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Employee empowerment and job satisfaction in the evolving digital banking workplace

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Abstract: This study explores the interplay between employee empowerment and job satisfaction within the evolving context of the digitalised workplace. By analysing data collected from a representative sample of banking professionals, the study identifies four empowerment dimensions found to significantly enhance job satisfaction: 1) a compelling organisational mission combined with performance-based rewards; 2) autonomy in decision-making; 3) effective delegation of managerial responsibilities; 4) robust inter-departmental communication. On the other hand, excessive standardisation was found to negatively impact job satisfaction as it constrains employee initiative and career growth opportunities. The findings advocate for enrichment strategies emphasising decentralisation, team-based job collaboration, as well as leveraging digital technologies to facilitate communication and agile performance management tactics. The emerging role of digitalisation, and the evolving immersive Metaverse call for enhanced empowerment practices responding to the needs of the modern work environment.

Keywords: job satisfaction; employee empowerment; human resource management; banking industry; human capital; digital workplace; digitalisation.

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1 Introduction

In the evolving landscape of the digital economy, the role of human capital should take a central stage. The diverse talents and experiences within an organisation's workforce are critical assets for success, as evidenced by many studies. In this context, empowerment and job satisfaction emerge as a vital component of employee well-being and key drivers for organisations striving for sustainable competitive advantages. Far from being a mere internal metric, job satisfaction significantly impacts productivity, performance, and consumer satisfaction. It is important to note that the traditional work environment is undergoing substantial changes, influenced by emerging technologies and virtual

interfaces, notably within the so called 'Metaverse'. This extended reality (XR) environment introduces new opportunities for collaboration and productivity but also presents unique challenges for employee empowerment and job satisfaction (Koohang et al., 2023; Seth et al., 2022; Tsappi and Papageorgiou, 2023). Furthermore, as sustainability principles become integral to modern strategies, frameworks emphasising systemic approaches, such as those for sustainable urban development, offer valuable insights into designing empowered and resilient work environments (Papageorgiou and Tsappi, 2024).

Empowerment, as described by Arathy and Biju (2022), involves enhancing employees' decision-making capabilities and their ability to translate decisions into tangible outcomes. The link between empowerment and job satisfaction has been a focus of extensive research, with contributions from Carless (2003), Pelit et al. (2011) and more recent studies by Karia and Mahmoud Saleh (2022) and Makhamreh et al. (2022). High job satisfaction can lead to increased organisational loyalty and improved service quality, thus underscoring the importance of employee empowerment, which is explored from both socio-structural and psychological perspectives. However, the intricacies introduced by the emerging Metaverse-influenced work settings call for a re-evaluation of traditional empowerment models. Research by Charoensukmongkol and Suthatorn (2022) as well as by Linando and Halim (2023) has point out some emerging challenges such as increased employee stress and shifts in empowerment frameworks. However, to date little empirical investigations had examine the application of traditional empowerment practices and their influence on job satisfaction under the scope of digitalised workplaces. In other words, it is currently unknown if the traditional practices that influence job satisfaction are equally apply to the idiosyncratic characteristics of digital workplace.

This paper aims to bridge the gap found in the literature by exploring how empowerment practices affect job satisfaction in digitalised work environments. To achieve this goal focus is placed on the examination of current empowerment practices and their effects on job satisfaction in the evolving digital workplace of the banking industry, seeking to provide insights for strategic managerial decision-making. The subsequent sections review relevant literature on empowerment models, outline the foundational concepts of this research, points out the main employment practices and describe the adopted methodology. The final sections present the findings, discuss the implications for managers, and suggest directions for future research.

