Stakeholder Relationship Management in the Romanian IT Sector: A Pilot Assessment Using the Malcolm Baldrige National Quality Award Excellence Model

Cristina-Elena Ungureanu * , Bogdan Fleacă , Răzvan Mihai Dobrescu , Elena Fleacă

Posted Date: 20 May 2026

doi: 10.20944/preprints202605.1362.v1

Keywords: business continuity; IT organisations; MBNQA excellence model; organisational resilience; pilot study; quality management; Romania; stakeholder relationship management

 doi:10.20944/preprints202605.1362.v1

Article

Stakeholder Relationship Management in the Romanian IT Sector: A Pilot Assessment Using the Malcolm Baldrige National Quality Award Excellence Model

Cristina-Elena Ungureanu [1,*,†], Bogdan Fleacă [2], Răzvan Mihai Dobrescu [3] and Elena Fleacă [2]

[1] Doctoral School of Entrepreneurship, Business Engineering and Management, National University of Science and Technology POLITEHNICA Bucharest, Bucharest 060042, Romania

[2] Department of Entrepreneurship and Management, Faculty of Entrepreneurship, Business Engineering and Management, National University of Science and Technology POLITEHNICA Bucharest, 060042 Bucharest, Romania

[3] Department of Economics, Faculty of Entrepreneurship, Business Engineering and Management, National University of Science and Technology POLITEHNICA Bucharest, 060042 Bucharest, Romania

* Correspondence: cristina.elena.u@gmail.com or cungureanu0307@stud.faima.upb.ro

† This manuscript is part of the research belonging to the first author's doctoral thesis.

Abstract

Nowadays, the organisational landscape aiming to provide value through their product and service offerings relies on having the infrastructure necessary to deliver at the expected service levels, as well as contributing to business continuity and organisational resilience in the face of modern organisational performance disruptions. This requires appropriate adaptation of existing frameworks, methods, and models to their business models which have generated consistent deliverables across time and industries. The same is applicable for the Romanian Information Technology (IT) organisations, which face increasing pressure to deliver within the expected quality, time, and budget parameters. Therefore, this paper aims to assess how stakeholder relationship management components, viewed through the Malcolm Baldrige National Quality Award (MBNQA) excellence framework, with impact on organisational quality and its contribution to business continuity and organisational resilience in Romanian IT organisations. This is a pilot-type study with a sample of N = 52 participants, to explore the applicability of the MBNQA framework within the Romanian IT sector. The results suggest that the four components of MBNQA focused on stakeholders (Leadership and Governance, Workforce, Customers and Markets, Community Engagement) may be suitable to be considered in assessment tools on the Romanian IT market. The "Workforce" variable emerges as the strongest area to focus on for achieving quality in stakeholder relationship management (SRM). Given its pilot delimitation, this study provides can be seen as providing an initial foundation for applying MBNQA in a specific regional IT context. While limited by sample size and geographic focus, the findings justify expanding the research to include broader population segments. Future research could transition from this correlational design to longitudinal frameworks to validate the associations across other multiple geographical markets.

Keywords: business continuity; IT organisations; MBNQA excellence model; organisational resilience; pilot study; quality management; Romania; stakeholder relationship management

1. Introduction

In the current organisational landscape, excellence models have evolved so as to provide value towards organisations beyond their pre-defined function as assessment tools. These frameworks

 doi:10.20944/preprints202605.1362.v1

serve nowadays as complex roadmaps for navigating the sophisticated landscapes of organisational systems. Amont these variety of frameworks, the MBNQA excellence framework stands out given its comprehensive scope of multi-dimensional quality constructs which are required for achieving organisational performance [1,2]. In spite of this, as researchers in the field have highlighted, the application of such models is often times challenged when attempts are made to implement it within delimited geographic areas or specialised industries. In such areas, local operations tend to have a local nuance which might differ from the excellence model's original origins [3–5].

Reflecting on the modern realities of a landscape driven by volatile, uncertain, complex and ambiguous (VUCA) factors following the CoVid-19 effects, the IT sector has emerged as a significant domain for societal resiliency and innovation [6–10]. For organisations activating within this sector, the transition from mastering technical proficiency to achieving desired organisational excellence seems to require the adoption and adaptation of robust frameworks relevant to their specific ecosystem. The quality among a diverse group of stakeholders can be perceived as a central piece of this transition process, acting as a bridge between technical output and sustainable value creation [11–16].

From an academic perspective, frameworks such as the MBNQA have showed promising results in professional sectors such as manufacturing, service industry, education, healthcare, non-profit, governmental, or small business, providing an overachieving perspective on performance of the model, its applicability on the cultural and operational nuances of the IT sector based in Romania remains yet to be documented [3,17–19]. As such, this gap becomes relevant, especially in the context in which the IT sector holds a strategic importance on the Romanian market, which is projected to provide a significant contribution to the national Gross Domestic Product (GDP) within the upcoming years [20]. Additionally, research indicates that with the increase in the offering of digital products and services, there is an increase in ensuring the continuity of essential operations and the capability to recover, in a timely manner, from disruptions. As such, evaluating SRM through the MBNQA's stakeholder dimensions provides a practical route to assess both organisational quality and the relational capacities that enable business continuity and organisational resilience in Romanian IT organisations [21,22].

In light of this context, this article seeks to explore how the stakeholder-focused quality framework of the MBNQA excellence model is relevant and applicable within the specific context of the Romanian IT landscape. At the time of this study, the research sample consisted of 52 respondents from IT professionals and management representatives. As such, this work can be classified as a pilot study, serving as a foundation for future iterations with a larger participation base [23].

This article also seeks to fill-in the existing academic gap in applying excellence models of the Romanian IT sector. To evaluate the current sae of the research, a systematic database search has been performed in April 2025 across academic repositories, such as Web of Science, MDPI, Scopus, and IEEE Xplore. The search utilises combinations of keywords such as "Malcolm Baldrige", "IT services", "Romania", and "software development". Specifically, the results returned:

- 25 results in the IEEE Xplore collection with the keyword: "Malcolm Baldrige",
- 21 results in the Web of Science collection with the keywords: "Malcolm Baldrige", "IT services",
- 5 results in the Web of Science collection with the keywords: "Malcolm Baldrige", "Romania",
- 6 results in the Web of Science collection with the keywords: "Malcolm Baldrige", "software development",
- 8 results in the Scopus collection with the keyword: "MBNQA", "Romania",
- 8 results in the Scopus collection with the keyword: "MBNQA", "IT services", "Romania",
- 0 results in the MDPI collection with the keyword: "Malcolm Baldrige", "Romania",
- 0 results in the MDPI collection with the keyword: "MBNQA", "Romania".

The results reveal a considerable gap in the intersection of this specific geographic region, industry, and model application, which may correlate with the strategic segment's slight stagnation, compared to the strong growth experienced in the recent years [24].

 doi:10.20944/preprints202605.1362.v1

This article continues with Section 2, which establishes the theoretical foundation of SRM and excellence models, followed by research methodology in Section 3. In Section 4 the results are described, followed by analytical findings in Section 5 and concludes with the remarks and study limitations in Section 6.

2. Theoretical Framework

2.1. Introduction to SRM Frameworks

As the Romanian IT sector is currently perceived to be a high-volume outsourcing hub aiming to transition to a value-driven innovation ecosystem, the switch in perception requires solid approaches to support the transformative process altogether. As such, this study utilises the MBNQA model as an assessment tool to assess the level of quality in SRM in the Romanian IT sector. The MBNQA excellence framework's recognition of acting as an integrated management system in the following main categories: leadership, strategic planning, customer orientation, knowledge management, workforce management, and process management [1,2]. By aligning the SRM focused-categories with established stakeholder theory, a differentiation can be made between internal and external organisational systems that influence SQM quality. These systems which can be the starting blocks for this study.

