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From Price to Value: Implementing Best Value Procurement in the Czech Public Sector—A Case Study with Survey Insights

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Abstract

This paper explores the implementation of the Best Value Approach in public procurement, particularly in construction projects, with a focus on its application at Brno University of Technology. This study addresses the need for qualitative evaluation criteria in supplier selection to improve project outcomes and mitigate risks. The key problem addressed in this paper is the use of qualitative methods in selecting suitable contractors for public contracts. As the main methods, a descriptive mixed-methods study that includes a narrative overview and two descriptive cross-sectional surveys were adopted. Drawing on theoretical foundations such as Information Measurement Theory and the Kashiwagi Solution Model, this paper outlines the principles and processes of BVA, including its emphasis on transparency, expert-driven decision-making, and risk management. The results show that BVA enhances procurement quality by reducing reliance on lowest-price criteria, encouraging realistic pricing, and fostering deeper bidder engagement. The surveys reveal growing interest in qualitative methods but also highlight limited awareness and experience with BVA in the Czech Republic. Pilot projects confirmed the method's effectiveness and informed procedural refinements. This paper concludes that successful BVA implementation requires a paradigm shift, leadership support, education, and continuous improvement. BVA principles offer tools for cultivating transparency, efficiency, and quality in public procurement.

Keywords: best value approach; construction procurement; risk management; evaluation criteria; construction projects; project efficiency; transparency

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1. Introduction

Public procurement in the Czech Republic has long been oriented towards the lowest bid price criterion, which is unable to consider factors other than the price characteristics of the bid [1]. This article is therefore focused on evaluating the possibilities of using qualitative criteria. The identified possibilities are subsequently applied to case studies implemented by a public investor, where the authors concentrate on the use of qualitative evaluation of public contracts through the Best Value Approach (BVA). The BVA method enables work with potential project risks already present during the preparation of the contract, i.e., during the supplier selection process, and connects three key themes: framework–project management, public procurement, and risk management [2].

Procurement using the BVA method is still a novelty in the Czech Republic, and no plan has yet been announced for its broader deployment by any state organizational unit, as has happened in countries like the Netherlands or Norway. However, the method has successfully been used and developed in several places in the Czech Republic. One such

place is Brno University of Technology (BUT), which has been using the BVA method since 2018 for selected contracts, not only in construction but also in cleaning or security services, IT, marketing, and even for a university-wide sustainability study.

The research conducted by the authors of this article so far has focused mainly on research and obtaining information about the possibilities of using qualitative analysis in the organization of selection procedures by public institutions. The goal was to collect sufficient data to be able to define one's own procedure for using qualitative methods (specifically BVA) at BUT. This article presents these solutions, including their application in pilot projects.

The research gap identified in the presented research lies in the still-missing transfer of experience with the use of a qualitative approach in tender procedures found in the Netherlands or Norway to the conditions of the Czech Republic, where, according to experience, the evaluation of contracts based on the bid price is prioritized.

The main goal of this paper is to create a structured framework that places the application of qualitative criteria for evaluating construction projects and their potential suppliers into a broader context. The work focuses on the theoretical explanation and practical description of these principles and provides methodological recommendations for public sector stakeholders interested in applying a qualitative approach in public procurement evaluation.

The authors formulated the key research question as follows:

"What key factors and procedures ensure effective implementation of the Best Value Approach in public sector organizations?"

A list of objectives is presented below:

- Determining the awareness of public procurement authorities and construction contractors about the possibilities of applying qualitative methods in public procurement.
- Defining the possibilities of applying the BVA in the conditions of Czech public contracting authorities.
- Definition of key activities required for using the BVA in the case of a specific contracting authority.
- Description of the advantages and disadvantages of the defined approach.
- Verification of the use of the BVA in a case study.

This is a descriptive mixed-methods study that includes a narrative overview, two descriptive cross-sectional surveys focused on the use of qualitative methods by public contracting authorities and the experiences of suppliers with these methods, a proposal for the use of BVA at BUT, and a case study of the implementation of the BVA method for two pilot projects implemented at BUT.

In the following parts of the text, a detailed analysis of the current state is carried out, within which the authors focus on the available documents oriented towards the use of qualitative methods in the process of selecting a suitable contractor for a construction contract, both in the Czech Republic and abroad. This is followed by a part focused on the methods used, oriented mainly towards the theoretical basis of the BVA method and the recommended settings of individual criteria. In the part focused on the results, the authors subsequently present the results of a questionnaire survey focused on the experiences of contracting authorities and contractors with qualitative approaches in public procurement and the recommended procedure for using the BVA method. Processed case studies are also presented here. The discussion then includes a summary of the advantages and disadvantages of the approaches considered. The conclusion then includes a summary of the entire issue and practical recommendations for using the BVA method in the case of a public contracting authority. The authors also comment on the achievement of the objectives of the work and any limitations in the presented research.

2. State of the Art

The issue of public procurement is addressed by a wide range of academic publications. These works explore trends in public procurement, the potential use of qualitative methods including the BVA, the digitization of procurement procedures, and their connection to the long-term sustainability of tendered projects.