2 Literature review

2.1 Job satisfaction

Job satisfaction emerges as a pivotal cornerstone in the architecture of modern work environments, particularly within the realm of the knowledge-based economy. It does not exist in isolation; it is an intricate outcome shaped by myriad factors and exerts a profound influence on the operational and strategic successes of organisations. It is a catalyst for intellectual capital and, as Kang et al. (2022) have pointed out, it drives competitive advantage, with its effects radiating through various dimensions of organisational performance. The symbiotic relationship between employee satisfaction and productivity is underscored in the work of Islam et al. (2022), where they elucidate that employee contentment is not merely a desirable state but a precursor to enhanced efficiency and output. This is a recurring theme, with Al Jenaibi (2010) attributing the rise of creativity, adaptability, and organisational loyalty to the roots of job satisfaction. These intangible assets, once cultivated, manifest as measurable organisational benefits – higher service quality, improved sales, and increased customer loyalty, as substantiated by researchers like Beuren et al. (2022) and Liu et al. (2022).

For instance, consider a technology company that nurtures a culture of satisfaction among its software developers. The resulting innovation and productivity can lead to the development of cutting-edge products, outpacing competitors and securing market leadership. Or, in a healthcare setting, nurses who find their job fulfilling are likely to provide better care, leading to improved patient outcomes and hospital reputations, as highlighted by Makhamreh et al. (2022). The genesis of job satisfaction as a field of study harks back to the 1930s, with Hoppock's (1935) seminal work establishing a foundational understanding that takes into account psychological, physiological, and environmental influences. This triadic perspective underscores the multifaceted nature of job satisfaction, which has only grown more complex in the intervening decades.

Today's discourse around job satisfaction is characterised by its recognition as a dynamic and multifaceted phenomenon. Spector (1997) mapped out a triad of influences encompassing personal values, behaviours, and the broader operational context within which employees' function. Al Jenaibi (2010) expands on this, portraying job satisfaction as a harmonious blend of personal aspirations, external opportunities provided by the employer, and the realisation of personal values. The determinants of job satisfaction can be broadly categorised into factors that are individual-centric and organisation-centric. Personality traits such as conscientiousness and extroversion have been found to correlate with higher job satisfaction (Eason et al., 2015; Bui, 2017). To illustrate, a gregarious salesperson might find great satisfaction in a role that leverages their extroverted nature, thus contributing positively to job satisfaction. However, a notable paradox arises when considering the influence of education, as identified by Eskildsen et al. (2004). Higher education can escalate one's aspirations, which, if not met, may lead to reduced satisfaction. A well-educated employee may have high expectations for their career trajectory and might experience dissatisfaction if those expectations are not met or if they perceive a lack of opportunity to apply their skills fully. Organisational factors are equally influential. The significance of job clarity and the breadth of organisational benefits, such as competitive salaries, promotion prospects, and personal growth opportunities, are highlighted by Alzubi et al. (2023) as vital for employee satisfaction. Molla (2015) emphasises the stabilising role of job security, and Hajdukova et al. (2015) distinguish between tangible infrastructure and intangible factors like the culture of workload management and development opportunities in contributing to job satisfaction. Moreover, the leadership style and managerial engagement, as posited by Janićijević et al. (2015), can be illustrative of the organisational commitment to its employees. For example, a manager who is attuned to the needs and aspirations of their team members and who regularly acknowledges and rewards their contributions can foster a work environment where job satisfaction thrives. Liu et al. (2022) advocate for the impact of organisational justice on job satisfaction. Employees who perceive their work environment as fair and equitable are more likely to experience job satisfaction. Consider a scenario where promotions are based on merit and transparent criteria; such practices not only build trust but also encourage a culture of excellence and satisfaction.

In the evolving landscape of work, empowerment has become an increasingly prominent practice. It is crucial to explore the interplay between empowerment and job satisfaction. An empowered employee who is given the autonomy to make decisions and the trust to take ownership of their work is likely to feel a greater sense of satisfaction. This is particularly relevant in flat-hierarchy organisations like start-ups, where empowerment is often part of the organisational DNA, leading to high levels of job satisfaction and innovation. Performance evaluation frameworks, as highlighted by Tsappi et al. (2024), play a pivotal role in enhancing empowerment and job satisfaction, especially in digitalised or educational environments where feedback and structured evaluation processes are critical for sustaining engagement and motivation. Additionally, the implications of digitalisation for workplace practices extend far beyond structural changes, shaping how employees perceive autonomy and interact with organisational systems, as explored by Papageorgiou et al. (2024). In summary, job satisfaction is a multifaceted construct influenced by a complex interplay of individual predispositions and organisational settings. Its significance in shaping organisational success cannot be overstated, given its impact on productivity, creativity, and employee retention. The evolving understanding of job satisfaction and its influencers provides valuable insights for organisations aiming to cultivate a fulfilling and productive work environment.

