

Assessing Organisational Excellence for Public Transport Companies Using the Baldrige Framework

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Abstract. Organisational excellence must be a critical strategic desirable for various entities, including public transport organisations, which increasingly face demands to enhance efficiency, service quality, and sustainability. In this context, international performance evaluation models serve as valuable frameworks for assessing and improving organisational management. Among these models, the Baldrige Excellence Framework is particularly notable for its integrated approach, clear application structure, and strong emphasis on sustainable outcomes. This study aims to evaluate the current level of organisational excellence at Societatea de Transport Bucureşti STB S.A. by utilising the Baldrige criteria, which have been adapted into quantitative research instruments based on a Likert-scale questionnaire. Data was collected through a questionnaire administered to the organisation's employees, followed by analysis using descriptive and inferential statistical methods. The reliability of the research instrument was confirmed through statistical indicators. At the same time, the relationships between the examined variables were assessed using other statistical indicators. The findings reveal significant associations among leadership, strategic planning, workforce engagement, and organisational performance, underscoring the crucial role of integrated management systems in achieving optimal outcomes.

Keywords: organisational excellence, Baldrige framework, public transport, organisational performance, integrated management systems.

Introduction

In recent years, organisational performance has become a central concern for both private and public institutions, especially in contexts marked by rapid economic, technological, and social transformations. Rather than relying solely on financial indicators, organisations are increasingly evaluated through a broader perspective that includes leadership practices, strategic alignment, customer orientation, workforce engagement, and overall societal impact. This shift is particularly relevant for public organisations, which must balance efficiency with accountability and transparency.

Urban public transport systems illustrate these challenges very clearly. Companies operating in this sector face constant pressure to improve service quality while dealing with ageing infrastructure, limited financial resources, and growing expectations from citizens regarding sustainability and digitalisation. In such conditions, the adoption of structured performance evaluation models becomes not only useful but necessary.

One of the most widely recognised frameworks for assessing organisational excellence is the Baldrige Excellence Framework. Its relevance lies in the fact that it provides a coherent structure that integrates key managerial dimensions, including leadership, strategy, customer focus, measurement and knowledge management, workforce, process management, and results. Unlike

fragmented approaches, the Baldrige model allows organisations to understand how these elements interact and contribute to long-term performance (Technology, N. I. Baldrige , 2023-2024).

This study focuses on the evaluation of organisational excellence within Societatea de Transport București (STB S.A.), the main provider of public transport services in Bucharest. The choice of this organisation is motivated not only by its strategic importance for urban mobility and its direct impact on the daily lives of a large number of citizens, but also by the challenging context it is currently facing. In recent years, STB S.A. has encountered significant financial and operational difficulties, often associated in public discourse with long-term managerial inefficiencies.

In this context, the recent decision of the General Council of Bucharest to approve a technical and economic audit highlights the need for a rigorous and objective assessment of how organisational resources and processes are managed. Therefore, the results of the present study may contribute to a better understanding of the organisation's current level of managerial maturity and may provide relevant insights for identifying improvement directions, complementing the ongoing institutional efforts. At the same time, the complexity of the organisation's operations makes it a relevant case for applying an integrated performance evaluation model.

The research is based on a quantitative approach, using a structured questionnaire aligned with the Baldrige criteria and addressed to employees of STB S.A. The aim is to capture internal perceptions regarding key organisational dimensions such as leadership, strategy, processes, and results, and to analyse the relationships between them using statistical methods.

The central research question guiding this study is the following: to what extent do the Baldrige criteria explain the level of organisational excellence within STB S.A., and how are leadership, strategy, workforce involvement, and organisational performance interconnected? Based on this question, several hypotheses are formulated, focusing on the relationships between these core dimensions.

By combining empirical data with a well-established theoretical framework, this paper aims not only to assess the current state of organisational performance, but also to provide relevant insights that may support future managerial improvements within the organisation.

Literature review

Modern organisations operate in environments shaped by rapid and often unpredictable changes driven by economic, technological, and social developments. In this context, the way organisational performance is defined and evaluated has undergone significant transformation. While in the past the focus was primarily on financial indicators, the current body of literature supports a much broader perspective, encompassing dimensions such as leadership, strategy, organisational culture, internal processes, and the relationship with service beneficiaries (Verboncu, 2019).