A comprehensive study presenting findings from a research survey on public procurement in the above-threshold regime in the Czech Republic conducted in May 2023 provides a panoramic view of the current state of public procurement, covering aspects such as procurement methods, funding sources, cost considerations, and time allocation. The study reveals significant trends and patterns in the procurement process and offers a deep understanding of prevailing practices and challenges. It also examines the complexities of selecting procurement methods, preparing tender documentation, communicating with bidders, and handling appeals [1].

2.1. Experiences with the BVA Abroad

Norway and the Netherlands have extensive experience with Best Value Procurement [3]. The use of the BVA in construction practice is discussed by the authors of article [4]. The aim of this investigation is to explore the differences between the "Best Value Approach" and "Best Value Procurement" and to test whether the BVA can be used for the successful delivery of specific supplies in the field of roofing systems. The BVA has been applied in roofing services for many years. However, in the past three years, it has been found that the BVA is not sustainable and is full of risks. The suitability of using the BVA for the successful delivery of roofing systems was tested on a new industrial roof project covering 70,000 square feet in the Phoenix metropolitan area. The case study confirmed the appropriateness of the BVA for such projects [4].

The next contribution focuses on how to reduce costs and increase project value through the BVA. A performance-based research group using an industry structure model identified that the problem lies in a "client-centered" approach, where the client acts as the expert and uses a price-based method. The model shows that if the client submits a request for a proposal and leverages the expertise of suppliers, performance can be improved and project costs reduced. This BVA was used in an article as a tool to meet the requirements for cleaning services in the city of Colorado [1].

According to the next contribution, construction companies have lost millions of dollars in recent years due to poor project management performance. The BVA system is one of the few documented systems that demonstrate improved project management performance. It has been used in over 2000 projects with 98% customer satisfaction in terms of cost reduction, time savings, reduced effort, and improved project quality. The BVA system is also the most licensed technology at Arizona State University, with 65 licenses [5].

The authors of the next article focus on the effectiveness of public construction procurement in Norway. Public procurement of construction works represents a large portion of public sector investment and, according to the authors, affects both society and participants in the construction industry. Despite this, public construction projects in Norway tend to be delayed and over budget. The sector is also characterized by traditional adversarial behavior, but in the past two decades, it has been moving toward collaboration and a more integrated approach. Achieving collaborative relationships in construction is challenging due to one-off contracts and short-term gains. The research presented in this publication explores how the BVA could enable collaboration between the client and the main contractor in a construction project. The issue is addressed through a case study of the Omsorgsbygg project using semi-structured interviews [6,7].

Several studies have explored the use of the BVA in highway construction projects. Such projects have historically been awarded based on the lowest bid price. Although this method encouraged competition among bidders, many stakeholders questioned whether it truly delivered the best value for the money spent. BVA-based procurement is one of several alternative methods used in highway construction to overcome the shortcomings of price-only procurement. The BVA requires subjective evaluation of technical proposals and combines technical factors with price to select the bidder offering the best value to the owner. The study aimed to explore the use of the BVA and identify the best practices for developing transparent procedures for selecting the most advantageous offer in highway construction projects. The findings were validated through four case studies [8].

Other authors highlight that the Vietnamese construction industry faces risks that cause delays, budget overruns, and low customer satisfaction, requiring continuous risk management. The presented study evaluates the current state of Vietnam's construction industry in terms of performance, common risks, and success factors, and explores the potential of using the BVA—an innovative technology for public procurement and project management—to improve overall performance. Risk factors were identified through a survey covering 23 common risks that lead to poor performance in construction projects in developing countries. The factors were compiled from extensive literature reviews and input from 103 construction professionals in Vietnam [9].

The next study identifies barriers to establishing a stewardship relationship between client and contractor, as opposed to the traditional principal–agent model, through the implementation of the BVA method. According to the article, the BVA focuses on building trust based on rational analysis using metrics and aligning goals and risks between client and contractor. The barriers to implementing stewardship are analyzed using a theoretical framework that includes agency theory and stewardship theory. Data were collected between 2013 and 2014 through project documentation and interviews for four case studies at the Dutch highway authority [10].

Research presented in other sources revealed a lack of understanding of the strategic goals of owners and users, and a lack of methodology for translating these goals into functional buildings. Achieving these goals is essential for creating value through a project. Management and design processes can be decisive in reaching desired outcomes. Knowledge of what creates value, applied within a management framework, enables higher value creation. The framework developed using two surveys, eight interviews, two case studies, and a focus group workshop proposes principles that contribute to value creation at every project stage. Implementing this methodology helps decision-makers better understand goals and translate them into functional solutions [11].

The analysis of available studies confirms that the effective implementation of the Best Value Approach (BVA) in public sector organizations depends on several key factors and procedures. Among the most significant are the client's ability to shift from traditional price-based evaluation to leveraging supplier expertise, the establishment of transparent selection procedures, an emphasis on measurable performance indicators, and the building of trust between client and contractor. Case studies from various sectors (construction, cleaning services, infrastructure) demonstrate that the BVA can lead to cost reduction, improved quality, and higher customer satisfaction when properly applied. The research question is thus addressed through the identification of specific conditions and practices that support successful BVA adoption in practice.