2.2 The influence of empowerment on job satisfaction

The role of empowerment in shaping job satisfaction is a rich and complex tapestry woven from various organisational practices, and its significance cannot be overstated. Empowerment strategies resonate profoundly with job satisfaction, as underscored by multiple studies (Ameer et al., 2014; Fernandez and Moldogaziev, 2015; Ulutaş, 2018; Cruz et al., 2021; Karia and Mahmoud Saleh, 2022). This empowering ethos includes giving employees a voice through information sharing, autonomy in their roles, and a say in decisions affecting their work (Ayupp and Chung, 2010; Raub and Robert, 2013). By fostering an environment where employees have greater agency and flexibility in work-related tasks, organisations enable a more involved role in decision-making for their staff (Ibrahim et al., 2016).

Sahoo et al. (2010) present empowerment as a process that fosters autonomy in individuals. Such empowerment not only instils a deeper understanding of their roles but also emphasises accountability for their decisions. In the backdrop of a technologically advancing world, the role of empowerment has garnered further significance. A competitive edge is sharpened when employees, fuelled by empowerment, demonstrate increased creativity and an unwavering learning attitude (Boudrias et al., 2009; Kang et al., 2022). It is pivotal to understand that empowerment touches both the broad strokes and the finer details of an organisation. The organisational structure, its policies, and practices play a crucial role in nurturing or stifling empowerment. A decentralised structure encourages autonomy, while narrow organisational spans can potentially restrict an employee's sense of self-determination (Spreitzer, 1996).

Further, insights by Wall et al. (2005) underscore the merit of grassroots decision-making. When decision-making is decentralised, allowing participation from employees at lower levels, the organisation benefits from unique insights owing to their proximity to customers or pressing challenges. Such a structure not only ensures swift customer-centric responses but also deepens organisational commitment. Additionally, the clarity and vigour of a mission statement can significantly influence empowerment. A clear mission provides direction, fosters an inclusive culture, and shapes engagement

dynamics within the organisation (Chiang and Jang, 2008). Moreover, the tangible aspect of resource availability, especially to those interfacing directly with production or services, stands fundamental to empowerment practices (Hamish, 2004; Seibert et al., 2004; Sahoo et al., 2010).

Empowerment practice	Main studies
Promotion of information sharing	Andoh et al. (2022) and Arathy and Biju (2022)
Promoting effective communication	Carless (2003), Downey et al. (2015) and Arathy and Biju (2022)
Support for individual as well as team-oriented activities	Fenton-O'Creevy (2001)
Employee involvement in the decision-making process	Fenton-O'Creevy (2001) and Carless (2003)
Autonomy over job	Seibert et al. (2004) and Chiang and Jang (2008)
Promote initiative and improvisation	Carless (2003)
Flexibility in task activities away from rigid job descriptions	Chiang and Jang (2008)
Freedom to think, behave and take action	Spreitzer (1996) and Seibert et al. (2004)
Clear definition of job responsibilities and role clarity	Carless (2003)
Accountability	Seibert et al. (2004) and Arathy and Biju (2022)
Power to directly deal with events, situations or people in the workplace	Spreitzer (1996) and Arathy and Biju (2022)
Clear definition of mission statement/compelling mission	Chiang and Jang (2008)
Sufficient allocation of resources	Llorente-Alonso et al. (2023)
Feeling of personal responsibility	Chiang and Jang (2008) and Zopiatis et al. (2014)
Restructuring/redesigned of policies, practices to provide employees with authority and influence in their work	Chiang and Jang (2008)
Career prospect and support for development	Fenton-O'Creevy (2001), Carless (2003) and Andoh et al. (2022)
Standardised and high-volume processes	Sahoo et al. (2010)
Job enrichment/redesign	Fenton-O'Creevy (2001)
Organisational learning culture	Andoh et al. (2022)
Fair performance evaluation and provision of rewards	Liu et al. (2022)
Support independent thought and autonomy	Carless (2003) and Andoh et al. (2022)
Recognition for exerting an effort	Carless (2003) and Liu et al. (2022)

