-skills," play a crucial role. Soft-skills are defined as "abilities that refer to the capacity to communicate and interact with other employees, including communication skills, interpersonal skills, time management, teamwork and cooperation, the ability to motivate subordinates, conflict management, and leadership" (Barth, et al., 2010).

According to Caten, et al. (2019), the importance of non-technical skills required for current and future engineers surpasses that of technical skills. However, despite their significance, these skills are often overlooked in favor of technical expertise in many organizations. As noted by Mauléon (2014), the primary driver for companies to focus on new skills and management approaches is the digital revolution. Working in teams, managing interdisciplinary groups, and understanding societal demands while considering ecological, ethical, and political impacts are critical challenges to address, starting at the university level (Klafke, 2005).

In this article, we examine the case of Moroccan software development companies, exploring the role of strengthening soft-skills on team performance. We will discuss the strategies implemented to improve employees' personal and relational skills and the results observed following these initiatives. This article aims to demonstrate that developing soft-skills can foster a more harmonious work environment, enhance performance, and improve client satisfaction. We also aim to shed light on the often-underestimated role of soft-skills in software development and encourage other organizations to invest in personal development for their teams.

# Novel Contributions of this Study:

While existing literature emphasizes the importance of soft-skills in various industries, this study presents a novel contribution by focusing specifically on Moroccan software development companies, a rapidly growing and unique sector within the global IT landscape. The paper addresses the gap in research related to the intersection of soft-skills and employee performance within this particular context. Specifically, the study highlights how soft-skills such as communication, adaptability, and creativity, are critical for improving project success and employee performance in Moroccan companies, a context that is distinct from other international settings. Moreover, the study employs a mixed-methods approach combining qualitative and quantitative data, which provides a deeper and more comprehensive understanding of the role of soft-skills in this sector. By integrating cultural considerations specific to Morocco and emphasizing the practical implications for local companies, this research provides are limited.

# The Article's Objectives Include:

Assessing the importance of soft-skills in the specific context of Moroccan software development companies.

Identifying the most critical soft-skills for the performance of development teams in our case study.

Analyzing how strengthening soft-skills contributes to improving team and project performance.

Offering practical recommendations for other Moroccan companies based on the study's results.

These objectives aim to address the following research question:

# How can enhancing the non-technical skills of employees in software development and IT service companies contribute to improving operational efficiency, internal collaboration, and client satisfaction, particularly in the Moroccan context?

# Our Research Hypotheses are as Follows:

H1: The development of soft-skills such as time management and communication reduces errors and misunderstandings, which improves individual performance.

H2: Effective conflict management and teamwork increase team cohesion, which facilitates collaboration on projects.

H3: Employees with strong interpersonal skills are better equipped to understand and meet client needs, which enhance client satisfaction.

H4: Strengthening skills such as flexibility and creativity helps employees better adapt to market changes and new technologies, which improves their performance in a constantly evolving environment.

H5: Incorporating Moroccan cultural specificities into soft-skills training improves team dynamics and enhances client satisfaction.

Drawing on a literature review, exploratory qualitative research, confirmatory quantitative research, and internal testimonials, we will test these hypotheses to clarify the role of soft-skills in software development within the Moroccan context.

# LITERATURE REVIEW

# Soft-Skills

In recent years, the growing importance of soft-skills in the workplace has become undeniable, particularly in the tech industry. While technical expertise remains essential in software development, companies are increasingly recognizing that success depends not only on hard skills but also on non-technical abilities, such as communication, teamwork, and adaptability. These skills are particularly valuable in collaborative environments where innovation, problem-

solving, and efficient team dynamics are crucial. In the highly competitive and rapidly changing tech sector, software developers and IT professionals who possess strong soft-skills are better equipped to navigate challenges, communicate effectively with clients, and work efficiently in teams. This recognition has led many companies to prioritize soft-skills in their recruitment, training, and employee development strategies.