2.2. Public Procurement Process and Its Digitalization

Electronic reverse auctions (e-RAs) are considered an effective tool for negotiating bid prices and achieving cost savings. It is expected that if multi-criteria evaluation is used,

e-RAs will also contribute to advantages in other areas, such as minimizing life-cycle costs. This study aims to analyze the relationships between selected e-RA variables [12,13].

Similar articles also focus on the use of e-RAs as a tool for achieving financial savings. In this study, the authors examine the relationships between various active e-RA variables and test predictive models to estimate the level of savings in public construction contracts. Data from real construction auctions in Slovakia were statistically analyzed using graphical tools, multiple regression analysis, tests, and statistics to measure associations between categorical variables. The results showed that when considering the use of e-RAs, the type of contract must be considered [14].

E-RAs represent an innovative yet controversial tool in public procurement in construction. This study summarizes insights into their use with an emphasis on industry specifics, identifying five key areas: the suitability of eRAs, barriers, ethical issues, savings, and bidding behavior. A systematic literature review shows that eRAs can influence project outcomes both positively and negatively. The authors suggest focusing future research on the long-term impacts of eRAs and their interaction with tendering processes. A key topic remains the balance between transparency, efficiency, and quality of outcomes [15].

The construction industry is modernizing, and electronic public procurement (e-procurement) is becoming a key tool for increasing efficiency. A study from Zimbabwe identified major barriers to its implementation in the public sector—a lack of software, negative attitudes toward technology, and weak IT infrastructure. Other barriers include lack of leadership support, technical knowledge, training, and legal frameworks. Factor analysis revealed six main problem areas, including organizational policy, budget constraints, and weak government support. Public institutions still rely on paper-based processes, which hinder digitalization. Successful implementation of e-procurement requires e-government reform, staff training, and strong public–private partnerships. The study emphasizes that without these steps, the potential of e-procurement will remain untapped [16].

E-procurement is expanding globally as a tool for streamlining supply chain management. In sub-Saharan Africa, where public procurement is burdened by corruption, its potential as an anti-corruption tool is being explored. A study from Nigeria identified 18 anti-corruption benefits of e-procurement, the most significant being transparent inventory records, accountability through audits, and reduced direct human contact during tenders. E-procurement increases transparency and competition, and it reduces opportunities for manipulation. Compared to paper-based methods, it offers greater control and traceability. The results show that e-procurement can significantly contribute to reducing unethical practices in construction projects. However, effective use requires broader implementation and institutional support [17].

The aim of a study during the COVID-19 pandemic was to determine whether investments in digital procurement increased the economic resilience of companies in the manufacturing industry during the COVID-19 pandemic. Research conducted in 2021 using a questionnaire survey and statistical tests (ANOVA, chi-square) did not demonstrate any significant correlation. Digitalization of procurement had no greater impact on the resilience of manufacturing companies compared to construction and agriculture. The results can be used to set realistic expectations for the digitalization of procurement processes. A limitation of the study is its focus solely on the Czech manufacturing industry and the pandemic period [18].

Public procurement of construction works has so far only limitedly reflected the potential of digitalization, specially Building Information Modeling (BIM). This leads to inefficient utilization of its benefits. Successful implementation of BIM requires a comprehensive framework and high-quality documentation that enables integration with traditional procurement procedures. However, professional research lacks specific guidelines on how

to integrate BIM into public procurement in accordance with applicable standards and regulations. This research therefore proposes a systematic approach that includes literature analysis, expert interviews, the creation of a BIM-integrated procurement framework (BIM—Building Information Modeling), and a model document with BIM specifications. This framework is based on ISO 19650 standards [19] and the European Directive 2014/24/EU and is applicable to both the public and private sectors. Emphasis is placed on Exchange Information Requirements (EIRs), which shape the competitive environment of the procurement process. The conclusion states that full contractual implementation of BIM requires that information from digital models take precedence over traditional 2D drawings [20].

The reviewed studies highlight that digital tools such as e-RAs, e-procurement systems, and BIM can significantly enhance the effectiveness of public procurement when properly implemented. Key factors for the successful adoption of the BVA in public sector organizations include the integration of multi-criteria evaluation, transparency, institutional support, and digital infrastructure readiness. Barriers such as lack of technical knowledge, inadequate legal frameworks, and resistance to change must be addressed to unlock the full potential of these technologies. Furthermore, the alignment of digital procurement tools with BVA principles—such as performance-based evaluation and supplier expertise—can lead to improved project outcomes, cost savings, and reduced corruption. These findings directly support the research question by identifying the critical factors and procedures that ensure the effective implementation of BVA in public sector environments.