This shift in perspective is particularly important in the case of public organisations, where performance cannot be assessed solely in terms of economic efficiency. In such contexts, social impact, the quality of delivered services, and the level of public trust represent essential evaluation criteria. At the same time, institutional constraints and the legislative framework may significantly influence how managerial practices are implemented.

The concept of organisational excellence has emerged as an alternative to traditional performance evaluation models, offering an integrated view of how organisations can achieve sustainable results. In the literature, excellence is often associated not only with superior outcomes, but also with an organisation's ability to adapt, learn, and continuously improve its internal processes. From this perspective, organisational excellence can be understood as a dynamic

process, dependent on the maturity of the management system and on the coherence between different organisational components.

Several internationally recognised models have been developed to assess organisational excellence, each with its own methodological particularities. Among the most well-known are the EFQM model, ISO standards in quality management, and the Baldrige framework. Although these models differ in terms of structure and application, they share a common focus on an integrated approach to performance and on linking internal factors to organisational results.

In practice, however, such models are not always easy to implement, particularly in contexts such as Romania, where resistance to change can be significant. Nevertheless, experience shows that, through persistence, new mechanisms can be gradually introduced, even if initial results do not fully meet expectations.

The Baldrige model stands out due to its clear structure and systemic perspective, providing an analytical framework that covers the main dimensions of organisational management. It includes criteria such as leadership, strategy, customer focus, knowledge management, workforce, processes, and results. An important feature of the model is the interdependence of these criteria, organisational performance being the result of the integrated functioning of the entire system.

In the literature, the application of the Baldrige model is associated with significant improvements in service quality, process efficiency, and employee engagement. However, its implementation, especially in the public sector and even more so in the Romanian context, may encounter difficulties related to resistance to change, limited resources, and institutional constraints. These aspects highlight the need to adapt theoretical models to the specific context of each organisation. (Technology, N. I. Baldrige, 2023-2024)

In the case of public transport organisations, the evaluation of performance and organisational excellence becomes particularly relevant, given its direct impact on urban mobility and on citizens' quality of life. In this sense, the use of an integrated model such as Baldrige can provide a coherent perspective on how managerial dimensions influence organisational outcomes (Garitte & Marius Tomoiala, 2020).

Methodology

Although the study relies on employees' perceptions, the research design is quantitative in nature. The questionnaire items were measured using a Likert scale, allowing statistical analysis of relationships between variables. Perception-based measurement is widely used in organisational research because employees represent direct observers of leadership practices, strategy implementation and internal processes. Therefore, perceptions provide a valuable proxy for assessing organisational management practices when objective performance indicators are difficult to access.

The methodological approach is structured around a descriptive–correlational research design, which seeks both to describe employees' perceptions regarding the Baldrige criteria and to identify the relationships between leadership, strategy, workforce and organisational performance.

Employees represent key internal stakeholders who directly experience organisational leadership, strategy implementation and operational processes. Previous studies in organisational behaviour and management research frequently rely on perception-based measures because they capture how managerial practices are understood and experienced within the organisation. Such perceptions influence motivation, engagement and organisational outcomes.

Research design

The research was designed as a cross-sectional study, conducted in a single data collection stage, using the questionnaire as the main research instrument. This type of design is widely used in studies on organisational performance and managerial excellence and is recommended for evaluating perceptions and relationships between variables at a specific moment in time.

The Baldrige model was operationalised by transforming each criterion into a set of measurable items formulated on a five-point Likert scale, ranging from 1 – very low level to 5 – very high level.

Research hypotheses

Based on the research objectives and the theoretical background discussed in the literature review, a set of working hypotheses was formulated in order to guide the empirical analysis. These hypotheses reflect the assumed relationships between key organisational dimensions, particularly leadership, strategy, workforce involvement, and overall organisational performance.

More specifically, the study assumes that leadership quality is positively associated with organisational performance, that organisational strategy is correlated with organisational results, and that workforce involvement contributes to improved performance outcomes. In addition, it is expected that the integrated application of the Baldrige criteria is associated with a higher level of organisational maturity.