 Table 1
 An overview of the main studies on empowerment practice

Beyond structural elements, ensuring that job benefits align with employees' intrinsic values is paramount. Initiatives should encompass learning, development, training, career progression, and appropriate rewards. A recognising and rewarding employee

contribution cultivates an empowered workforce, leading to heightened job satisfaction (Seibert et al., 2004; Alzubi et al., 2023). On the other hand, limited career progression can diminish job satisfaction, spurring elevated turnover rates (Zopiatis et al., 2014).

3 Methodology

This study utilises exploratory factor analysis and multiple regression analysis to investigate the potential connections between essential empowerment practices and job satisfaction in the contemporary era. The analysis hinges on data collected via a structured survey composed of closed-ended questions. Ethical standards were stringently upheld. Informed consent was obtained from all participants, and confidentiality and anonymity were rigorously maintained. Data security was ensured, with access limited to authorised team members. The research was free from conflicts of interest, adhering to institutional and legal guidelines. Transparency in methods and analysis was prioritised, along with respect for participant welfare, ensuring their right to withdraw at any stage without negative repercussions. This approach guaranteed the study's ethical integrity and participant protection. This study utilises a purposive/criterion sampling technique to collect the responses. Since the overall aim of the study is to examine the empowerment practices, their application and influence on job satisfaction, in digital workplaces participants should be familiar with such digital environment. As a result in order to eliminate response biases errors criterion sampling was ideal for the implementation of the study. This approach aligns with prior research on empowerment practices in specific settings, such as entrepreneurship, where tailored methodologies are critical for capturing nuanced insights (Papageorgiou et al., 2023). Specifically, the questionnaire was distributed to a representative sample of employees within Greece's banking sector who experience digital workplaces. The choice of the banking sector and the city of Thessaloniki for the study is grounded in several key considerations. Firstly, the Greek banking sector, significantly impacted by the economic crisis, represents a vital area for examining the transformations in employee relations and adaptation strategies, particularly in response to economic challenges (Mitsakis, 2014; Karafolas, 2019). Secondly, this banking sector acts as crucial indicator of the country's economic health, making it a pivotal area for studying changes in employee empowerment practices and satisfaction. Thessaloniki, as Greece's second-largest city, is an important economic hub, offering a representative urban setting to understand these dynamics. Additionally, the banking sector's faces radical challenges, including regulatory changes and acceleration of digital transformation, directly affect employee roles and perceptions, making it an insightful sector to explore the application of empowerment practices and their influence on job satisfaction (Yuan and Yang, 2022; Tsappi and Papageorgiou, 2023).

Therefore, focusing on Thessaloniki's banking sector provides critical insights into the topic and allow us to fulfil the objectives of our study. Finally in order to capture a holistic understanding on the empowerment practices the sampling includes participant from all levels of the organisational hierarchy.

The questionnaire consists of three parts. The initial section gathers demographic information, encompassing participants' gender, educational background, years of experience, and positions within their organisations. The subsequent segment is dedicated to assessing job satisfaction, the dependent variable of this investigation. This assessment is conducted using the job satisfaction survey (JSS) instrument, established by Spector (1985). The JSS comprises 36 items, facilitating an exhaustive and multidimensional evaluation of job satisfaction. It encompasses nine facets (including promotion, benefits, supervision, contingent rewards, communication, co-workers, operating conditions, nature of work, and compensation) and is frequently employed in scholarly research for measuring job satisfaction levels (Ensour et al., 2018; Koukoumpliakos and Řehoř, 2021; Frutos-Bencze et al., 2022). The final section addresses empowerment practices, derived from an extensive review of existing literature.

Table 2 displays the empowerment practices along with their corresponding reference codes, which were instrumental in constructing and analysing the survey. Respondents articulated their perspectives using a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). This methodology facilitated the acquisition of significant insights concerning empowerment practices, as it was informed by a comprehensive literature review.