2.3. Public Procurement in Relation to the Sustainability of Implemented Projects

Another study examines key factors influencing Lean Procurement (LP) in construction projects in India using the Total Interpretive Structural Modeling (TISM) method. Ten readiness factors were identified that help managers identify weaknesses in areas such as procurement, inventory, and revenue. The most important factor turned out to be supplier selection. Hierarchical analysis of relationships between factors enables more effective planning of LP implementation. The results provide practical guidance for construction project managers in implementing LP. The study emphasizes the need to focus on specific readiness areas before starting LP. It is the first study linking LP and TISM in the context of construction projects. The findings can serve as a scientific basis for effective public procurement in construction [21].

The construction industry, as a major consumer of resources and energy, is a central point in the debate on sustainable development. The Sustainable Development Goals provide the construction industry with an overarching guide to support sustainability from environmental, social, and economic perspectives. Moreover, sustainable consumption and production are emphasized in Sustainable Development Goal 12 (SDG 12), while sustainable public procurement focuses on promoting sustainability through procurement processes and decisions. However, little has been written about how the construction industry could turn SP challenges into opportunities that support procurement practices aligned with national policies and priorities [22].

Green Public Procurement (GPP) is becoming a key tool of environmental policy across the EU and is being incorporated into national action plans. A literature review in construction revealed a lack of research in systemic modeling and economic evaluation that includes social and environmental costs. The study identified various factors and barriers hindering GPP implementation, including organizational, technical, and behavioral aspects. The theoretical framework used enabled a broader view of variables influencing GPP. The research highlights the need to expand evaluation methods and focus on practical tools for effective GPP implementation in construction. The conclusions also suggest directions for future research and support for sustainable procurement [23].

Construction activities have significant environmental impacts, especially in waste production, which leads to pressure for sustainable practices. Another study focuses on Sustainable Public Procurement Management (SPM) and the role of project offices in the private sector. Based on a literature review and qualitative survey, 17 sustainability requirements were identified. Project offices support collaboration, improve decision-making, and facilitate the implementation of sustainable procurement processes. The results contribute to the theoretical understanding of SPM principles and their practical application [24].

Implementing sustainable public procurement in construction is a complex process that has not yet been sufficiently explored in a multi-level context. Another study developed and empirically tested a model for adopting sustainable public procurement in construction based on data from 193 public sector respondents. Using structural modeling, key factors influencing decisions to adopt sustainable practices were identified. The model provides practical guidance for managers and policymakers in implementing sustainable procurement. The research offers an original approach to understanding technological, organizational, and environmental aspects of sustainability in construction organizations [25].

The construction sector plays a key role in sustainable development, but public procurement of construction works regarding sustainability is complex. Another study examines the potential of developers (both public and private) to implement sustainability principles in technical specifications, evaluation criteria, and procurement processes. The greatest willingness was observed in technical specifications, while process implementation was the most challenging. The research used questionnaires, interviews, and document analysis. The results provide insights into barriers and opportunities for sustainable procurement in construction [26].

Social Public Procurement (SP) is becoming a global tool for increasing the value of public projects. Another study examines the understanding of SP among suppliers in Botswana and identifies its main drivers. SP is perceived more as an expression of social responsibility than as a structured process governed by policies. Compliance with regulations is the main motivation for its application. The research contributes to the development of awareness of SP and its implementation in the local construction sector [27].

Sustainable public procurement in construction is still a new approach in Indonesia, despite its crucial importance for improving the environmental and economic performance of projects. Another study identified four key success factors—strategies, organization, capacity, and finance—and analyzed their priorities using the Analytic Hierarchy Process (AHP). The research shows that proper resource allocation and overcoming barriers in these areas are keys to successful implementation. Data was collected through a combination of literature review, expert evaluations, and a questionnaire survey. The results provide a practical framework for improving sustainable procurement in construction projects [28].

The studies reviewed emphasize that effective implementation of the BVA in public sector organizations is closely linked to broader procurement strategies such as LP, GPP, and SP. Key factors include readiness in supplier selection, organizational capacity, digital infrastructure, and alignment with sustainability goals. Barriers such as lack of technical expertise, insufficient policy frameworks, and limited stakeholder engagement must be addressed. The integration of sustainability principles into procurement processes—through technical specifications, evaluation criteria, and collaborative project management—supports value creation and long-term performance. These findings contribute to answering the research question by identifying critical success factors and procedures that enhance the implementation of the BVA in public sector construction projects, especially when combined with sustainable and lean procurement practices.

2.4. EPC (Engineering, Procurement, Construction) Projects

EPC project contractors face high risks due to unbalanced contractual methods, such as lump-sum deliveries and low-price selection. Another study presents a digital tool for analyzing risk provisions in contracts, based on artificial intelligence. The modules used automatically identify risky clauses using text mining and machine learning techniques. Pilot tests demonstrated higher accuracy and speed compared to manual analysis. The results confirm the potential of digital tools for effective risk management in EPC projects [29].

Public procurement in the form of EPC has become common practice in infrastructure projects under the Belt and Road Initiative (BRI), especially in Western Asia. Another study analyzes the current state of EPC using SWOT analysis and interviews with stakeholders. Identified issues include low levels of managerial practice, weak coordination, and high communication costs. The outcome is four strategic recommendations for EPC development in the region. The study offers a new perspective on strategic management of EPC projects in the context of international cooperation [30].