These assumptions are grounded in previous research highlighting the role of integrated management systems in achieving organisational excellence, as well as in studies that examine the relationships between leadership, strategy, and performance (Titan, Simona Ghita, & Cristina Trandas, 2003).

In order to test these relationships, Pearson correlation analysis was employed, as it allows the identification of statistically significant associations between the examined variables. This method is widely used in organisational research, particularly in studies that explore the interaction between leadership, strategy, employee engagement, and performance outcomes.



Figure 1. Conceptual research model based on the Baldrige Excellence Framework

Source: Authors' conceptualization.

Research instrument

The research instrument used is a structured questionnaire developed in accordance with the seven criteria of the Baldrige model. The questionnaire consists of two main sections.

The first section includes socio-demographic and professional questions (gender, age, seniority, position, education level, workplace location).

The second section comprises 35 items organised into seven thematic sets corresponding to the Baldrige criteria, each set containing five items.

The items were formulated in clear and accessible language to ensure uniform understanding and to reduce the risk of ambiguous interpretations. The Likert scale allows the quantification of perceptions and the application of subsequent statistical analyses.

Sample and data collection

The target population of the research consisted of STB S.A. employees. The questionnaire was distributed electronically to a sample of 1,000 employees, of whom 157 provided valid responses, corresponding to a response rate of 15.7%.

Although the response rate is relatively low, the obtained sample covers all relevant demographic and professional categories, offering a sufficiently diversified basis for analysing internal perceptions.

Data collection was carried out over a period of 30 days, and participation was voluntary and anonymous, aspects that contribute to increased honesty of responses and to the reduction of social desirability bias (Anghelache, Stefan Virgil Iacob, & Madalina Gabriela Anghel, 2020).

Data analysis methods

The collected data were processed using descriptive and inferential statistical methods. The analysis included:

- calculation of frequencies and percentages for demographic variables;
- analysis of means and distributions for each Baldrige criterion;
- assessment of instrument reliability using Cronbach's Alpha coefficient;
- Pearson correlation analysis to test the relationships between variables;
- one-sample t-test to evaluate the positioning of perceptions relative to the neutral value of the scale (Cortina, 1993) (Cronbach, 1951).

The obtained Cronbach's Alpha coefficient ($\alpha = 0.989$) indicates an excellent level of internal consistency of the instrument, confirming its suitability for analysing organisational performance.

Statistical data processing was carried out using specialised statistical software (SPSS), widely used in social sciences and management research.

Methodological rigor and limitations

The methodological rigour of the research is supported by the validated structure of the instrument, the use of established statistical methods, and the alignment of the research design with the formulated objectives and hypotheses.

However, the study also presents certain limitations. The relatively low response rate may influence the level of generalisation of the results. In addition, the use of employees' perceptions as the main data source implies a certain degree of subjectivity. Nevertheless, these limitations are common in organisational research and do not significantly diminish the analytical value of the results, but rather provide directions for future research.

Another limitation of the research derives from its cross-sectional design, which captures employees' perceptions at a single point in time. Organisational excellence is a dynamic process, and future research should consider longitudinal approaches that allow the analysis of performance evolution and the impact of managerial interventions over time.

Link with previous research

The adopted methodology is consistent with previous studies that have used the Baldrige model to evaluate organisational performance in both public and private sectors. Similar to these studies, the present research integrates employees' perception analysis with the statistical evaluation of relationships between the model criteria, contributing to the consolidation of the external validity of the applied approach.

Results and discussions

This section analyses and discusses the results obtained from the application of the questionnaire based on the Baldrige model criteria within STB S.A., aiming to evaluate the level of organisational excellence and the relationships among the main dimensions of managerial performance. The interpretation of the results is conducted in a critical manner, integrating statistical analysis with comparisons to conclusions reported in the specialised literature.

The results are structured according to the Baldrige criteria and the formulated research hypotheses, highlighting the organisation's strengths, vulnerabilities and strategic implications. The structure of the sample highlights a balanced gender distribution, as well as a significant representation of employees with long professional experience. More than half of the respondents have over ten years of seniority within STB S.A., suggesting that the expressed opinions reflect the perceptions of employees with a high level of familiarity with organisational processes.