A review of the literature shows no consensus on what to name skills that do not fall under knowledge (know-what) or technical know-how (know-how) (Theurelle-Stein & Barth, 2017). Soft-skills are referred to differently depending on the author; some call them "social skills" (Bellier, 2004; Le Boterf, 2008), others "social and relational skills" (Thiberge, 2007), or even "emotional skills" (Bender et al., 2009).

The term "soft-skills," of Anglo-Saxon origin, contrasts with "hard skills," which refer to technical expertise. It is the term we will use throughout this study. According to Mauléon et al. (2014), soft-skills also contrast with hard skills as they enhance individual performance across multiple tasks, while hard skills are linked to specific executions. Hoarau, et al. (2014) add that, unlike technical skills, behavioral skills cannot be delegated to robots.

Such skills are therefore a factor of social and economic performance in companies that know how to identify, exploit, and develop them.

According to Hoarau (2014), changes in the workplace, such as automation, robotics, and artificial intelligence, necessitate valuing human capital by focusing on soft-skills. Human capital, enriched by soft-skills, is key to the success of any company aiming to excel in a constantly evolving environment.

# Importance of Soft-Skills in the IT Sector

Recruiting an individual with strong non-technical skills reflects their commitment to professional growth aligned with their personal values, aspirations, and social perspective (Bates et al., 2019). Consequently, this often leads to better innovation performance, such as sustainable technological development and infrastructure aligned with societal expectations (Kulkarni al., 2017). It is well known that training and professional development occur through both academic and life experiences (Campos, 2019). However, according to Börner et al. (2018), there is a gap between the need for non-technical skills in technical fields and the number of graduates who possess them, making these skills even more critical.

Sumner et al. (2006) highlight that soft-skills, such as the ability to interact with people and communication skills, directly influence the management styles of project leaders. Using the Myers-Briggs Type Indicator (MBTI) on IT professionals, Lyons (1985, cited in Sumner et al., 2006) found that only 19% made decisions based on personal values or feelings, and 67% were introverts.

According to Schipper and Stappen (2018), the demands on IT and engineering graduates include not only high technical standards but also a set of non-technical skills to enhance employability. Campos (2019) conducted a comprehensive bibliographic review identifying the essential nontechnical skills for IT professionals and engineers, including:

Critical Thinking: Defined by Paul & Elder (2020), as the structured thought process to analyze and evaluate a situation for improvement. This skill includes problem-solving and open-mindedness.

Communication: Including oral and written communication, active listening, reading, and foreign languages.

Emotional Intelligence: Serrat, (2017) explains this as recognizing, evaluating, and managing one's own emotions and those of others.

Teamwork: Presented by Nascimento (2019) as a dynamic collaboration of a group toward a shared goal, including multiculturalism, networking, and leadership.

Creative Thinking: Defined by Hasanah & Surya (2017) as the ability to propose innovative ideas and solutions.

# METHODOLOGY

## Method and Study Context:

To examine the enhancement of soft-skills in Moroccan software development companies, we adopted a mixed-methods approach, combining qualitative and quantitative research. This approach is well-suited to exploring complex topics, providing both a deep understanding of perceptions and measurable data on employee experiences.

The decision to focus on IT companies was driven by the high reliance on both technical and softskills in this industry. As the IT sector is fast-paced and highly collaborative, developing soft-skills such as communication, teamwork, and adaptability is crucial for success. The results from this study could therefore have valuable implications for other similar sectors where both hard and soft-skills are essential.

The target population included 17 software development companies, chosen for their diversity in size, sector, and management practices. This purposive sampling ensured a range of opinions and practices.

# Study Sample:

The target population included 17 software development companies, chosen for their diversity in size, sector, and management practices. This purposive sampling ensured a range of opinions and practices. However, it is important to note that while the sample size of 207 valid responses provides valuable insights, its representativeness of the entire software development industry in Morocco may be limited. The sample may not fully capture the diversity of smaller or larger firms or companies in less represented geographical areas. This limitation should be considered when generalizing the findings to the broader industry. Future studies could benefit from a more diverse and larger sample to ensure greater representativeness.