Effective implementation of the BVA in public sector organizations requires strategic risk management and coordination, especially in EPC projects. AI-based tools improve contract analysis and risk detection, while strategic planning helps address managerial and communication challenges. These findings highlight technology, stakeholder engagement, and structured management as key factors supporting successful BVA adoption in complex infrastructure procurement.

2.5. BVA—Historical Consequences

The BVA method has been successfully used in the Netherlands since 2004 as a response to problems with fraud and non-transparent public procurement. A key role in its implementation was played by the Rijkswaterstaat, a government agency that is the executive arm of the Dutch Ministry of Infrastructure and Water Management. This organization, with a history dating back to 1798, is currently responsible for planning, construction, and management of transport and water infrastructure, and annually carries out projects worth EUR 3 to 4 billion (approximately CZK 75 to 100 billion) [31].

Although the Czech Republic and the Netherlands have undergone different historical developments, they now share many common features—EU membership, a legal framework for public procurement, and democratic principles. While the Netherlands has experienced continuous development as a Western market society, the Czech Republic has gradually approached Western economies since 1989 and is adapting proven principles, including public procurement culture.

EU Directive No. 2014/24/EU [32], transposed into the Czech Public Procurement Act of 2016 [33], creates a legal framework that is fully compatible with the BVA method. The emphasis on the most economically advantageous tender, qualification of key personnel, and quality of services fully aligns with BVA principles.

From a legal and technical standpoint, there is nothing preventing the expansion of this method in the Czech Republic. However, challenges remain in the social and institutional setup—particularly in overcoming entrenched habits, the focus on price, and concerns about innovative approaches. Pilot projects, however, show that change is possible in the Czech Republic as well [34].

2.6. Comparative Analysis of Literature Sources

Table 1 presents a comparative analysis of the reviewed references. Mail orientations of publications with a determination of common features are presented.

Table 1. Comparative analysis of references.

Ref n.	Type of Reference	Topic of Reference	BVA Included	Case Study Included	Czech Environment
1	Journal article	Experiences with the BVA	YES	NO	NO
2	Journal article	Procurement	NO	NO	YES
3	Dissertation	Experiences with the BVA	YES	YES	NO
4	Journal article	Experiences with the BVA	YES	YES	NO
5	Journal article	Experiences with the BVA	YES	NO	NO
6	Journal article	Experiences with the BVA	YES	YES	NO
7	Journal article	Experiences with the BVA	YES	YES	NO
8	Dissertation	Experiences with the BVA	YES	NO	NO
9	Dissertation	Experiences with the BVA	YES	NO	NO
10	Journal article	Experiences with the BVA	YES	NO	NO
11	Journal article	Experiences with the BVA	YES	NO	NO
12	Journal article	Public procurement and digitalization	NO	NO	YES
13	Journal article	Public procurement and digitalization	NO	NO	YES
14	Journal article	Public procurement and digitalization	NO	NO	NO
15	Journal article	Public procurement and digitalization	NO	NO	NO
16	Journal article	Public procurement and digitalization	NO	NO	YES
17	Journal article	Public procurement and digitalization	NO	NO	YES
18	Journal article	Public procurement and digitalization	NO	NO	YES
19	Journal article	Public procurement and digitalization	NO	NO	NO
20	Journal article	Public procurement and sustainability	NO	NO	NO
21	Journal article	Public procurement and sustainability	NO	NO	NO
22	Journal article	Public procurement and sustainability	NO	NO	NO
23	Journal article	Public procurement and sustainability	NO	NO	NO
24	Journal article	Public procurement and sustainability	NO	NO	NO
25	Journal article	Public procurement and sustainability	NO	YES	NO
26	Journal article	Public procurement and sustainability	NO	NO	NO
27	Conference paper	Public procurement and sustainability	NO	NO	NO
28	Journal article	EPC projects	NO	NO	NO
29	Journal article	EPC projects	NO	YES	NO
30	Methodology	Procurement	NO	NO	NO
31	EU Directive	Procurement	NO	NO	NO
32	Act	Procurement	NO	NO	YES
33	Journal article	Procurement	YES	NO	YES

From Table 1, it is clear that the issue of public procurement is addressed by many authors from various perspectives (qualitative assessment, digitalization, consideration of social and environmental impacts, EPC projects). At the same time, it is possible to state that a significant number of the authors are directly concerned with the problem of using the BVA, and several case studies have even been prepared here. Studies involving qualitative methods, and especially the BVA method, have been conducted in several countries. The most examples can be found in the Netherlands and Norway, countries where the BVA method is widely used. Attention should also be paid to the USA, which is represented by case studies of the application of roofing systems in Phoenix, cleaning services in Colorado, and licensed technologies at Arizona State University. However, examples can also be found in the construction industry in Vietnam. However, only a few authors are concerned with the environment of the Czech Republic, and no cases of authors dealing with the application of the BVA method in early conditions were found. For this reason, the presented article seems to be a suitable introduction to opening the issue of public procurement in the Czech Republic.