To understand the SRM system in place in modern organisations, it is worth mentioning that the SRM concept has evolved from a combination of academic and organisational practice theories which ranged from "stockholder" interests to "stakeholder theory" in less than a century. An early definition comes from the Stanford Research Institute as early as 1963, when the idea of stakeholders was referring strictly to groups mandatory for an organisation's existence. Around 1984, R. Edward Freeman expanded the concept to include any group or individual capable of affecting or being affected by an organisation's objectives. This moment can be pinpointed as the one that marked the move from monetary-driven objectives towards what is now known as value generation for all interested parties. The modern SRM notion is now seen as a strategic process used by organisations to analyse, manage, and address the interests and influences of various groups of interests. Beyond its strategic organisational management, recent research indicates that SRM has started to be accepted as integrated in Corporate Social Responsibility (CSR), an external, which is perceived as an external facing concept, and Sustainability Management Systems (SMS), perceived as an internal facing concept. All in all, this progression from stockholder to integrated sustainability systems can be viewed as underpinning the requirement for solid governance structures that can adapt to emerging trends such as digitalization, circular economy strategies, or adaptation to Artificial Intelligence (AI) developments [25–32].

Given this context quality in SRM could be defined as the extent to which an organisation has the capabilities required to identify, prioritise, and maintain engagement with its stakeholder base in order to deliver value.

To bridge the gap between theory and practice this article uses two primary SRM frameworks to systematise organisational behaviours. The selected models are the Project Management Institute's (PMI) approach on SRM as detailed in the Project Management Body of Knowledge (PMBOK) guide and Lynda Bourne's Stakeholder Relationship Management Maturity Model (SRMMM) [12,33]. These frameworks have been selected for their strong focus on the practices in SRM engagement and their ability to act as links between theory and practical application with modern organisational structures.

For example, a direct comparison of these framework reveals a consistent lifecycle that matches both internal and external MBNQA-considered factors:

- **internal identification and alignment of stakeholders**: in both cases, these processes have their roots in the identification of the appropriate stakeholders and prioritisation based on the triangle of interest, influence, and power;

 doi:10.20944/preprints202605.1362.v1

- **understanding of the environment**: mapping of the internal flows, connections, and external factors of the organisation allows for an understanding of the stakeholder community;
- **strategic alignment:** involves carrying out the defined strategies agreed in previous steps so as to encourage positive relationships through effective communication channels;
- and **continuous monitoring**: which both models agree upon that concludes with iterations aimed at ensuring that stakeholder processes remain applicable to internal and external factors.

Be connecting these practical frameworks with broader organisation factors, it can be noted firstly that both models connect project success to stakeholder involvement. Additionally, these frameworks highlight that there is a dynamic relationship between a project's lifecycle and stakeholders' involvement.

The selection of the PMBOK and the SRMMM as the main frameworks for this article are driven by their specialised attention to people dynamics and organisational maturity from a project perspective. While standards such as ISO 21500:2012 or frameworks such as PRINCE2 were also considered, their primarily attention is towards stakeholder engagement as an administrative component within a checklist format, whereas the PMI and SRMMM frameworks perceive SRM to be a process which requires dedicated attention and oversight through the entire lifecycle of the project. Also, the two frameworks were selected over alternative options for their higher compatibility with the multi-dimensional approach of the MBNQA. As an example, while PRINCE2 focuses on project-level controls and documentation, the PMBOK and SRMMM take a deeper look at the attention given to interdisciplinary skills such as communication and agreement, without continuous feedback loops, which also aligns with the MBNQA's evaluation of the stakeholder factors such as leadership, workforce management, or customer orientation [34,35]. By following such specific models, the research gains a more robust base for pinpointing the gap to achieving excellence in the Romanian IT sector.

In addition to the reasons for choosing the PMBOK and SRMMM models, the reason for considering the MBNQA framework is given by its multi-dimensional and system-thinking perspectives. While the PMBOK and SRMMM offer the procedural depth for handling SRM topics, the MBNQA serves as an overarching management system aimed at evaluating how organisations carry out their SRM-oriented activities in the areas of leadership, workforce management, customer and markets, and community engagement [1,2]. For the current state of the Romanian IT sector, this can be considered a solid assessment tool to measure the transition from basic proficiency towards achieving organisational excellence. Therefore, by applying this framework the study can evaluate whether SRM is carried out in this reign as a fragmented administrative task or as a mature, systematic process which is heavily rooted in the organisation's ways of working [12,36].

Next, to transition from high-level theory to application, the MBNQA criteria which are stakeholder oriented are furthered analysed to provide the structural mapping against the overall article topic. The integration of the MBNQA, PMBOK, and SRMMM frameworks provide a comprehensive lens through which the multi-dimensional nature of SRM quality can be examined. This alignment has the purpose to explore how MBNQA excellence criteria can be segmented to determine the maturity and quality of SRM activities within the Romanian IT sector.

The next step in this research is to transition from theory to empirical application by operationalising the concept of "SRM quality" as a multi-dimensional construct which reflect organisational capabilities to deliver value through systematic engagement. By treating SRM as a series of separate administrative tasks mapped on the MBNQA framework, quality can be measured by the degree of process maturity, together with checking its integration into the organisation's core ways of working.

Based on the literature explored so far, the factors can be organised into two main objectives:

O1: To evaluate Romanian employees' perceptions of how internal MBNQA criteria (Leadership and Governance, Workforce) influence the quality of SRM activities.

O2: To evaluate Romanian employees' perceptions of how external MBNQA criteria (Customer and Markets, Community Engagement) influence the quality of SRM activities.

 doi:10.20944/preprints202605.1362.v1

For further reference, the MBNQA criteria will be collectively references to as:

- V1 for Leadership and Governance,
- V2 for Workforce,
- V3 for Customers and Markets, and
- V4 for Community Engagement

In the next subsection, the research hypotheses will be developed and detailed based on the literature findings.

2.2. Hypothesis Development

In the attempt of pursuing organisational excellence, the role of organisational leadership and governance serves as a basic pillar for achieving high-quality SRM. Within the MBNQA framework, leadership is viewed as the way in which the organisation's leaders guide the organisation in setting the overall vision and maintaining a high level of performance excellence. In the context of Romanian organisations, the perception over organisational structures is perceived to be basic elements for setting accountability and transparency needed to build trust both within and outside of the concerned organisations. An element of strong leadership can ensure that SRM is more than a peripheral activity. By leveraging proper leadership and governance skills in the management of an organisation, a solid strategic direction can be ensured, thus fostering a culture where stakeholder needs are prioritised [33,37].

Reviewed literature suggests that in the cases where leadership provide and keep their commitment to governance and corporate social responsibility actions, this has a direct effect on the perception over maturity and quality of stakeholder interactions. In the context of the Romanian organisations, the same perception tends to be directly correlated with the way in which organisations manage their stakeholder relationship. [12,37,38].

Therefore, the hypotheses can be defined as:

Hypothesis 1 (H1): *There is a strong positive relationship between Romanian employees' perception of the Leadership and Governance and the quality of SRM activities.*

The Workforce elements of the MBNQA framework emphasizes the creation of a high-performance environment, where employee are constantly engaged and developed to utilise their full potential, in alignment with the organisation's strategic objectives. The literature related to the Romanian market shows that the IT sector is undergoing shifts in recruitment and retention strategies in recent years. These shifts indicate that the internal perception of how an organisations address workforce concerns has a high impact on its operational excellence, adhering to service levels, organisational resilience, and business continuity. In this context, literature indicates that by investing in workforce capabilities and directly engaging to support systematic process-related topics, a high-quality level can be achieved in terms of interactions with both internal and external stakeholders. As such, exploring investments in workforce concerns not only process optimisation for achieving performance, but also readiness to respond to unforeseen socio-technical disruptions [21,22,39].