Code	Empowerment practice
E1	Team-oriented activities
E2	Enhancement of information sharing
E3	Communication
E4	Involvement of employees in decision making process
E5	Employees have autonomy in their jobs
E6	Enhance initiations and improvisation
E7	Agility in activities execution away from rigid job descriptions
E8	Employees have the ability to think, behave and act freely
E9	Clear definition of job roles/role clarity
E10	Employees accept accountability
E11	Power to adequately deal with events, situations or people in their workplace
E12	Clear definition of mission statement/compelling mission
E13	Sufficient allocation of resources
E14	Feeling of personal responsibility
E15	Restructuring/redesigned of policies, practices to provide employees with authority and influence in their work
E16	Career prospect and development support
E17	Standardised and high-volume processes
E18	Job enrichment/redesign
E19	On-going learning culture
E20	Justice and fair performance review and rewards
E21	Support of employees' independence/autonomy
E22	Appraisal/recognition of given efforts

 Table 2
 Computation of empowerment practices

The questionnaire was distributed between September 2023–January 2024. Out of 300 distributed questionnaires, 105 were returned completed. However, three of these were subsequently disregarded due to their incomplete status, rendering them unsuitable for further analysis. Consequently, the final sample comprised 102 responses, equating to a 34% response rate, which formed the basis for the subsequent analysis. Upon completion

of data collection, the statistical analysis was conducted in two primary stages, the results of which will be detailed in the following section. The initial stage involved an exploratory factor analysis, paving the way for the second stage, which comprised a regression analysis. The exploratory factor analysis was instrumental in the modelling process, generating a dimensional structure of distinct factors that could be further employed in examining causal relationships, as recommended by Efstathiades and Papageorgiou (2019). This tailored research design is congruent with our investigative objectives, facilitating the development of specific factors derived from the empowerment practices and probing their influence on job satisfaction. A comprehensive exposition of the approach, inclusive of the corresponding statistical analyses, is elaborated upon in the succeeding section.

4 Results

4.1 Demographic characteristics

The collected sample data varied in terms education, managerial position as well as in terms of years of experience. Table 3 presents the demographic destitution of our sample.

		Frequency	Percentage
Age	<30	1	1.0
	31-40	20	19.6
	41–50	44	43.1
	51<	37	36.3
Educational level	Secondary school	3	2.9
	Other higher education	8	7.8
	Bachelor's degree	40	39.2
	Post graduate degree	51	50.0
Years of experience within the	0–5	11	10.8
organisation	6–10	5	4.9
	11–15	15	14.7
	16<	71	69.6
Position	First line manager	25	24.5
	Middle manager	66	64.7
	Top manager	11	10.8

 Table 3
 Demographics characteristics

Employees that fall in the age range of 41–50 years are the largest category with a percentage of 43.1%, followed by the category of more than 51 years which counts for 36.3%. A notable characteristic of the sample is that it included well-educated individuals with noteworthy work experience. Specifically, 50% of the responders had received post-graduate education and another 39.2% had received a university level degree. Further, a notable percentage of 69.6% has more than 16 years of work experience, while

another 14.7% has between 11–15 years. Finally, the majority of the participants holds a middle managerial position with a percentage of 64.7%.

4.2 Factor analysis

Following an initial statistical analysis on the collected data the next step in our modelling process was to derive the main empowerment factors based on the multitude of practices. These would then serve as the potential determinants that positively influence job satisfaction. To do that we first run an exploratory factor analysis based on the questionnaire items of practices as they were derived from the extensive literature review. Following a series of tests under factor analysis Table 4 present the communalities as well as Table 5 the rotation sum of squared loadings that categorise the under-investigation practices into five distinct factors.