3. Materials and Methods

3.1. BVA Context

Compared to standard approaches in public procurement, the BVA introduces a new and innovative method for supplier tenders in both the public and private sectors. It is not limited to construction works; it can also be applied to IT, maintenance services, security and cleaning services, public relations projects, marketing, and other types of contracts. The BVA model is designed to increase the overall value of a project through transparency and to enable better risk management and mitigation. The goal is to select a supplier—an expert—who can best fulfill the client's intentions and achieve a win–win relationship.

However, adopting and applying for the BVA requires a paradigm shift [35].

A paradigm is generally defined as a set of shared beliefs, values, thought patterns, or methods. Within a particular field, science, or organization, a paradigm represents the dominant way of viewing, explaining, managing, and solving problems.

Implementing the BVA thus requires changing traditional thinking and approaches to supplier selection and project management. While traditional methods often emphasize specifications, control, and supervision, the BVA focuses on outcomes, risk minimization, and trust in supplier expertise. This shift requires moving from a controlling and authoritative management style to one that relies on transparency, measurable outputs, and supplier accountability—like what was successfully achieved in the Netherlands.

3.2. The Problem of Abnormally Low Bid Prices

It is not uncommon for public contracts to be executed by low-quality suppliers at very low prices. There are several reasons for this. Systemic settings often force public contracting authorities to choose tenders where the lowest price wins. Financial and time parameters are often poorly defined, and major risks are not properly considered, evaluated, or mitigated. Tender documentation, including project designs and bills of quantities, frequently contains numerous errors.

On the bidder's side, there may be attempts to win contracts under any conditions and then seek compensation through additional work. In other cases, it may be a matter of survival, securing work, income, and utilization of human and machine resources, even temporarily.

An abnormally low price thus poses a significant risk to the entire project. Long-term practice shows that its consequences can be severe.

One way to counter these risks and negative impacts is to use multi-criteria—qualitative evaluation of the contract, which should ease the pressure on price criteria and reduce the success rate of extremely low-price bids.

3.3. Quality in Construction Projects

Quality in construction is a crucial aspect that affects not only the execution but also the overall success of the investment plan. A construction project is the result of long-term collaboration among many entities, and the true quality of the work often becomes apparent only over time.

Poor quality leads not only to technical and operational problems but also to economic losses, reputational damage, and limitations on future business opportunities. Low prices for design and construction work often result in a proportional decline in quality [36].

Persistent distrust toward public contracting authorities and fear of experimentation contribute to a tendency to decide based on the lowest bid price, regardless of the long-term value and efficiency of the work [37].

A quality outcome requires a professionally prepared process. The contracting authority should ensure qualified personnel for both preparation and evaluation of the contract,

either internally or through external expertise. In public procurement, good final quality of a construction project can be ensured and supported through three basic elements:

- High-quality project documentation aligned with the client's intentions;
- Classification requirements emphasizing professional competence;
- Qualitative evaluation.

Simpler methods of quality assessment include evaluating the experience of key personnel of the bidder. The BVA, which evaluates not only price but also expertise, risk awareness, capabilities of key personnel, and potential added value, represents a more comprehensive approach.

3.4. Subjectivity in Evaluation

The BVA method incorporates elements of subjective evaluation, which is perceived as unusual in the Czech public procurement environment. In engineering fields such as construction, there is traditionally a strong emphasis on exact, measurable criteria. Applying the BVA requires a change in mindset among all participants—contracting authorities, evaluators, and bidders.

Advantages of subjective evaluation include flexibility, speed, and personal insight. Disadvantages include the risk of bias, inconsistency, and difficulty in repeatability and auditability. Decision-making is naturally influenced by both rational and emotional components. Emotions often determine which rational arguments will be used [38].

To avoid the bias and inconsistency in decision-making it is possible to apply the following:

- Calibration Sessions (Pre-evaluation Workshops)
  to organize joint sessions before formal evaluation begins;
- Use of Evaluation Rubrics
  to develop detailed scoring rubrics with clear descriptors for each score level;
- Statistical Reliability Measures
  to apply inter-rater reliability metrics to quantify consistency.

3.5. Our Analysis of Above-Threshold Public Construction Contracts

An analysis of above-threshold public construction contracts awarded in the Czech Republic in 2022 and 2023 shows a prevailing emphasis on lowest bid price as the main evaluation criterion. The data comes from the ROZZA portal. The ROZZA portal is a platform integrating electronic tools for public procurement and unifying data on contracts and their structure. This simplifies access to data and contributes to increasing the transparency of public procurement in the Czech Republic. Data from contracting authorities publishing contracts via the electronic tools Tender arena, E-ZAK, Portal for Appropriate Publication, Tendermarket, Gemin.cz and NEN are transferred to ROZZA. The ROZZA portal is managed by the Ministry for Regional Development of the Czech Republic. At the time of data download (July 2024), the portal registered 17,824 contracting authorities and 967,932 public contracts [39].