Based on the theoretical findings, the proposed hypothesis can be:

Hypothesis 2 (H2): *There is a significant positive relationship between Romanian employees' perception of the Workforce and the quality of SRM activities.*

In the MBNQA framework, the customer and markets criterion refers to the way in which an organisation determines the requirements and expectations of its external target audience in order to ensure that the long-term engagement and brand loyalty with its product and services. In the context of Romanian organisations, the ability of organisations to segment markets and understand the shifting needs of a national consumer base is the basic step for maintaining a competitive edge. When

 doi:10.20944/preprints202605.1362.v1

employees perceive that their target organisation is actively listening to their target audience and adapts its offering to the demand, it generated a perception of reinforcement of its systematic approach [19,40,41].

Based on the theoretical findings, the hypothesis propose can be:

Hypothesis 3 (H3): *There is a significant positive relationship between Romanian employees' perception of the Customer and Markets and the quality of SRM activities.*

In the context of Community Engagement, the MBNQA framework defines this as an external component which refers to the organisation's role in the contribution of the well-being of it social and environmental ecosystem. Referring to the Romanian organisational landscape, the literature on this topic finds that this criterion is increasingly viewed as an integral part of a circular and sustainable economy, where success is tied to the wellbeing of its community. As such, effective SRM involves moving beyond internal operations to address the expectations of the general public and the environment. Literature shows that when Romanian employees perceive heir organisations to be actively involved in the development of their local community and environmental topics, this strengthens the perceived quality and ethical standing of the organisation's broader stakeholder interactions. As such, a solid commitment to community engagement is expected to be correlated with an enhanced and effective approach when it comes to managing stakeholder relationships [42–45].

Therefore, the hypotheses can be defined as:

Hypothesis 4 (H4): *There is a significant positive relationship between Romanian employees' perception of the Community Engagement and the quality of SRM activities.*

The conceptual framework developed as a result of the above hypotheses definition and the overall topic of SRM quality is captured in Figure 1.

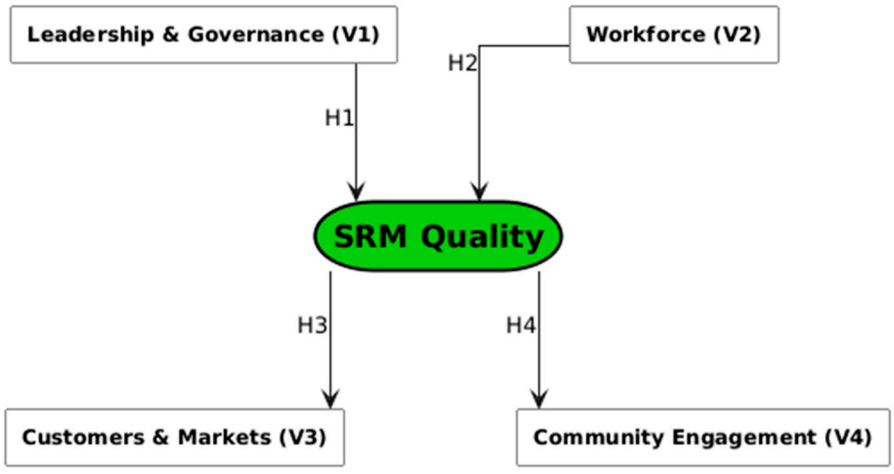


Figure 1. Conceptual framework of the study developed in UML.

Building on the conceptual framework of the MBNQA and the SRM models, the article continues in the next section with the empirical assessment. The next section outlines the research design used to carry out the assessment of the study.

3. Materials and Methods

Having established the theoretical connection between the MBNQA criteria and the SRM model, the study continues with an empirical assessment of the frameworks within a Romanian IT

 doi:10.20944/preprints202605.1362.v1

organisation. This combination of industry and geographical location have been selected as the target population for their status as a high-growth, knowledge-intensive combination that serves as a primary driver for national sustainable development and innovation objectives [46–50].

The research hypotheses operationalised four primary constructs Leadership and Governance (V1), Workforce (V2), Customers and Markets (V3), and Community Engagement (V4) which derive from the MBNQA excellence framework. These multi-dimension selections represent both internal and external organisational factors that influence the maturity and quality of stakeholder interactions. In the context of project-oriented organisations, both internal drivers such as leadership and workforce development are perceived as essential for building trust towards achieving operational excellence. Simultaneously, external selections such as customers and community engagement can reflect the increasing requirements and pressure on attention to CSR activities. Brought together, these variables capture the relevant internal and external dimensions influencing SRM quality in Romanian IT organisations while also ensuring contextual and analytical alignment with the study sample.

In order to ensure that a rigorous evaluation of the proposed relationships described in the literature section could be made, the theoretical constructs were operationalised into a structured measurement instrument. The overall process involved mapping each research objective and hypothesis to specific MBNQA variable group questions. Next, each variable item was translated into a functional survey item. The table contains the operational description of each variable, the corresponding survey question number, and the corresponding measurement scale to capture respondent perception, with 1 being the lowest and 5 corresponding to the highest level of agreement. Likert was the measurement scale used for measuring the variables. A matrix table representation of the study operationalisation can be found in Table 1.

Table 1. Study research structure.

Research objective	Hypotheses	Variable group description	Operational description	Survey question
Demographic data			Current position within your organisation's hierarchy	Q01
			Seniority in the IT&C sector	Q02
			Age range	Q03
O1.	H1.1	V1	Effectiveness of leadership and governance processes (succession, communication)	Q04
			Effectiveness of leadership engagement and communication with the workforce	Q05
			Effectiveness of leadership engagement and communication with key stakeholders	Q06
			Demonstration of leadership and governance accountability in audits and	Q07
			Effectiveness of addressing grievances and complaints	Q08
	H2.1	V2	Effectiveness of key processes for workforce engagement	Q09
			Effectiveness of key processes for workforce development	Q10
			Effectiveness of key processes for health and safety	Q11
			Organisational results concerning absenteeism, retention, and turnover	Q12
			Extent to which the organisation measures employee satisfaction	Q13
			Effectiveness of developing organisational workforce and leadership	Q14
			Incidence rate of health and safety events	Q15

 doi:10.20944/preprints202605.1362.v1

			Organisational results on additional workplace health and safety indicators	Q16
			Effectiveness of processes for customer listening	Q17
	H3.1	V3	Effectiveness of processes for customer engagement	Q18
			Effectiveness of processes for customer retention	Q19
			Effectiveness of processes for customer support	Q20
			Organisational performance in market positioning	Q21
			Organisational results for customer loyalty	Q22
			Effectiveness of managing customer complaints across segments	Q23
			Overall customer satisfaction with products, services, and experience	Q24
O2.	H4.1	V4	Effectiveness of key processes for community engagement	Q25
			Effectiveness of processes for listening and engaging with communities	Q26
			Effectiveness of key processes for supporting key communities	Q27
			Effectiveness of engaging and building relationships with key communities	Q28
			Frequency, diversity, and impact of community engagement activities	Q29
			Sufficiency of the duration of community engagement meant to achieve meaningful outcomes	Q30
			Significance and impact of social contributions made by the organisation	Q31

While there are a few studies which approach the MBNQA model in Romania industries, the design of this research is based on the gap identified in the specialised literature that combines excellence models with stakeholder theory within the IT sector [19,34,51,52].

To conduct the quantitative research, the survey method has been used to devise the content based on the information available on the online version of the National Institute of Standards and Technology (NIST) website in 2024 of the MBNQA model [35,53–55]. An electronic copy of the survey is available below in Table 2.

Table 2. Survey questions.