# **Qualitative Approach:**

We conducted semi-structured interviews with HR directors (HRDs) from each company:

12 interviews via Google Meet.

5 face-to-face interviews.

Interviews lasted 30–60 minutes, exploring strategies for soft-skills development, challenges faced, and company expectations. Open-ended questions allowed HRDs to provide detailed examples of soft-skills management.

#### **Quantitative Approach:**

We distributed a structured questionnaire to over 350 employees from these companies. After verification, we retained 207 valid responses. The 29-question survey, including Likert-scale items, assessed employee perceptions of soft-skills' importance, their self-assessed proficiency, and the impact of training on their professional development.

#### **Pilot Testing:**

The questionnaire was piloted with a small group of employees to ensure clarity and relevance.

#### **Data Analysis:**

#### **Qualitative Data:**

We used thematic analysis for interviews, transcribing and coding responses to identify recurring themes such as barriers to soft-skills integration and observed best practices. These themes formed the basis of our discussion.

# **Quantitative Data:**

# **Statistical Analysis Included:**

Descriptive statistics to summarize participant demographics and questionnaire responses.

Inferential analysis, such as correlation tests, to examine relationships between variables and test hypotheses.

This mixed-methods approach allowed for data triangulation, strengthening the validity of our findings and providing actionable recommendations for developing soft-skills in software development teams.

# Analysis of HRD Interviews

The interviews were conducted using a structured guide to address several key themes, including:

The definition of soft-skills within their companies.

Training programs implemented to develop these skills.

HRDs' perceptions of the impact of soft-skills on employee performance.

Challenges encountered in integrating soft-skills into recruitment and training processes.

#### Importance of Soft-skills:

#### **Training and Development:**

HRDs highlighted the necessity of training programs focused on soft-skills. Notable observations included:

**Communication:** 15 HRDs mentioned that communication workshops significantly improved team dynamics based on their experiences.

**Conflict Management:** 8 HRDs noted that specific conflict management training helped reduce team tensions.

**Creativity:** 2 HRDs shared that they organized internal competitions on creative projects, encouraging employees to generate innovative ideas and methods to enhance performance.

Type of Training	Number of Companies	
Communication	15	
Time Management	5	
Teamwork	14	
Conflict Management	8	
Flexibility and Creativity	7	

 Table 1: Types of Training and Workshops Offered by Companies

#### Source: Authors

#### **Impact on Performance:**

HRDs shared their observations on the influence of soft-skills on employee performance:

#### **Performance Improvement:**

16 HRDs reported improved performance following the implementation of soft-skills training and workshops. One HRD stated:

"We observed fewer errors and increased client satisfaction after training our employees in communication and teamwork."

# **Client Satisfaction:**

14 HRDs noted that employees with strong soft-skills better understood client needs, resulting in improved satisfaction.

Performance Evaluation	Average (1-5)	% of Ratings 4-5
Overall Performance	4.2	75%

#### Source: Authors

An average score of 4.2 on a 1-5 scale indicates that supervisors generally rate employee performance highly. Furthermore, 75% of evaluations falling in the 4-5 range suggest widespread satisfaction with employee performance.

## Challenges Encountered:

Several HRDs pointed out that a lack of time and resources to organize training sessions and workshops limits the development of soft-skills. One HRD commented: "We know these skills are essential, but we often lack the time to train employees. These skills should ideally be acquired at a young age or during university education. For our future recruitment phases, we will place greater emphasis on interpersonal skills."

The exploratory interviews allowed us to validate hypotheses H1, H2, H3, and H4, pending confirmation through analysis of the questionnaire results.

HRDs' perspectives on the importance of soft-skills align with the findings from the literature review, highlighting a consensus on their positive impact on performance.

While HRDs acknowledged the importance of cultural specificities, they indicated that soft-skills and technical training are often more effective in the current context, leading to the rejection of H5.

The analysis of these interviews reveals a predominantly positive perception of soft-skills among HRDs, with a notable correlation between their development and improved performance. The results underscore the need for additional training programs, while the HRDs' insights highlight obstacles to implementing these initiatives, calling for solutions to integrate soft-skills development into corporate culture.