The tender documentation of all above-limit public contracts for construction works registered in ROZZA and announced in 2022 and 2023 was filtered and downloaded through the portal. "The value in CZK" shown in Table 1 corresponds to the expected value determined by the contracting authority. "The number of contracts" express number of contracts using specific criterion.

The results of the analysis are presented in Table 2.

Table 2. Evaluation criteria table for above-threshold construction contracts in 2022 and 2023.

Criteria	Value in CZK	Value in %	Number of Contracts
Bid price	88,328,313,431	95.84	179
Experience of the team member(s)	1,670,187,786	1.81	13
Shortening of single-track operation	632,675,618	0.69	1
Operational criterion	553,808,946	0.60	2
Theoretical total annual electricity production	211,500,000	0.23	1
Key person interview	139,594,227	0.15	4
Professional level	138,704,652	0.15	2
Shortening the construction period	122,471,558	0.13	6
Risks	104,661,002	0.11	3
Warranty extension	83,227,092	0.09	4
Operational costs and the life cycle of the construction	47,600,000	0.05	1
Length of experience of team member(s)	43,023,843	0.05	2
Development of project documentation	35,250,000	0.04	1
Certification	28,425,381	0.03	3
Costs of future service work	11,005,000	0.01	1
Environmental aspect	9,000,000	0.01	1
Inclusion of disadvantaged people in the labor market	4,163,167	0.00	1
In Total	92,163,611,704	100	---

Based on the conducted analysis, it can be observed that the recalculated volume of the total estimated values of contracts tendered using the price criterion amounts to CZK 88,328,313,431 excluding VAT, which represents 95.84% of the total value. The recalculated volume of other, non-price criteria is CZK 3,835,298,273, excluding VAT, representing only 4.16%. Furthermore, the criterion "Bid Price" was used in all 179 contracts. A total of 149 contracts were tendered based solely on price. Only 30 contracts included additional criterion. Thus, 149/179 offers were only related to price, and only 30 used other criteria.

In relation to the BVA method, it was found that during the period analyzed, only two contracts were announced using this method.

3.6. Theoretical Foundations of the Best Value Approach

The Best Value Approach is built on two key theories: Information Measurement Theory (IMT) and the Kashiwagi Solution Model (KSM). These theories form the foundational framework for identifying and effectively utilizing information in risk management and problem-solving within projects.

IMT focuses on a logical approach to events, where the use of relevant information minimizes subjective decision-making and contributes to predictability. The KSM theory applies IMT principles to individuals, categorizing personalities based on their ability to perceive and apply information, thereby creating different role types necessary for successful project management.

IMT is based on the belief that individuals who are unable to perceive information create the false impression that information is missing. The theory provides a logical framework for tracking events using key data, minimizing subjective decisions, and optimizing processes with the goal of reducing the need for management and control of others. All events are predictable if relevant information is available. IMT enables the identification of risks and more accurate prediction of their impacts through effective information handling.

A key conclusion from IMT is the assertion that increased decision-making raises project risks. This principle, expressed as "If decision making goes up, risk goes up," emphasizes that the more a project relies on subjective decisions, the higher the likelihood

of errors and unpredictable outcomes. IMT thus forms the basis for project management aligned with the BVA [40].

The KSM builds on IMT and applies its principles to individual traits in project management. It focuses on differences in information handling and individuals' ability to respond effectively to change. The KSM describes the learning cycle as a process involving perception, processing, and application of information, which leads to a change in thinking. The speed of repeating this cycle determines a person's ability to adapt and grow.

The KSM is used to identify key individuals in project management. For success—especially in construction—it is essential to have Type A individuals on the team, experts who effectively use information and apply logic and common sense in everything they do. By applying IMT principles, they ensure smooth progress and successful project completion. They solve problems simply, adapt, and minimize risks. They believe in a win–win state. They are leaders, not "programmed managers." [40]

The Best Value Approach focuses on identifying the right experts (individuals and entities) with the highest quality, maximum experience, and strong communication skills.

The BVA-based supplier selection system consists of four basic phases:

1. Pre-Qualification—an explanatory and educational phase, e.g., through market consultations (optional).
2. Selection—the bidder submits; level of expertise (LE), risk assessment plan (RA), value added (VA), bid price, and an interview is conducted with the bidder's key person.
3. Clarification—verification and detailed clarification of the offer, technical details, schedule, milestones, submission of the risk management plan and weekly risk report (WRR).
4. Execution—setting the environment, execution, and signing of the contract [35].

The basic criteria and weights for selecting the best supplier (as proposed by the BVA method author) are presented below.

- Level of Expertise 30%
- Risk Assessment Plan 20%
- Value Added 10%
- Interview with Key Person 30%
- Bid Price 10%

4. Results

4.1. Survey of Expert Opinions

This section summarizes the results of two surveys focused on processes, quality, and efficiency in public procurement, evaluation criteria, and the level of bid assessment. Part of the questions also addressed the BVA and the use of risk identification as an evaluation criterion. Without this type of verification, implementation could be judged only subjectively, without real contact with practical experience, which could reduce trust in the method and lead to underutilization of its full potential. The presented questionnaire surveys and their results do not form a key part of the outputs of the contribution presented. They are included here mainly to point out the importance of the issues addressed in

construction practice. Questionnaire surveys are only indicative in nature. Their aim is not to conduct a detailed statistical survey, but rather to point out the topicality and importance of the issues being addressed in construction practice.