	Initial	Extraction
E1	1.000	0.623
E2	1.000	0.852
E3	1.000	0.839
E4	1.000	0.672
E5	1.000	0.785
E6	1.000	0.828
E7	1.000	0.817
E8	1.000	0.805
E9	1.000	0.716
E10	1.000	0.725
E11	1.000	0.697
E12	1.000	0.693
E13	1.000	0.529
E14	1.000	0.671
E15	1.000	0.630
E16	1.000	0.785
E17	1.000	0.802
E18	1.000	0.714
E19	1.000	0.666
E20	1.000	0.635
E21	1.000	0.801
E22	1.000	0.751

Table 4Communalities

Table 4 shows the communality of each indicator (empowerment practice) that was measured by the survey questionnaire instrument. The results show that the variables are well explained by the extracted factors since the value of the communality in each separate practice is greater that 0.5 ($h^2 > 0.5$). Hence the explanatory power is sufficient in all variables, thus no practice will be drop out for the next steps.

Component		Initial eigenvalues	alues	Extra	Extraction sums of squared loadings	ared loadings	Rota	Rotation sums of squared loadings	red loadings
Component	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	9.435	42.886	42.886	9.435	42.886	42.886	4.663	21.196	21.196
2	2.497	11.349	54.235	2.497	11.349	54.235	4.612	20.964	42.160
б	1.531	6.961	61.196	1.531	6.961	61.196	2.963	13.467	55.627
4	1.396	6.344	67.540	1.396	6.344	67.540	2.516	11.438	67.065
5	1.177	5.348	72.888	1.177	5.348	72.888	1.281	5.823	72.888
9	0.828	3.764	76.653						
7	0.736	3.348	80.000						
8	0.664	3.019	83.019						
6	0.563	2.557	85.576						
10	0.461	2.096	87.672						
11	0.442	2.009	89.681						
12	0.335	1.525	91.205						
13	0.299	1.361	92.567						
14	0.280	1.274	93.840						
15	0.249	1.132	94.972						
16	0.227	1.033	90.006						
17	0.216	0.980	96.986						
18	0.187	0.850	97.836						
19	0.167	0.761	98.597						
20	0.140	0.637	99.235						
21	0.091	0.415	99.650						
22	0.077	0.350	100.000						

Table 5Total variance explained

Table 6	Empowerment	factor	loadings

Facto)r	Component loading
	Empowering mission/strategy	
E12	Clear definition of mission statement/compelling mission	0.618
E15	Restructuring/redesigned of policies, practices to provide employees with authority and influence in their work	0.750
E16	Career prospect and development support	0.776
E18	Job enrichment/redesign	0.657
E19	On-going learning culture	0.680
E20	Justice and fair performance review and rewards	0.694
E22	Appraisal/recognition of given efforts	0.634
	Employee autonomy	
E4	Involvement of employees in decision making process	0.612
E5	Employees have autonomy in their jobs	0.841
E6	Enhance initiations and improvisation	0.876
E7	Agility in activities execution away from rigid job descriptions	0.844
E8	Employees have the ability to think, behave and take action freely	0.866
E21	Support of employees' independence/autonomy	0.634
	Role clarity and feeling of accountability	
E9	Clear definition of job roles/role clarity	0.726
E10	Employees accept accountability	0.846
E11	Power to adequately deal with events, situations, or people in their workplace	0.709
E14	Feeling of personal responsibility	0.664
	Cooperation and communication	
E1	Team-oriented activities	0.616
E2	Enhancement of information sharing	0.850
E3	Communication	0.877
	Standardised work activity	
E14	Standardised and high-volume processes	0.879

Further, Table 5 presents the extraction and rotation sums of squared loadings. As it is derived by factor analysis the twenty-two empowerment practice items that were used in the questionnaire can be grouped into five main factors.

The above five-factor solutions count for a 72.89% of the total variance with the percentages of 42.88%, 11.34%, 6.96%, 6.34% and 5.35% of each variance accounted by each factor respectively. Hair (1998) argue that percentages that have extraction variance more than 60% are consider satisfactory, hence the explanatory variance of the model can be consider more than sufficient.

Considering the above results, of the extractions sums in a combination with the factor loading components the five resulting factors can be given appropriate names as follows:

- Factor 1: empowering mission and strategy.
- Factor 2: employee autonomy.
- Factor 3: role accountability.
- Factor 4: effective cooperation and communication.
- Factor 5: standardised work activity.