Question ID	Question content
Q04	Leadership and governance processes and systems, including succession planning and two-way communication, are effective.
Q05	Senior leaders from my organisation effectively engage and communicate with the workforce.
Q06	Leadership and governance accountability of the organisation is demonstrated through effective internal and external audits, assessments, certifications, and accreditations.
Q07	Leadership and governance accountability of the organisation is demonstrated through effective internal and external audits, assessments, certifications, and accreditations.
Q08	My organisation effectively addresses grievances and complaints, including those related to safety, the Equal Employment Opportunity Commission (EEOC), and ethics.
Q09	The organisation's key processes for workforce engagement are effective.
Q10	The organisation's key processes for workforce development and job skills training are effective.
Q11	The organisation's key processes for ensuring workplace health and safety are effective.

 doi:10.20944/preprints202605.1362.v1

Q12	The organization demonstrates positive results in terms of turnover, retention, and absenteeism.
Q13	The organisation measures satisfaction and dissatisfaction of employees.
Q14	The organisation effectively develops its workforce and leadership, including through job skills training.
Q15	The organisation has a low incidence of significant safety-related incidents, including Occupational Safety and Health Administration (OSHA) reportable incidents.
Q16	The organisation demonstrates positive results on additional indicators of workplace health and safety, such as safety audits and near-miss tracking.
Q17	The organisation's processes for customer listening are effective.
Q18	The organisation's key processes for customer engagement are effective.
Q19	The organisation's key processes for customer retention are effective.
Q20	The organisation's key processes for customer support are effective.
Q21	The organisation maintain a strong market position in terms of market size and market share across business units or product/service lines.
Q22	The organisation's customers are loyal, as evidenced by likelihood to recommend the organisation's products &/ service offering.
Q23	The organisation effectively manage customer complaints across customer segments.
Q24	The organisation's customers are satisfied with the received products, services, and overall experience.
Q25	The organisation's key processes for community engagement are effective.
Q26	The organisation's processes for listening to and engaging with communities are effective.
Q27	The organisation's processes for supporting key communities are effective.
Q28	The organisation effectively engages and builds relationships with key communities.
Q29	The organisation's community engagement activities are frequent, diverse, and impactful.
Q30	The organisation's community engagements is of sufficient duration to achieve meaningful outcomes.
Q31	The organisation makes significant and impactful societal contributions.

To test the study relevancy, the Romanian IT sector has been selected as the specific industry in which to pilot the survey. The demographical dimensions considered for this study are the following:

- survey was created and distributed in two formats: 1) digital format through Google Forms and 2) in printed format, for the responders who preferred responding on paper;
- survey was sent out to people who work in industrial engineering organisations – specifically IT departments and their derivates;
- out of 52 requested surveys, 52 answers were received;
- surveys were distributed and answers were collected between December-2024 and February-2025;
- out of the responders, 62% of respondents hold individual contributor roles and 38% hold a form of leadership role within IT departments.

The responses were collected and analysed with PSPP and Python [56,57], an open-source tool for data analysis, similar in capabilities to other data management software available on the market.

4. Results

After completing the data collection phase, a total of 52 responses (N = 52) were gathered. The primary objective is to systematically evaluate the empirical data so as to determine the association between the MBNQA criteria (V1-V4) and the operationalised SRM activities. After validating the data, the demographical analysis was conducted using Microsoft Excel, while the statistical analysis was executed in an automated way through the software PSPP and Python, thus ensuring data integrity and minimising manual errors.

 doi:10.20944/preprints202605.1362.v1

The sample included 32 individual contributors, 12 lower-level managers (team or scope managers), and 8 middle-level managers (managers of managers or individuals with significant decision-making responsibilities). Results are displayed in Table 3.

Table 3. Respondent profiles.

Respondent profile	Response count	Response in %
Individual contributor / non-managerial employee	32	62%
Lower-level manager	12	23%
Middle-level manager	8	15%

Another key demographic is respondent seniority (Table 4): most have 10 or more years of experience in IT departments, 16 have 5–10 years, and the remaining are juniors with 3–5 years of experience.

Table 4. Respondent profiles.

Seniority in industry	Response count	Response in %
≥ 10 years	33	63%
5-10 years	16	31%
3-5 years	3	6%

The third demographic element recorded was the age range of the respondents, presented in Table 5.

Table 5. Respondent profiles.

Age range of responders	Response count	Response in %
≥ 50	2	4%
40-49	19	37%
30-39	25	48%
26-29	6	12%

The consistency of the MBNQA criteria was evaluate busing Cronbach's Alpha (α). As it can be seen in Table 6, all the group variables either met the acceptable reliability threshold, with the group variable Community Engagement (V4) showing the highest reliability (α = 0,94) and closely followed by Customers and Markets (V3) at (α = 0,90). Additionally, the descriptive statistics reveals that the group variable Customers and Markets (V3) also ranked the highest mean score, with M = 4,06, thus suggesting a strong focus on this dimension within the evaluated environment.

Table 6. Reliability and description statistics based on PSPP & Python results.

Variable	N	Items	Cronbach's Alpha (α)	Variance	Skewness	Min	Max	Mean
Leadership and Governance (V1)	52	5	0,67	0,45	-0,22	2,6	5	3,97
Workforce (V2)	52	9	0,86	0,41	-0,02	2,78	5	3,99
Customers and Markets (V3)	52	7	0,90	0,51	-0,89	2,14	5	4,06
Community Engagement (V4)	52	7	0,94	0,58	0,44	2,57	5	3,68

Further analysis performed on the MBNQA dimensions, including Standard Error Mean (SEM) and Standard Deviation (SD) from Table 7 illustrates the dispersion and the prevision of the collected data.

 doi:10.20944/preprints202605.1362.v1

Table 7. Descriptive statistics of MBNQA dimension (N = 52) based on PSPP & Python results.

Variable	Standard Error Mean (SEM)	Standard Deviation (SD)
Leadership and Governance (V1)	0,09	0,67
Workforce (V2)	0,09	0,64
Customers and Markets (V3)	0,10	0,72
Community Engagement (V4)	0,11	0,76

In order to determine the association between the MBNQA elements and the operationalised SRM activities, the Standardised Regression and Pearson Correlation analyses were performed. The results of the regression analysis indicate that all four group variables are statistically significant predictors (p < 0,001), with the Workforce (V2) group displaying the highest standardised coefficient (0,321) and a high t-statistic result (t = 14,86). This could suggest that this variable has the most substantial impact of the analysed model. The results of the analyses can be found in Table 8.

Table 8. Standardised regression based on PSPP & Python results.

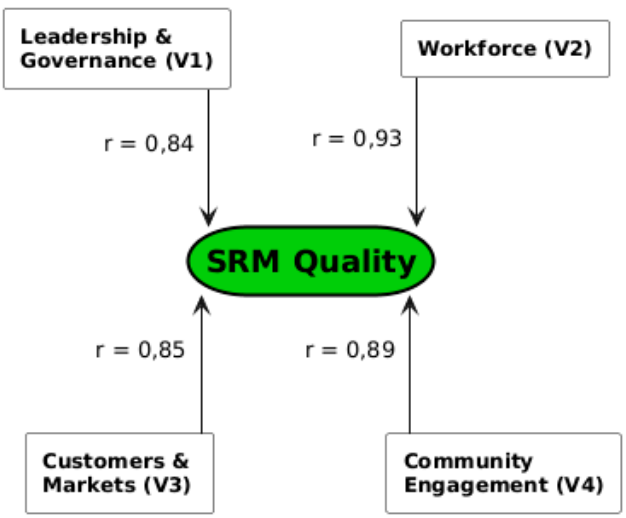
Variable	Standardised	t-statistic	Sig. (p)
Leadership and Governance (V1)	0,179	10,12	< 0,001
Workforce (V2)	0,321	14,86	< 0,001
Customers and Markets (V3)	0,250	17,31	< 0,001
Community Engagement (V4)	0,250	16,59	< 0,001

The hypothesis testing confirmed that all defined primary hypotheses (H1.1. to H4.1) are supported. The strongest positive correlation was observed between the Workforce (V2) group and the "SRM quality" concept with r = 0,93, closely followed by Customers and Markets (V3) with r = 0,89. The data can be found in Table 9.