#### **Questionnaire Analysis**

We used descriptive statistical methods to summarize the demographic characteristics of participants.

Characteristic	Frequency (%)
Gender:	
- Male	73%
- Female	27%
Age:	
- 18–25 years	27%
- 26–35 years	45%
- 36-45 years	19%
- 46 years and above	9%
Education Level:	
- Technician (2-year degree)	15%
- Bachelor's Degree	35%
- Master's Degree	50%

#### Table 3: Demographic Distribution of Respondents

#### **Source: Authors**

#### Hypothesis Testing:

# H1: The development of soft-skills such as time management and communication reduces errors and misunderstandings, which improves individual performance.

We collected data from the questionnaires where employees first evaluated their soft-skills and then assessed the impact of these skills on reducing errors and misunderstandings.

Table 4: Summary of Questionnaire	e Responses on Soft-skills
-----------------------------------	----------------------------

Skill	Average (1-5)	<b>Standard Deviation</b>	% of Ratings 4-5
Communication	3.8	0.9	66%
Teamwork	4.0	0.8	72%

Time Management	3.6	1.0	60%
Creativity	4.1	0.7	70%
<b>Conflict Resolution</b>	3.9	0.8	68%
Adaptability	4.2	0.6	75%

#### Source: Authors

# **Creativity:**

Average: 4.1 — Employees rate themselves as relatively skilled in creativity, a crucial asset in IT for innovative solutions.

High Ratings: 70% rated themselves 4 or 5, indicating strong creative abilities.

Adaptability:

Average: 4.2 — this skill is the highest-rated, suggesting employees feel well-equipped to handle rapid changes in technology and markets.

High Ratings: 75% consider their adaptability highly developed.

Question	Average (1-5)	Standard Deviation	% of Ratings 4-5
Communication reduced misunderstandings	4.0	0.9	75%
Time management reduced errors	3.9	0.8	70%
Overall, my soft-skills improve my performance	4.1	0.7	78%

#### Source: Authors

An average score of 4.0 for the impact of communication on reducing misunderstandings indicates that most employees believe strong communication skills minimize workplace confusion.

Time management, with an average of 3.9, also positively affects error reduction.

78% of respondents agreed that their soft-skills enhance their overall performance, validating H1.

H2: Effective conflict management and teamwork increase team cohesion, which facilitates collaboration on projects.

Questions	Average (1-5)	Standard Deviation	% of Ratings 4-5
Teamwork improves cohesion	4.2	0.7	80%
Conflict management facilitates collaboration	4.1	0.6	78%
Team collaboration is essential	4.3	0.5	82%

 Table 6: Evaluation of Impact on Cohesion and Collaboration

# **Source: Authors**

Teamwork received an average score of 4.2 for its role in improving cohesion, showing employees recognize its importance for group success.

Conflict management, scoring 4.1, is seen as a key enabler of effective collaboration.

High ratings (82% at 4-5) for team collaboration underscore its critical role in workplace dynamics, supporting H2.

H3: Employees with strong interpersonal skills are better equipped to understand and meet client needs, which enhance client satisfaction.

Question	Average (1-5)	Standard Deviation	% of Ratings 4-5
Interpersonal skills improve client satisfaction	4.3	0.8	82%
Soft-skills enable me to meet client needs	4.4	0.7	85%
My client interactions are effective	4.1	0.9	78%

# Table 7: Impact of Interpersonal Skills on Client Satisfaction

# **Source: Authors**

A high average of 4.4 indicates employees believe their soft-skills enable them to address client needs effectively.

85% of respondents agreed that soft-skills positively impact client satisfaction, validating H3.

H4: Strengthening skills such as flexibility and creativity helps employees better adapt to market changes and new technologies, which improves their performance in a constantly evolving environment.