Each factor includes several under-examination empowerment practices. A comprehensive overview regarding how the specific empowerment practices items are associated with the above derived factors is presented in Table 6.

As shown on Table 6 all the variables have sufficient factor loadings. Specifically, the component loadings values range from 0.612 to 0.879 which are greater than the acceptable 0.4 as suggested by Watkins (2018). Following the identification of the main empowerment factors corresponding scores were derived for each, which were used for the multiple regression analysis model.

4.3 Multiple regression analysis

The final step in our modelling process was to investigate the impact of the derived empowerment factors on job satisfaction. Specifically, multiple regression analysis was utilised to examine the causal effects of empowerment on job satisfaction as presented on Table 7. The explanatory power of our model is considered satisfactory with a value of $R^2 0.583$ which means that the model explains the 58.3% of the depended variable.

Model	0.101111	Unstandardised coefficients		t	Sig.
	В	Std. error	Beta		-
(Constant)	3.023***	0.073		41.666	0.000
Empowering mission/strategy	0.135*	0.074	0.159	1.836	0.070
Employee autonomy	0.246***	0.073	0.290	3.343	0.001
Role accountability	0.331***	0.073	0.394	4.551	0.000
Cooperation and communication	0.173**	0.073	0.206	2.374	0.020
Standardised work activity	-0.146**	0.073	-0.174	-2.011	0.047

 Table 7
 Multiple regression analysis results

Notes: *denotes that the regression coefficient is significant at the *0.1; **at the 0.05; ***at the 0.01.

As shown on Table 7, all the explanatory variables which represent empowerment practices as they derived from our previous analysis present statistically significance results. Specifically, empowering mission/strategy presents a positive and marginal statistical significance (sig. < 0.1) influence to job satisfaction. In other words, employees tend to be satisfied when there is a clear direction and a mission that challenge them, and where there is a culture that enhance ongoing learning and fair performance review. This finding aligns with insights on mission-driven strategies and their role in fostering autonomy and engagement, as highlighted by Tsappi and Papageorgiou (2023) in their exploration of key performance indicators in Metaverse workplaces. Moreover, this

supports the broader literature, which argues that an appropriate structure and organisational design lead to higher job satisfaction (Hamish, 2004; Seibert et al., 2004; Sahoo et al., 2010). The second factor, 'employee autonomy' also presents a positive and strong statistically significant effect (sig. < 0.01) in job satisfaction. This finding agrees with Wall et al. (2005) which argue that the participation of employees in the decision-making process lead to higher job satisfaction. From an organisational perspective, employees that have autonomy in their working environment are more willing to take initiative and innovate and as a result firms benefit from new product development (Cunha et al., 2020). Similarly, our results indicate that employees that participate in the decision making and have the freedom to complete their job responsibilities away from rigid job descriptions present higher levels of job satisfaction. The contemporary settings of work environment require intellectual stimuli of employees and require autonomy, and flexibility in job designs (Christofi et al., 2024). The findings also indicate that such flexible parameters are ideal in digitalised workplaces and act as catalyst for job satisfaction.

Additionally, we have also found that organisations should define clear roles to employees and keep them accountable for their outcomes. Specifically, the third factor, 'role accountability' exhibits a positive and statistically significant impact (sig. < 0.01) to job satisfaction. Clear roles and responsibilities keep employees directly accountable for their results and outcomes. As a result, employees feel important and develop greater commitment for the organisation, since responsibilities trigger their self-determination and realisation (Hajdukova et al., 2015). Further, 'communication and coordination' is also positive associated and has a statistically significant effect (sig. < 0.01) on job satisfaction. This finding is also in agreement with the literature. Particularly, Wong Humborstad and Perry (2011) argue that employees present greater satisfaction in organisations that enhance information sharing and foster communication. Finally, following the results in Table 7, the factor 'standardised work activity', exhibits a negative and statistically significant (sig. < 0.05) effect on job satisfaction. By their nature, high volume and standardised processes, which mainly refer to continues and mass processes, require detailed defined job, with little autonomy and decision-making discretion (Slack and Brandon-Jones, 2018). Additionally extreme standardised activities create bureaucracy and reduce the motivation of individuals. As a result, employees who occupied such positions have limited autonomy and improvisation due to the demands for repetitive homogeneous outcomes of the processes. Our results also show that process standardisation tends to reduce job satisfaction.