Table 9. Hypothesis testing – correlation analysis based on PSPP & Python results.

Hypothesis	Relationship	Pearson I	β-weight	p-value	Result
H1.1	V1 -> SRM quality	0,84	0,196	< 0,001	Hypothesis supported
H2.1	V2 -> SRM quality	0,93	0,34	< 0,001	Hypothesis supported
H3.1	V3 -> SRM quality	0,85	0,30	< 0,001	Hypothesis supported
H4.1	V4 -> SRM quality	0,89	0,31	< 0,001	Hypothesis supported

The conceptual diagram has been updated to reflect the Hypothesis testing validation in Figure 2.



 doi:10.20944/preprints202605.1362.v1

Figure 2. Hypotheses validation of the study developed in UML.

The correlation between group variables from Table 10 goes further to validate the cohesion between the MBNQA criteria, with the strongest-defined relationship being between the Leadership and Governance (V1) variable and Workforce (V2) variable, with a result of 0,792.

Table 10. Correlation between group variables based on PSPP & Python results.

Variable	V1	V2	V3	V4
Leadership and Governance (V1)	-			
Workforce (V2)	0,792[a]	-		
Customers and Markets (V3)	0,568 [a]	0,707 [a]	-	
Community Engagement (V4)	0,697 [a]	0,751 [a]	0,666 [a]	-

The One-Way ANOVA results presented in Table 11 was performed in order to determine the demographic factors influences the perception of the respondents. The obtained results indicate no statistically significant differences between the classifications of role (p = 0,74), seniority (p = 0,89), or age range (p = 0,18). Accordingly, the data can be interpreted to suggest that there is a high level of consensus on the overall topic across the considered demographic segments.

Table 11. One-Way ANOVA results based on PSPP & Python results.

Factor	Segment	Mean (μ)	SD (σ)	N	F-statistic	p-value
Role classification	Individual contributor / non-managerial employee	3,92	0,58	32	0,31	0,74
	Lower-level manager	3,85	0,76	12		
	Middle-level manager	4,07	0,56	8		
Seniority	3-5 years	3,79	0,62	3	0,12	0,89
	5-10 years	3,9	0,8	16		
	≥ 10 years	3,95	0,53	33		
Age range	26-29	4,39	0,77	6	1,70	0,18
	30-39	3,86	0,72	25		
	40-49	3,83	0,34	19		
	≥ 50	4,29	0	2		

The results of this study can be interpreted in various ranges of positive correlations, as shown below:

Moderate positive correlations:

R = 0,568 between Leadership and Governance (V1) and Customers and Markets (V3)

R = 0,666 between Customers and Markets (V3) and Community Engagement (V4)

R = 0,697 between Leadership and Governance (V1) and Community Engagement (V4)

Strong positive correlations:

R = 0,707 between Customers and Markets (V3) and Workforce (V2)

R = 0,751 between Community Engagement (V4) and Workforce (V2)

R = 0,792 between Leadership and Governance (V1) and Workforce (V2)

The results of the pilot survey would seem to indicate a range of positive correlations between the key variable groups. In turn, this would highlight the influence of specific MBNQA dimensions over SRM activities.

The group of positive moderate correlations were observed between Leadership and Governance (V1) and Customers and Markets (V3), while the strongest positive correlation is given by the Leadership and Governance (V1) and Workforce (V2) pair. This pair could indicate that

 doi:10.20944/preprints202605.1362.v1

Workforce (V2) and Leadership and Governance (V1) are considerably influential in shaping the quality of SRM activities within IT departments of Romanian organisations.

5. Discussion

The empirical findings of this study provide a more solid understanding of how the MBNQA excellence framework can be adapted to the particularities of the local Romanian IT sector so as to enhance SRM quality. As the Romanian IT environment continues to transition from a technical outsourcing hub to a value-driven ecosystem, the integration of multi-dimensional quality constructs becomes a strategic necessity [1,2].

This study's results can be used to support the positioning of the Romanian IT sector far beyond a technical provider. Slowly but surely, the results seem to indicate a maturing ecosystem, where relational capital is as essential as coding proficiency. By demonstrating that the Workforce (V2) dimension is highest predictor of SRM quality, the study challenges and goes beyond the traditional "technical-first" perspective, suggesting that the industry's competitive edge could now reside in the soft-skills competencies placed in a system-thinking structure. As such, the optics of this research position the MBNQA framework as an essential bridge to close the gap of Romanian IT organisations which attempt to shed their "outsourcing" label in favour of a value-driven identify.

The results confirm that all the four analysed MBNQA dimensions: Leadership and Governance (V1), Workforce (V2), Customers and Markets (V3), and Community Engagement (V4) are solid predictors of SRM quality, with high values. This result aligns with existing literature, suggesting that excellence models serve as roadmaps for navigating organisational systems. While the application of such models is challenged by local nuances [3,4]. the findings of this study suggest that the MBNQA's system-thinking model is relevant to the current Romanian IT sector context.

A finding of this research that stands out is the dominant impact of the Workforce (V2) dimension. With a Perason correlation which has also the highest weight (r = 0,93), it is the strongest predictor of SRM quality in the sampled organisations. This result is particularly significant given the current shifts in recruitment and retention strategies within the Romanian IT sector. As existing literature highlights [39], investing in workforce capabilities and creating a high-performance environment directly correlates with higher quality interactions with both internal and external stakeholders. The high internal consistency of this variable further reinforces that employees perceive their development and engagement as central to the organisation's SRM maturity.

The support for H1 highlights, the role of leadership in providing the vision and maintaining accountability. In the Romanian IT sector context, strong leadership ensures that SRM is treated as a core strategic process rather than a peripheral administrative task [33,37]. Furthermore, the significant impact of Community Engagement (V4) suggests that Romanian IT professionals increasingly view social and environmental responsibility as an integral part of stakeholder quality. This reflects a broader trend where success is closely part of stakeholder quality. This reflects then a broader trend where success is closely connected to the initiatives in the area of circular and sustainable economy [42,43].

Another finding is the lack of statistically significant differences in perceptions across role classifications, seniority, and age ranges, as evidenced by the One-Way ANOVA results. Whether an individual is a junior contributor in terms of experience or a middle-level manager with more than 10 years of experience, there is a unified consensus on the importance of these quality dimensions. This good level of alignment across the respondents suggests that the MBNQA framework criteria are aligned with the professional culture of the Romanian IT sector, thus providing a robust foundation for future larger-scale studies indicated in a similar study [23].

The achieved results validate the theoretical integration of the MBNQA with practical SRM models such as the PMBOK and the SRMMM. The strong correlations between Leadership (V1) and Workforce (V2) can also be shown to reflect the stakeholder-centric lifecycle of identifying, understanding, and engaging stakeholders described in these practical frameworks. By moving

 doi:10.20944/preprints202605.1362.v1

beyond a checklist-type approach, Romanian IT organisations can use these findings to bridge the gap between technical proficiency and sustainable value creation [11,12].

These results contribute to the existing MBNQA literature which shows the robustness of the MBNQA framework across a wide variety of sectors. In addition to its success in healthcare [52], the framework has proven applicable in mining [30], agriculture [19], sustainable-driven businesses [31], and supply chain management [34]. Additionally, the results show promising premises for further research into more targeted studies on the topic of organisational resilience and business continuity by using the MBNQA excellence framework, where these dimensions are main topic of the study [21,22].

The practical implications of this study are directly given by the strong positive correlations identified between the MBNQA multi-dimensions, most notably the dominant relationship between the Workforce (V2) variable and SRM quality (r = 0,93). As a result of these values the question that arises is whether Romanian IT organisations shouldn't look at prioritising development of soft-skills systems over purely technical infrastructure. Given the strong correlation between the Leadership (V1) and Workforce (V2) variables, the practical application of these results requires management representatives to look into evolving from task supervision towards enabling stakeholder value generation with the help of formal frameworks, such as the PMBOK. The One-Way ANOVA results seem to indicate a professional consensus across all the seniority levels. This in turn could suggest that the targeted industry is acceptable of adopting standardised quality models.