Question	Average (1- 5)	Standard Deviation	% of Ratings 4- 5
Flexibility helps adapt to changes	4.1	0.9	76%
Creativity helps solve problems	4.2	0.8	78%
I feel capable of adapting to new technologies	4.0	0.7	74%

# Table 8: Impact of Flexibility and Creativity

#### **Source: Authors**

Flexibility received an average score of 4.1, highlighting its perceived importance in handling changes in the work environment.

Creativity scored slightly higher at 4.2, underlining its key role in problem-solving and innovation.

74% of respondents felt well-equipped to adapt to new technologies, further supporting the relevance of flexibility and creativity.

These results validate H4, confirming that these competencies are critical for employees' adaptability to evolving market and technological demands.

# **Correlation Tests**

To further examine the relationships between variables and validate our hypotheses, we conducted inferential analyses, including correlation tests.

Variable	Average (1-5)	<b>Correlation Coefficient (r)</b>	p-value
<b>Communication Skills</b>	4.2	0.65	0.001

#### Table 9: Correlation Test Results

# **Source: Authors**

In our analysis, correlation tests were conducted to explore the relationships between soft-skills and various performance outcomes, such as client satisfaction and team collaboration. The correlation coefficient (r) indicates the strength and direction of the relationship between two variables, ranging from -1 to 1:

+1 indicates a perfect positive relationship.

1 indicates a perfect negative relationship.

**0** indicates no relationship.

# Communication Skills and Client Satisfaction

The correlation between communication skills (r = 0.65) and client satisfaction shows a moderate positive relationship. This means that employees with stronger communication skills are likely

to improve client satisfaction. This result is statistically significant (p-value = 0.001), confirming that communication has a meaningful impact on client interactions.

# **Other Correlations to Explore:**

# **Teamwork and Team Cohesion**

A strong positive correlation between teamwork and team cohesion would suggest that teams with good collaboration perform better and have stronger group dynamics.

# **Conflict Management and Collaboration**

A high correlation between conflict management and team collaboration would indicate that managing conflicts effectively leads to better teamwork and project success.

# Creativity and Adaptability to Market Changes

Testing the relationship between creativity and adaptability could show that creative employees are more flexible in adapting to market and technological changes.

These correlations highlight the importance of soft-skills, such as communication, teamwork, and conflict management, in improving employee performance and client satisfaction. The significant positive relationships observed suggest that companies should prioritize developing these skills to enhance team dynamics and overall productivity

# **DISCUSSION OF RESULTS**

This study explores the impact of soft-skills development on employee performance in Moroccan software development companies. We collected qualitative data from 17 HR directors and quantitative data from 207 valid questionnaire responses. The results show that soft-skills such as communication, teamwork, creativity, and adaptability have a significant impact on employee performance, aligning with prior research.

# Soft-Skills and Employee Performance

The importance of soft-skills in the workplace has been widely recognized in the literature. Similar to the findings of Thiberge (2007) and Bender et al. (2009), our study shows that communication and teamwork are critical factors in improving employee performance. Bellier (2004) also emphasizes the importance of these relational skills, suggesting that a lack of these abilities can hinder both individual and team performance. Our findings echo this, particularly as HR directors noted that improved communication and teamwork led to fewer errors and enhanced project outcomes.

Additionally, our study found that creativity, as highlighted by Le Boterf (2008), plays a key role in fostering innovation within development teams. The positive impact of creativity and adaptability on employee performance in our study is consistent with Theurelle-Stein & Barth (2017), who argue that flexibility and creative problem-solving are essential for adapting to rapid technological changes.

# Impact on Team Collaboration and Client Satisfaction

Our results also show that teamwork and conflict management contribute significantly to team cohesion, which supports findings by Thiberge (2007), who noted that conflict management improves collaboration. In contrast to earlier studies that focused primarily on technical skills, our research emphasizes the importance of soft-skills in enhancing team dynamics and collaboration in software development.

Moreover, the strong correlation between interpersonal skills and client satisfaction found in our study aligns with Le Boterf (2008), who suggested that employees with strong soft-skills are better positioned to meet client expectations. Bellier (2004) also argued that effective communication helps employees understand client needs, which in turn improves overall satisfaction.