Sample characteristics

Table 1 presents the demographic and professional structure of the respondents, indicating a diversified and representative sample.

Table 1. Demographic and professional profile of respondents

Variable	Category	Number of respondents	Percentage (%)
Gender	Female	79	50.30%
	Male	75	47.80%
	Prefer not to answer	3	1.90%
	Total	157	100%
Age category	Under 25 years	3	2.00%
	25–34 years	19	12.10%
	35–44 years	41	26.10%
	45–54 years	44	28.00%
	55 years and above	50	31.80%
	Total	157	100%
Seniority	Less than 1 year	2	1.2%
	1–3 years	26	16.6%
	4–6 years	24	15.3%
	7–10 years	25	15.9%
	More than 10 years	80	51.0%
	Total	157	100%
Position / Occupation	Engineer	39	24.8%
	Economist (HR, finance, accounting)	31	19.7%
	Head of service / section / department	21	13.4%
	Specialist referent	16	10.2%
	IT specialist	6	3.8%
	Legal advisor	5	3.2%
	Technician	5	3.2%
	Psychologist	4	2.5%

Variable	Category	Number of respondents	Percentage (%)
	HR specialist	4	2.5%
	Public procurement expert	3	1.9%
	Auxiliary staff	3	1.9%
	Various occupations	20	12.7%
	Total	157	100%
Education level	Bachelor + Master	120	76.4%
	Bachelor only	7	4.5%
	Advanced postgraduate / PhD	17	10.8%
	High school	12	7.6%
	Other	1	0.6%
	Total	157	100%

Source: Authors' own research.

The age group distribution indicates the predominance of the 45–54 and over 55 segments, confirming the mature character of the organisation's workforce. This demographic structure may influence perceptions regarding organisational change, digitalisation and leadership styles, aspects that are relevant for the subsequent interpretation of the results.

The level of education is predominantly high, with most respondents holding university and postgraduate degrees. This strengthens the validity of the responses, as the participants possess the cognitive and professional capacity required for a critical evaluation of managerial practices.

The diversity of positions held within the organisation confirms the transversal character of the research, including perspectives from technical, economic, legal, IT, human resources and managerial domains. This variety contributes to a balanced assessment of organisational excellence and reduces the risk of a unilateral view of performance (Anghelache, Stefan Virgil Iacob, & Madalina Gabriela Anghel, 2020).

Reliability of the research instrument

The reliability analysis presented in Table 2 confirms the excellent internal consistency of the research instrument.

Table 2. Reliability analysis of the Baldrige-based questionnaire

Baldrige Criterion	Number of items	Cronbach's Alpha
Leadership	5	0.981
Strategy	5	0.982
Customer orientation	5	0.979
Measurement and knowledge management	5	0.985
Workforce	5	0.984
Process management	5	0.986
Results	5	0.987
Overall scale	35	0.989

Source: Authors' own research.

The Cronbach's Alpha coefficient for the overall scale (0.989) indicates an excellent level of internal consistency, exceeding the threshold recommended in the specialised literature. The high values obtained for each Baldrige criterion confirm that the items measure the theoretical dimensions of organisational excellence in a coherent and stable manner (Cortina, 1993).

These results support the methodological validity of the research and allow for the subsequent interpretation of descriptive and inferential analyses with a high level of confidence.

The very high value of Cronbach's Alpha may indicate a strong conceptual coherence between the questionnaire items, which were designed based on the Baldrige criteria structure.

Descriptive results

Descriptive statistics shown in Table 3 indicate a moderate to low level of organisational excellence across most Baldrige criteria.

Table 3. Descriptive statistics for Baldrige criteria

Criterion	Mean	Standard deviation
Leadership	2.91	1.14
Strategy	2.78	1.09
Customer orientation	3.02	1.07
Measurement and knowledge management	2.85	1.11
Workforce	2.96	1.10
Process management	2.88	1.12
Results	2.94	1.09

Source: Authors' own research.