Building on these results, several original contributions emerge:

- **Suitability for SRM**: The adapted MBNQA framework is suitable as an initial approach for driving quality into SRM activities within specialised sectors such as IT.
- **Role of experience**: The study confirms that effective SRM requires a certain level of professional experience, as reflected in the seasoned survey population.
- **Process refinement**: The obtained insights can help guide organisations in order to refine internal processes or exploring additional performance-oriented frameworks to enhance SRM practices.
- **Measurable improvements**: By focusing on key dimension of the Workforce (V2) dimension, organisations can achieve measurable improvements in their SRM endeavours, therefore leveraging the observed correlations to prioritise interventions for maximum impact.

To replicate these results, organisations can be encouraged to adopt a broader range of excellence frameworks, supported by the ongoing updates of established methodologies such as the PMBOK [33]. Research using both historical MBNQA data [51,52] and recent studies highlights that SRM has a dynamic nature. It requires a continuously updated stakeholder database that is regularly reviewed to reflect market changes.

Based on the described methodology in this paper, future research could be performed to repeat this survey on populations holding purely theoretical experience to compare results, as studies indicate that soft skills and risk management responses will remain central elements in education and organisational excellence [6,23].

Despite its contributions, the study has several limitations. The sample size was relatively small (N = 52), which may limit the findings. As the survey targeted only Romanian IT professionals in industrial engineering contexts, results may not extend to other sectors or geographic regions. The cross-sectional design captures perceptions at a single point in time. This approach makes it difficult to determine a long-term causal relationship or the evolutionary effects of MBNQA dimensions on SRM performance. Future studies should seek to address these limitations by increasing the surveyed size, including more diverse populations, and employing longitudinal designs to track SRM maturity over time.

 doi:10.20944/preprints202605.1362.v1

6. Conclusions

This study looked into evaluating the applicability of the MBNQA excellence framework as a tool for assessing and enhancing SRM quality within the Romanian IT sector. The empirical results confirm that the MBNQA framework is a robust and appropriate model for this purpose, providing a multi-dimensional lens through which organisations can navigate complex stakeholder landscapes.

The main conclusions of this research are now summarised. First, the results demonstrate that Romanian modern organisations can effectively use the MBNQA framework to assess SRM quality through both internal factors (Leadership and Governance, Workforce) and external factors (Customers and Markets, Community Engagement). Among the four dimensions, the Workforce (V2) factor emerged as the most significant predictor of SRM quality, showing the highest correlation and standardized impact. This underscores the critical role of human capital and employee engagement in fostering high-quality stakeholder interactions in a value-driven IT ecosystem. Secondly, this study revealed strong positive correlations across all variable pairs, particularly between Leadership and Workforce factor, indicating that these dimensions are mutually reinforcing. This supports the systems thinking perspective inherent in excellence models [1,2]. Thirdly, the lack of statistically significant differences across age, seniority, and professional roles could suggest a high degree of professional consensus within the Romanian IT industry regarding the importance of quality standards in SRM. These findings extend the documented robustness of the MBNQA framework beyond traditional sectors such as healthcare, education, and agriculture into the specialized domain of IT-driven industrial engineering, considering the increased demand for organisational capabilities such as quick business continuity practices and organisational resilience capabilities [19,21,22,51,52].

From a practical perspective, the insights obtained can guide organisations to prioritise improvement actions, namely in leadership development and workforce capabilities so as to achieve measurable improvements in SRM performance. Furthermore, the study highlights that effective SRM is a dynamic process which requires to have stakeholder databases which are continuously updated and regular reviews so as to adapt to market changes. While limited by a small sample size (N=52) and a cross-sectional design, this research provides a foundational approach for integrating quality excellence into stakeholder management. Future research on this topic should aim to include larger, more diverse populations and longitudinal designs to track the long-term impact of these quality dimensions on organizational sustainability and competitive advantage (Badea et al., 2023; Fleacă & Stanciu, 2019).

Author Contributions: Conceptualization, E.F.; methodology, C.E.U.; software, B.F. and R.M.D.; validation, E.F., formal analysis, B.F.; investigation, C.E.U.; resources, C.E.U.; data curation, C.E.U.; writing—original draft preparation, C.E.U.; writing—review and editing, E.F. and C.E.U.; visualization, C.E.U.; supervision, E.F.; project administration, E.F.; funding acquisition, B.F. and R.M.D. All authors have read and agreed to the published version of the manuscript." Authorship must be limited to those who have contributed substantially to the work reported.

Funding: This research was funded by the National University of Science and Technology POLITEHNICA Bucharest, grant number _____, PubArt. The APC was funded by PubArt.

Institutional Review Board Statement: Ethical review and approval were waived for this study according to the Romanian Law no. 206/27.05.2004 on ethical conduct in scientific research, technological development and innovation (accessed on 5 January 2026).

Informed Consent Statement: Written informed consent has been obtained from all subjects involved in the study through the survey.

Data Availability Statement: The data presented in this study was collected by the corresponding author as part of their PhD thesis research. The data are not publicly available due to privacy restrictions.

Acknowledgments: The authors thank all the survey participants for their valuable contributions.

 doi:10.20944/preprints202605.1362.v1

Conflicts of Interest: The authors declare no conflicts of interest.

Abbreviations

The following abbreviations are used in this manuscript:

Acronym	Acronym meaning
AI	Artificial Intelligence
CSR	Corporate Social Responsibility
EEOC	Equal Employment Opportunity Commission
IT	Information Technology
GDP	Gross Domestic Product
MBNQA	Malcolm Baldrige National Quality Award
NIST	National institute of Standards and Technology
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
OSHA	Occupational Safety and Health Administration
SD	Standard Deviation
SEM	Standard Error Mean
SMS	Sustainability management system
SRM	Stakeholder Relationship Management
SRMMM	Stakeholder Relationship Management Maturity Model
VUCA	Volatility, Uncertainty, Complexity, Amiguity

References

1. Prybutok, V., & Cutshall, R. (2004). Malcolm Baldrige National Quality Award leadership model. Industrial Management & Data Systems, 104(7), 558–566. https://doi.org/10.1108/02635570410550223 (accessed on 30 Jan 2026).
2. Wilson, D. D., & Collier, D. A. (2000). An Empirical Investigation of the Malcolm Baldrige National Quality Award Causal Model. *Decision Sciences*, *31*(2), 361–383. https://doi.org/10.1111/j.1540-5915.2000.tb01627.x (accessed on 30 Jan 2026).
3. Flynn, B. B., & Saladin, B. (2006). Relevance of Baldrige constructs in an international context: A study of national culture. Journal of Operations Management, 24(5), 583–603. https://doi.org/10.1016/j.jom.2005.09.002 (accessed on 30 Jan 2026).
4. Sampaio, P., Saraiva, P., & Monteiro, A. (2012). A comparison and usage overview of business excellence models. The TQM Journal, 24(2), 181–200. https://doi.org/10.1108/17542731211215125 (accessed on 30 Jan 2026).
5. Williams, R., Bertsch, B., Van Der Wiele, A., Van Iwaarden, J., & Dale, B. (2006). Self-Assessment Against Business Excellence Models: A Critique and Perspective. Total Quality Management & Business Excellence, 17(10), 1287–1300. https://doi.org/10.1080/14783360600753737 (accessed on 30 Jan 2026).
6. Badea, D., Halmaghi, E.-E., Ranf, D.-E., & Bucovetchi, O. (2023). *Transforming Urban Resilience. FAIMA Business & Management Journal*, *11*(3), 112-130. Available online: https://www.proquest.com/scholarly-journals/transforming-urban-resilience/docview/2868342033/se-2. (accessed on 19 Sept 2025).
7. Li, B., Mousa, S., Reinoso, J. R. R., Alzoubi, H. M., Ali, A., & Hoang, A. D. (2023). The role of technology innovation, customer retention and business continuity on firm performance after post-pandemic era in China's SMEs. Economic Analysis and Policy, 78, 1209–1220. https://doi.org/10.1016/j.eap.2023.05.004 (accessed on 30 Jan 2026).
8. Nousopoulou, E., Kamariotou, M., & Kitsios, F. (2022). Digital Transformation Strategy in Post-COVID Era: Innovation Performance Determinants and Digital Capabilities in Driving Schools. Information, 13(7), 323. https://doi.org/10.3390/info13070323 (accessed on 30 Jan 2026).
9. Ristevski, B., Jolevski, I., Savoska, S., Blazheska- Tabakovska, N., & Bogdanoska-Jovanovska, M. (2021). Challenges and opportunities in the ICT sector during and post-CoVid-19 pandemic. Horizons - International Scientific Journal, 9(2), 29–37. https://doi.org/10.20544/HORIZONS.B.09.2.P03 (accessed on 30 Jan 2026).