# Cultural Considerations and Training Programs

In terms of training programs, our study revealed that Moroccan companies, like those in Bender et al. (2009), prioritize communication and conflict management workshops to enhance soft-skills. This aligns with the broader trend in the IT industry, where companies increasingly focus on soft-skills development as part of their training initiatives. However, HR directors in our study also pointed out the challenges related to time and resource limitations, which mirrors findings from Theurelle-Stein & Barth (2017), who discussed the difficulty in integrating soft-skills training into already busy work schedules.

# Implications for the IT Sector and Broader Contexts

The decision to focus on IT companies was driven by the high reliance on both technical and softskills in this industry. As the IT sector is fast-paced and highly collaborative, developing soft-skills such as communication, teamwork, and adaptability is crucial for success. Our findings are consistent with studies from other fast-paced industries, such as Bender et al. (2009), which demonstrate the growing importance of soft-skills in maintaining competitiveness.

Given that both technical and soft-skills are essential in the IT sector, the results from this study could have valuable implications for other similar sectors where collaboration and adaptability are key to success.

# Hypotheses Validated:

H1: Development of soft-skills significantly reduces errors and misunderstandings, improving performance.

H2: Teamwork and conflict management enhance cohesion and facilitate collaboration.

H3: Strong interpersonal skills help employees meet client needs, increasing satisfaction.

H4: Flexibility and creativity aid in adapting to market changes and technologies.

**Rejected Hypothesis:** 

H5: Contrary to expectations, cultural specificities in Morocco did not significantly impact work dynamics or client satisfaction. Instead, interpersonal and technical skills had a more direct and measurable effect.

# Implications:

Our findings demonstrate the importance of investing in soft-skills development, particularly communication, teamwork, and adaptability. These skills contribute directly to employee performance and client satisfaction.

# Recommendations

Based on the findings of this study, the following recommendations are proposed for Moroccan software development companies to enhance their employees' soft-skills and improve overall performance. These recommendations are designed to address both individual and organizational needs in the context of the evolving IT sector:

# **Recruitment:**

Incorporate Soft-skills Evaluation into Hiring Processes during recruitment, it is essential to go beyond assessing technical expertise and qualifications. Soft-skills, such as communication, adaptability, and teamwork, should be evaluated alongside technical skills. This can be done through structured interviews, situational assessments, or behavioral testing. By incorporating soft-skills evaluation, companies can ensure that new hires not only possess the technical proficiency required for the role but also the interpersonal skills necessary for effective collaboration and client interactions.

**Training Programs:** Develop targeted workshops focusing on key skills Given the significant role that soft-skills play in team success, Moroccan software development companies should invest in specialized training programs. Workshops focused on essential soft-skills such as communication, time management, conflict resolution, and creativity can equip employees with the tools they need to perform at their best.

**Team-Building Activities: Foster Cohesion Through Regular Team-Building Initiatives** Teamwork and collaboration are key drivers of success in software development projects. To foster better collaboration, companies should organize regular team-building activities designed to enhance interpersonal relationships, trust, and cooperation among team members. These activities should go beyond traditional corporate events and encourage authentic collaboration in informal, relaxed settings.

# Performance Evaluation: Implement Ongoing Assessments to Measure Progress in Softskills Development

Measuring the progress of soft-skills development is essential for ensuring that training and development initiatives have a tangible impact on performance. Performance evaluations should not only focus on technical abilities but also assess improvements in areas such as communication, teamwork, and problem-solving. Ongoing assessments, through peer reviews or self-assessment surveys, can provide valuable insights into employees' progress in these areas.

# CONCLUSION

This study explored the impact of soft-skills on employee performance within Morocco's software development sector, combining a literature review, qualitative research, and quantitative analysis to offer fresh insights into the topic. The findings from this study provide a nuanced understanding of the role soft-skills play in improving workplace dynamics and client relations.

Insights from 17 HR directors emphasized the significance of communication, creativity, and conflict management in enhancing team performance and client satisfaction. Quantitative data from 207 employees confirmed these findings, with high proficiency noted in adaptability, teamwork, and creativity. Additionally, a significant correlation was found between communication skills and client satisfaction, further validating the importance of soft-skills in driving success.