Following the factor and regression analysis the following model is proposed. This is based on the values of standardised coefficients, which shows the relative importance of the derived empowerment factors.

JSi = 0.16 (MSi) + 0.29 (EAi) + 0.39 (RAi) + 0.21 (CCi) - 0.17 (SWi)

where

- JSi = job satisfaction
- MSi = mission and strategy
- EAi = employees autonomy
- RAi = role accountability

- CCi = cooperation and communication
- SWi= standardised work activities.

5 Conclusions

This research study navigates the intricate landscape of employee empowerment and its subsequent effect on job satisfaction within the contemporary banking sector, an environment increasingly influenced by digitalisation and the burgeoning Metaverse. Through a methodical evaluation of feedback from 102 banking professionals, we distil some pivotal empowerment elements that appear to be instrumental in enhancing job satisfaction. Specifically, a distinct, empowering corporate mission deems crucial, serving not just as a beacon for employee efforts but also as a catalyst for engagement, dedication, and a target-driven attitude. This finding aligns with existing literature that postulates the profound influence of well-articulated organisational objectives on employee motivation and satisfaction (Carless, 2003; Kang et al., 2022). Moreover, the role of autonomy and inclusive decision-making processes emerged as a critical enhancer of job satisfaction. This aspect is particularly noteworthy given the banking sector's traditional structures known for their rigidity. Shifting towards a more inclusive culture can prompt a rise in morale, a surge in the exchange of ideas, and increased adaptability (Christofi et al., 2021; Demetriou et al., 2022).

The findings of this paper offer valuable contribution to both theory and practice. Specifically, this study illuminate the complex interplay between employee empowerment and job satisfaction in the banking sector, contextualised within a rapidly digitalising workspace. It underscores the necessity for banks to revitalise both their structural dynamics and technological integrations to foster a more empowered, satisfied workforce. First, it expands the organisational viewpoint of job satisfaction by illustrates the empowerment practices that applies on the digital workplaces. Previous studies have pointed out that organisations which give the opportunity to employees to develop themselves, and recognises their efforts tend to have more satisfied employees (You et al., 2024; Alzubi et al., 2023; Molla, 2015). This paper adds that in contemporary organisations settings, job satisfaction goes beyond transactional practices such as promotions and compensations by adding practices towards flexible job design that enhance employees' autonomy and at the same time accountability. Since employees are part of an organisation which as a system set rules and routines such flexible job designs with agility on activities execution keep employees empowered, and help them feeling themselves as a part of the systemic progress rather than expendable mean of production.

The results of this study also have important managerial implications that suit the transformational nature of the modern workplace. First under the scope of their restructuring, banks should move away from strictly heretical structures to towards more decentralised structures that allows team-based works and cross-functional collaborations. In parallel organisational design, and job design should be enriched in a way that top managers delegate responsibilities to lower levels. With these implementations' employees can be feel autonomous, with space for improvisation while at the same time organisations keep them accountable. These systemic changes can serve as a foundation to cultivate a culture of innovation, engagement, and heightened job satisfaction. Further, in today's the digital realm, technology emerges as a prominent force, that can be utilised towards greater job flexibility and collaboration. In practice, organisations can unutilised technologies such as cloud storage and computing to offer flexibility on the employees' location while keep them engage with individuals from other bank branches and even counties.

As all empirical investigations, this paper has its own research limitations. Specifically, the study's scope, confined to the Greek banking sector, and as a result necessitates caution when generalising findings. For instance, different regulatory frameworks or cultures in other countries may affect the effectiveness of the identified empowerment practices. Hence, we argue that there is a need for future research that encompass diverse geographical regions and industries to validate these insights. Additionally, the inexorable rise of digital workplaces, AI, and project-based structures in the banking industry Zerjav (2021) requires deeper exploration. Understanding these elements is no longer ancillary but pivotal to ensuring sustained employee satisfaction and organisational success in the competitive landscape.

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