 doi:10.20944/preprints202605.1362.v1

10. Ungureanu, C.-E., Sbîrcea, I., & Chiriță, R. A. M. (2023). VUCA Factors Influencing Stakeholder Relationship Management Development: A Systematic Literature Review. *Bulletin of the Polytechnic Institute of Iași. Machine Constructions Section*, *69*(3), 29–47. Available online: https://doi.org/10.2478/bipcm-2023-0022 (accessed on 19 Sept 2025).
11. Ali, A., Ranga, N., Barakat, M., Eid, A., Barakat, A., & Madkour, T. (2023). *Sustainable Practices in the Supply Chain*. *FAIMA Business & Management Journal*, *11*(2), 45-60. Available online: https://www.proquest.com/scholarly-journals/sustainable-practices-supply-chain/docview/2840373674/se-2?accountid=29198 (accessed on 19 Sept 2025).
12. Bourne, L. (2008). *SRMM®: Stakeholder relationship management maturity*. Available online: https://www.pmi.org/learning/library/stakeholder-relationship-management-maturity-8364 (accessed on 19 Sept 2025).
13. Cucu, L., Stoica, M., Simion, I., & Cananau, S. (2021). Sustainable component design using generative tools for additive manufacturing. UPB Scientific Bulletin, Series D. Mechanical Engineering, Vol. 83, Issue 3, 2021, 227-238.
14. Fleacă, B., Fleacă, E., & Corocăescu, M. (2023). Sustainability information – analysis of current trends in sustainability monitoring & reporting. Entrepreneurship and Sustainability Issues, 10(3), 274–287. Available online: https://doi.org/10.9770/jesi.2023.10.3(18) (accessed on 19 Sept 2025).
15. Olkiewicz, M. (2020). The role of the stakeholder in the quality improvement of an organization. Scientific Papers of Silesian University of Technology. Organization and Management Series, 2020(143). https://doi.org/10.29119/1641-3466.2020.143.19 (accessed on 30 Jan 2026).
16. Sanyaolu T. O., Adams Gbolahan Adeleke, Christianah Pelumi Efunniyi, Lucy Anthony Akwawa, & Chidimma Francisca Azubuko. (2023). Stakeholder management in IT development projects: Balancing expectations and deliverables. International Journal of Management & Entrepreneurship Research, 5(12), 1239–1255. https://doi.org/10.51594/ijmer.v5i12.1535 (accessed on 30 Jan 2026).
17. Căpitanu, V. C., Ciobănescu, Ștefan A., & Fleacă, B. (2026, Jan 08). A Decision Analysis of the Methods and Techniques for Diagnosing the Level of Performance and Competitiveness of the STB S.A. Organization. International Conference of Management and Industrial Engineering, 12, 419–427. (accessed on 30 Jan 2026).
18. Rusu, B., Sandu, C. B., Avasilcai, S., & David, I. (2023). Acceptance of Digital Transformation: Evidence from Romania. Sustainability, 15(21), 15268. https://doi.org/10.3390/su152115268 (accessed on 30 Jan 2026).
19. Savov, R., Cheben, J., Lancaric, D., & Serencéš, R. (2017). MBNQA approach in quality management supporting sustainable business performance in agribusiness. *Amfiteatru Economic*, *19*(44). Available online: https://ideas.repec.org/a/aes/amfeco/vs10y2017i18p11.html (accessed on 19 Sept 2025).
20. European Commission. Romania 2025 Digital Decade Country Report; European Commission: Brussels, Belgium, 2025. Available online: https://digital-strategy.ec.europa.eu/en/factpages/romania-2025-digital-decade-country-report (accessed on 20 Mar 2026).
21. Steen, R., Haug, O. J., & Patriarca, R. (2024). Business continuity and resilience management: A conceptual framework. Journal of Contingencies and Crisis Management, 32, e12501. Available online: https://doi.org/10.1111/1468-5973.12501 (accessed on 26 Apr 2026).
22. De Matteis, J., Elia, G., & Del Vecchio, P. (2023). Business continuity management and organizational resilience: A small and medium enterprises (SMEs) perspective. Journal of Contingencies and Crisis Management, 31, 670–682. Available online: https://doi.org/10.1111/1468-5973.12470 (accessed on 26 Apr 2026).
23. Fleacă, E., & Stanciu, R. D. (2019). Digital-age Learning and Business Engineering Education – a Pilot Study on Students' E-skills. *Procedia Manufacturing*, *32*, 1051–1057. Available online: https://doi.org/10.1016/j.promfg.2019.02.320 (accessed on 19 Sept 2025).
24. Romania-Insider. Romania's IT sector to reach 12% of GDP until 2025. Romania Insider, 17 July 2017. Available online: https://www.romania-insider.com/romania-it-sector-2025 (accessed on 20 Mar 2026).
25. Tiron-Tudor, A., & Ivan, R. O. (2021). *Corporate Social Responsibility in Romania* (pp. 311–326). Available online: https://doi.org/10.1007/978-3-030-68386-3_14 (accessed on 19 Sept 2025).