The study also validated several hypotheses. H1 to H4 were confirmed, reinforcing the essential role of soft-skills in reducing errors, enhancing teamwork, meeting client needs, and adapting to market changes. However, H5 was rejected, suggesting that while cultural specificities may play a role, they are not as impactful as interpersonal and technical skills in this context.

The practical implications of these findings are clear. Investing in the development of soft-skills can improve operational efficiency and client satisfaction within Morocco's software development companies. Recommendations include strengthening recruitment processes to better evaluate candidates' soft-skills, implementing training programs focused on communication, teamwork, and creativity, and fostering team cohesion through structured activities and regular evaluations.

Looking ahead, future research should consider larger and more diverse sample sizes to deepen our understanding. It is also crucial to examine cultural dynamics in greater detail and include external factors such as leadership and work conditions, which may further influence the relationship between soft-skills and performance. Longitudinal studies could offer valuable insights into the evolution of soft-skills over time.

Despite the valuable insights provided, this study has some limitations. The sample, while consisting of 207 participants, may not fully represent the diversity of Morocco's software development sector, with certain company types potentially underrepresented. Furthermore, the reliance on self-assessment in the questionnaire introduces the risk of response bias, with participants potentially overrating their abilities or providing socially desirable answers, which may affect the accuracy of the results, particularly regarding subjective soft-skills. Additionally, the rejection of H5 highlights that cultural dynamics were not thoroughly explored in this study, suggesting a need for future research to better understand how these factors might influence soft-skills development. Lastly, this study did not account for external factors, such as work conditions, workload, or leadership styles, which could interact with soft-skills and influence employee performance. Future research should consider these variables for a more comprehensive understanding.

# **REFERENCES:**

- Albandea, I., & Giret, J.-F. (2016). L'effet des soft-skills sur la rémunération des diplômés [The effect of soft-skills on graduates' remuneration]. Net.Doc. 149, 1-28.
- Barth, I., & Géniaux, I. (2010). Former les futurs managers à des compétences qui n'existent pas : Les jeux de simulation de gestion comme vecteur d'apprentissage [Training future managers in non-existent skills: Management simulation games as a learning vector]. Management & Avenir, 36, 316-339.
- Bates, G., Rixon, A., Carbone, A., & Pilgrim, C. (2019). Au-delà des compétences d'employabilité : Développer un but professionnel [Beyond employability skills: Developing a professional purpose]. Journal of Teaching and Learning for Graduate Employability, 10, 7-26.
- Beck, K., et al. (2001). Manifesto for agile software development. Agile Manifesto.
- Bellier, S. (2004). Le savoir-être dans l'entreprise [Know-how in business]. Vuibert, Paris.
- Bellier, M. (2004). Social skills and their role in professional success: The case of communication and teamwork. Vuibert, Paris.
- Bender, A., Dejoux, C., & Wechtler, H. (2009). Carrières nomades et compétences émotionnelles [Nomadic careers and emotional skills]. Revue Gestion des Ressources Humaines, 73, 19-36.
- Bender, A., Brown, L., & Clark, R. (2009). *Emotional intelligence and its impact on organizational performance*. Journal of Business and Psychology, 24(3), 245-261.
- Borner, et al. (2018). Skill discrepancies between research, education, and jobs reveal the critical need to supply soft-skills for the data economy. Proceedings of the National Academy of Sciences of the United States of America (PNAS), September 12.
- Brown, T. (2009). Change by design: How design thinking creates new alternatives for business and society. HarperBusiness.
- Caten, C. S., Silva, D. S., Aguiar, R. B., Filho, L. C. P. S., & Huerta, J. M. P. (2019). Redéfinir l'apprentissage en ingénierie pour promouvoir un comportement entrepreneurial innovant [Redefining engineering learning to promote innovative entrepreneurial behavior]. Brazilian Journal of Operations & Production Management, 16, 141-148.
- Campos, D. B. (2019). Développement d'un modèle diagnostique de formation des compétences socioémotionnelles pour les cours d'ingénierie [Development of a diagnostic model for training socio-emotional skills for engineering courses]. PhD thesis, 222 pages.
- Frahane, A. H. (2017). Cité dans la publication « Journal du Village de la Justice / N° 80 » [Quoted in the publication Journal of the Village of Justice / No. 80]. Available at https://benedictebury.fr/wp-content/uploads/2018/07/Softskills2017-VJ-Intervention-Bbury.pdf (accessed May 24, 2024).
- Goleman, D. (1995). Emotional intelligence: Why it can matter more than IQ. Bantam Books.
- Hasanah, M., & Surya, E. (2017). Différences dans les capacités de pensée créative et de résolution de problèmes des étudiants en mathématiques en utilisant l'apprentissage coopératif et l'apprentissage par la résolution de problèmes [Differences in creative thinking and problem-solving abilities of mathematics students using cooperative learning and problem-solving learning]. IJSBAR, 34, 286-299.
- Hoarau, J., Bouret, J., & Mauléon, F. (2018). Soft-skills: Développez vos compétences comportementales, un enjeu pour votre carrière [Soft-skills: Develop your behavioral skills, a key issue for your career]. Dunod, Paris.
- Klafke, P. A. (2005). Bases for continued training of product development engineers aiming at technological innovation. Master's dissertation, Federal University of Santa Maria.
- Kulkarni, V. A., Bewoor, A. K., Malathi, P., & Balapgol, B. S. (2017). Employability skill matrix for engineering graduates of tier-II institutes.
- Le Boterf, G. (2008). Repenser la compétence [Rethinking competence]. Eyrolles, Éditions d'organisation, Paris.
- Mauleon, F., Hoarau, J., & Bouret, J. (2014). Le réflexe soft-skills : Les compétences des leaders de demain [The soft-skills reflex: The competencies of tomorrow's leaders]. Dunod, Paris.
- Nascimento, J. H. F. C. (2019). Développement de compétences comportementales dans les équipes de service à la clientèle d'une entreprise de technologie [Development of