The mean values obtained for each criterion are situated around the neutral level of the scale, indicating predominantly moderate or critical perceptions regarding organisational performance. The Strategy criterion records the lowest mean value, suggesting deficiencies in the formulation, communication and implementation of strategic objectives.

Leadership and process management also present relatively low levels, confirming the perception of existing difficulties in coordinating activities and in orienting the organisation towards integrated performance.

The highest mean value is associated with customer orientation, indicating that the relationship with service beneficiaries represents a relatively more stable area of the organisation, although this level cannot be considered one of excellence (Titan, Simona Ghita, & Cristina Trandás, 2003).

Discussion in relation to previous studies

Compared to international studies that apply the Baldrige model in the public sector, the results obtained for STB S.A. indicate a lower level of organisational maturity. Organisations analysed in other contexts report higher levels of strategic coherence and managerial integration.

This difference can be explained by the particularities of the Romanian context, characterised by institutional rigidity, legislative constraints and a predominantly hierarchical organisational culture. European studies confirm that the transition towards modern management models is a gradual process and strongly dependent on changes in managerial culture.

The results indicate the necessity of implementing an integrated performance management system based on the Baldrige model. Strategic priorities include strengthening participative leadership, increasing strategic transparency and stimulating employee involvement.

The study extends the applicability of the Baldrige model in the field of public transport in Romania and confirms its systemic character, which is superior to fragmented approaches.

Overall, STB S.A. is in an intermediate stage of organisational maturity, characterised by the existence of isolated good practices and the lack of a coherent organisational excellence system. The research hypotheses are validated, confirming the central role of leadership, strategy and workforce in organisational performance.

Conclusion

The present study aimed to evaluate the level of organisational excellence within Societatea de Transport București (STB S.A.) by applying the Baldrige Excellence Framework, in a context characterised by increasing pressure on public services to improve efficiency, quality, and sustainability. The results confirm the usefulness of the Baldrige model as an integrated tool for analysing organisational performance and highlight the importance of leadership, strategy, and employee involvement in shaping organisational outcomes.

From an empirical perspective, the findings suggest that STB S.A. is currently at an intermediate stage of organisational maturity. Although certain functional areas display relatively stable levels of performance, the overall picture indicates the absence of a fully coherent and integrated management system. In particular, aspects such as strategic alignment, participative leadership, and internal communication require further attention.

The results also reflect a degree of organisational instability, largely influenced by the frequent and successive interim appointments of the general director from 2010 to the present, which have contributed to the lack of a consistent management system and continuity in a clear strategic direction.

These findings should be interpreted in connection with the broader organisational context, marked by financial constraints and ongoing institutional challenges. In this sense, the study does not aim to provide a definitive assessment, but rather to contribute to a more nuanced understanding of how internal managerial dimensions influence performance. The recent decision to conduct a technical and economic audit further underlines the relevance of such analyses.

From a practical perspective, the research highlights several directions that may support organisational improvement, including strengthening leadership practices, enhancing strategic transparency, and encouraging greater employee involvement in decision-making processes. At the same time, the findings suggest that implementing an integrated performance management system requires not only formal structures, but also gradual changes in organisational culture.

From a theoretical perspective, the study contributes to extending the applicability of the Baldrige model in the context of public transport organisations in Romania and reinforces the idea that organisational excellence should be understood as a continuous process rather than a fixed state, dependent on the interaction between multiple managerial dimensions.

Nevertheless, the study has certain limitations. The relatively low response rate may affect the generalisability of the results, while the reliance on employees' perceptions introduces a degree of subjectivity. In addition, the cross-sectional design does not allow for the analysis of performance evolution over time. These limitations, however, open up directions for future research.

Future studies could extend the analysis to multiple public transport organisations, include longitudinal data, or incorporate the perspectives of other stakeholders, such as service users and decision-makers. Comparative analyses between different performance evaluation models may also provide additional insights.

In conclusion, organisational excellence in the public transport sector should not be viewed as an abstract objective, but as a gradual and context-dependent process. The findings of this study suggest that, although challenges remain, structured frameworks such as the Baldrige model can play a meaningful role in supporting organisational development and improving the quality of public services.

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