 doi:10.20944/preprints202605.1362.v1

26. Awa, H. O., Etim, W., & Ogbonda, E. (2024). Stakeholders, stakeholder theory and Corporate Social Responsibility (CSR). International Journal of Corporate Social Responsibility, 9(1), 11. Available online: https://doi.org/10.1186/s40991-024-00094-y (accessed on 19 Sept 2025).
27. Cai, Z., & Wheale, P. (2004). Creating Sustainable Corporate Value: A Case Study of Stakeholder Relationship Management in China. Business and Society Review, 109(4), 507–547. Available online: https://doi.org/10.1111/j.0045-3609.2004.00208.x (accessed on 19 Sept 2025).
28. Pérez, A., & Rodríguez del Bosque, I. (2014). Sustainable development and stakeholder relations management: Exploring sustainability reporting in the hospitality industry from a SD-SRM approach. *International Journal of Hospitality Management*, *42*, 174–187. Available online: https://doi.org/10.1016/j.ijhm.2014.07.003 (accessed on 1 Nov 2024).
29. Popa, R. A. (2015). The Corporate Social Responsibility Practices in The Context of Sustainable Development. The Case of Romania. *Procedia Economics and Finance*, *23*, 1279–1285. Available online: https://doi.org/10.1016/S2212-5671(15)00395-0 (accessed on 19 Sept 2025).
30. Ranängen, H. (2017). Stakeholder management theory meets CSR practice in Swedish mining. *Mineral Economics*, *30*(1), 15–29. Available online: https://doi.org/10.1007/s13563-016-0098-z (accessed on 19 Sept 2025).
31. Rathobei, K. E., Ranängen, H., & Lindman, Å. (2024). Stakeholder integration in sustainable business models to enhance value delivery for a broader range of stakeholders. *Business Strategy and the Environment*, *33*(4), 3687–3706. Available online: https://doi.org/10.1002/bse.3651 (accessed on 19 Sept 2025).
32. Tătaru, I. M., Fleacă, E., & Fleacă, B. (2020). *Survey on Social Responsibility Practices and Sustainable Development Requirements in Romanian Firms*. Available online: https://doi.org/10.5281/zenodo.6556253 (accessed on 19 Sept 2025).
33. Project Management Institute. (2021). *A guide to the Project Management Body of Knowledge (PMBOK® guide) (7th ed.)* (7th ed.). Project Management Institute.
34. Loke, S.-P., Downe, A. G., Sambasivan, M., & Khalid, K. (2012). A Structural Approach To Integrating Total Quality Management and Knowledge Management with Supply Chain Learning. *Journal of Business Economics and Management*, *13*(4), 776–800. Available online: https://doi.org/10.3846/16111699.2011.620170 (accessed on 19 Sept 2025).
35. NIST National Institute of Standards and Technology. (2024). *Baldrige Performance Excellence Program*. Available online: https://www.nist.gov/baldrige (accessed on 19 Sept 2025).
36. Setiawan, S., & Purba, H. H. (2021). A Systematic Literature Review of Malcolm Baldrige National Quality Award (MBNQA). *Journal of Technology Management for Growing Economies*, *12*(1), 1–12. Available online: https://doi.org/10.15415/jtmge.2021.121001 (accessed on 19 Sept 2025).
37. Militaru, A. M. G., Fleacă, B., & Fleacă, E. (2025). A Comparative Analysis of Innovation Systems at the Country Level for Romania and Turkiye. UPB Scientific Bulletin, Series D. Mechanical Engineering, Vol. 87, Issue 1, 2025.
38. Fontaine, C., Haarman, A., & Schmid, S. (2006). The stakeholder theory. *Edlays Education*, *1*(4), 1–33.
39. Coiciu, I. (2023, Dec 19). Implementation of an Operational Excellence Management System Model in an Insurance Company. FAIMA: 11th International Conference on Management and Industrial Engineering, 11, 431-438. Available online: (accessed on 22 Mar 2026).
40. Neacșu, N. A. (2020). The Customer – Oriented Strategy – A Tool for Increasing Customer Satisfaction on the Romanian Banking Market. Bulletin of the Transilvania University of Brasov. Series V: Economic Sciences, 13(62)(1), 49-56. Available online: https://doi.org/10.31926/but.es.2020.13.62.1.6 (accessed on 22 Mar 2026).
41. Popa, I., Ștefan, S. C., & Constantin, H. G. (2019). The Organizational Culture of a Major Social Work Institution in Romania: A Sociological Analysis. Sustainability, 11(13), 3587. Available online: https://doi.org/10.3390/su11133587 (accessed on 22 Mar 2026).
42. Barbu, A., Militaru, G., Deselnicu, D. C., & Catană, Ş.-A. (2021). Key Success Factors That Enable IT Service Providers to Achieve Organizational Performance: Evidence from Romania. Sustainability, 13(19), 10996. Available online: https://doi.org/10.3390/su131910996 (accessed on 19 Sept 2025).

 doi:10.20944/preprints202605.1362.v1

43. Bocean, C. G., Nicolescu, M. M., Cazacu, M., & Dumitriu, S. (2022). The Role of Social Responsibility and Ethics in Employees' Wellbeing. International Journal of Environmental Research and Public Health, 19(14), 8838. Available online: https://doi.org/10.3390/ijerph19148838 (accessed on 22 Mar 2026).
44. Kujala, J., Heikkinen, A., & Blomberg, A. (2023). Stakeholder engagement in a sustainable circular economy : theoretical and practical perspectives. Palgrave Macmillan.
45. Negomireanu, E.-B.; Szabo, D.-A.; Ilea, D.-A.; Chiribău-Vitlinger, Ș.; Dragomir, M. (2026) *Circular Economy Approaches as Support for Business Transformation Towards Excellence*. Preprints, 2026021297. Available online: https://doi.org/10.20944/preprints202602.1297.v1 (accessed on 22 Mar 2026).
46. Fan, P., Urs, N., & Hamlin, R. E. (2019). Rising innovative city-regions in a transitional economy: A case study of ICT industry in Cluj-Napoca, Romania. *Technology in Society*, *58*, 101139. Available online: https://doi.org/10.1016/j.techsoc.2019.05.003 (accessed on 19 Sept 2025).
47. Gheorghe, M., Nastase, P., Boldeanu, D., & Ofelia, A. (2009). IT Governance in Romania: A case study. *Global Economy Journal*, *9*(1), 1850158. Available online: https://services.bepress.com/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1138&context=itfa (accessed on 18 Aug 2025).
48. Ogrean, C., Pirvu, B.-C., & Herciu, M. (2024). Exploring Digital Needs in the Centru Region, Romania: A Comparative Cross-Sectoral Study. *Studies in Business and Economics*, *19*(3), 348–368. Available online: https://doi.org/10.2478/sbe-2024-0060 (accessed on 19 Sept 2025).
49. Sirbu, R.-M., Popescu, A.-D., Borca, C., & Draghici, A. (2015). A study on Romania Sustainable Development. *Procedia Technology*, *19*, 416–423. Available online: https://doi.org/10.1016/j.protcy.2015.02.059 (accessed on 19 Sept 2025).
50. Stoica, M., & Ghilic-Micu, B. (2020). E-Government in Romania – a Case Study. *Journal of E-Government Studies and Best Practices*, *2020*, 1–12. Available online: https://doi.org/10.5171/2020.608643 (accessed on 19 Sept 2025).
51. Parast, M. M. (2015). A longitudinal assessment of the linkages among the Baldrige criteria using independent reviewers' scores. *International Journal of Production Economics*, *164*, 24–34. Available online: https://doi.org/10.1016/j.ijpe.2015.02.027 (accessed on 19 Sept 2025).
52. Parast, M. M., & Golmohammadi, D. (2019). Quality management in healthcare organizations: Empirical evidence from the Baldrige data. *International Journal of Production Economics*, *216*, 133–144. Available online: https://doi.org/10.1016/j.ijpe.2019.04.011 (accessed on 19 Sept 2025).
53. Baldrige Performance Excellence Program. (2024). *New Baldrige Award Criteria for 2024*. Available online: https://www.nist.gov/system/files/documents/2023/12/20/New-Baldrige-Award-Criteria-for-2024_0.pdf (accessed on 19 Sept 2025).
54. Djankov, S. D., & Murrell, P. (2000). Enterprise Restructuring in Transition: A Quantitative Survey. *SSRN Electronic Journal*. Available online: https://doi.org/10.2139/ssrn.238716 (accessed on 19 Sept 2025).
55. Espadoto, M., Martins, R. M., Kerren, A., Hirata, N. S. T., & Telea, A. C. (2021). Toward a Quantitative Survey of Dimension Reduction Techniques. *IEEE Transactions on Visualization and Computer Graphics*, *27*(3), 2153–2173. Available online: https://doi.org/10.1109/TVCG.2019.2944182 (accessed on 19 Sept 2025).
56. Costa, J., & Gonçalves, V. (2025, May 28-29). An analysis of the free software PSPP from a researcher's perspective. *CIVINEDU 2025*, 148. Available online: https://adayapress.com/wp-content/uploads/2025/06/CIVINEDU2025.pdf (accessed on 26 Nov 2025).
57. Riyantoko, P.A.; Funabiki, N.; Brata, K.C.; Mentari, M.; Damaliana, A.T.; Prasetya, D.A. A. (2025). Fundamental Statistics Self-Learning Method with Python Programming for Data Science Implementations. Information 2025, 16, 607. https://doi.org/10.3390/info16070607 (accessed on 19 Mar 2025).