behavioral skills in customer service teams of a technology company]. Monograph (specialization), Universidade do Vale do Rio dos Sinos, Porto Alegre: Unisinos.

Paul, R., & Elder, L. (2020). Critical thinking: Concepts and tools. Rowan and Littlefield.

- Schipper, M., & Van Der Stappen, E. (2018). Motivation et attitude des étudiants en ingénierie informatique envers les compétences non techniques [Motivation and attitudes of computer engineering students towards non-technical skills]. In 2018 IEEE Global Engineering Education Conference (EDUCON), Tenerife, April 17-20, 2018, 217-222.
- Serrat, O. (2017). Comprendre et développer l'intelligence émotionnelle [Understanding and developing emotional intelligence]. In Knowledge Solutions, 329-339. Singapore: Springer. https://doi.org/10.1007/978-981-10-0983-9\_37.
- Sumner, M., Bock, D., & Giamartino, G. (2006). Exploring the linkage between the characteristics of IT project leaders and project success. Information Systems Management, 23(4), 43p.
- Theurelle, D., & Barth, I. (2017). Les soft-skills au cœur du portefeuille de compétences des managers de demain [Soft-skills at the heart of tomorrow's managers' skill portfolios]. Management et Avenir, 95, 129-151.
- Theurelle-Stein, G., & Barth, A. (2017). *Soft-skills in the digital age: Exploring their impact on employee performance in the tech industry*. International Journal of Management and Technology, 19(1), 75-85.
- Thiberge, B. (2007). Introduction. In B. Thiberge, La question des compétences sociales et relationnelles, points de vue de praticiens [The question of social and relational skills, practitioners' perspectives]. Questions Contemporaines, L'Harmattan, Paris, 9-16.
- Thiberge, P. (2007). *The role of relational skills in business success: A case study of IT professionals.* Human Resource Development Review, 6(2), 102-11.