Survey among public contracting authorities

The questionnaire was prepared in 2023 and was sent electronically to public contracting authorities. Respondents were informed that this was research related to public procurement in the construction sector and that we were focusing on collecting information on the complexity of preparing and administering public procurement contracts and on multi-criteria evaluation.

The parameters of the questionnaire survey are as follows:

- Respondents were members of the Public Procurement Association and contracting authorities affiliated with the Platform for Responsible Public Procurement (113 members).
- The survey was conducted from 17 May 2023 to 30 May 2023 using the Survio application.
- The questionnaire was attended by 61 respondents and completed by 27 of them (the overall success rate of completing the questionnaire was 44.3%).
- The survey included a total of 37 questions.

Representatives of 24 public, 2 sectoral, 1 subsidized, and 1 unidentified contracting authority participated in the questionnaire survey. Most of them were public institutions, regional or local authorities, or regional or local authorities and agencies. Their main activity focuses on services for the public, education, healthcare, the environment, and other unspecified activities. In cases of dealing with the selection of construction works contracts, these were land constructions (81.5%), transport and underground constructions (22.2%), water management constructions (14.8%), special constructions (14.8%), and other constructions (7.4%). The main financial sources for the implementation of construction contracts were identified as public resources belonging to oneself, subsidies from EU funds, and subsidies from state budget chapters. Loans and credits were also used to a lesser extent. The responses received showed that there were several contracting authorities who were focused on various activities, but in the construction sector they mostly handled contracts related to building construction.

The results of the survey among public contracting authorities confirmed a growing interest in modernizing procurement procedures and emphasizing qualitative criteria. Most respondents were public institutions, with tenders most often administered in-house. More than half of the contracting authorities occasionally used some qualitative criteria. However, only a small number of respondents reported experience with the Best Value Approach, and those who did evaluated it positively—especially in terms of eliminating low-quality bidders and obtaining solutions with added value. The main disadvantage was seen in the higher time and administrative demands.

The survey also revealed that awareness of the BVA method is still low, which limits its broader application. Of the total number of respondents, only eight stated that they had experience with qualitative evaluation. Of this number, 25% of respondents stated that they had applied the BVA method in up to five cases; 50% of respondents stated that they had applied the BVA method in only one case. Increasing awareness and training could therefore support its adoption. Overall, the results confirm the contracting authorities' effort to consider qualitative criteria more than in the past and indicate a shift toward more efficient and transparent public procurement practices.

Questions 24 to 37, which focused only on contracting authorities with experience in the BVA, were answered by only eight and seven respondents, respectively. The questionnaire for conducting the survey is included in the Supplementary Materials.

Contractor survey

The questionnaire was prepared in 2024 and was sent electronically to construction contractors. Respondents were familiar with the fact that this was research that focused on managing the risks of construction projects through qualitative evaluation of public procurement.

The parameters of the questionnaire survey are as follows:

- Respondents were construction companies ranked by turnover in the Czech Construction Industry Yearbook of various sizes (197 participants).
- The survey was conducted from 4 June 2024 to 28 June 2024 using the Survio application.
- The questionnaire was attended by 78 respondents and completed by 37 of them (the overall success rate of completing the questionnaire was 47.7%).
- The survey included a total of 16 questions.

It was possible to collect responses from construction companies of various sizes. In relation to turnover, responses were collected from companies with a turnover of up to 200 million CZK/year to those with a turnover of more than 10 billion CZK/year. In relation to the number of permanent employees, responses were collected from companies with up to 20 employees to those with more than 1000 employees. In terms of focus, companies implementing building construction dominated. Five companies stated that their majority owners or owners were from abroad. According to the results, most participating suppliers operate mainly at the regional level, i.e., within a city, region, or a few regions (51.4%). Within the entire Czech Republic, suppliers constituted 29.7%, and in the Czech Republic and abroad, suppliers constituted 18.9%. The data show that the sample under study was sufficiently diverse and could provide meaningful data.

The results of the contractor survey showed that approaches to risk management varied significantly among construction companies. While one-third of firms actively worked with risks and updated their databases, a fifth did not record or address risks at all. Most companies recorded risks only in a basic form, without deeper analysis of impacts and probabilities. Only a small portion of firms had a dedicated risk management specialist.

The survey shows that only one respondent (2.7%) did not deal with risk issues at all. Another 16.2% of respondents dealt with risks only in individual cases when the respondent was required to do so, e.g., within the framework of a contract. A full 45.9% of respondents dealt with risks due to fulfilling obligations, e.g., in relation to ISO certification, and finally 35.1% of respondents actively worked with a risk database, monitoring, recording, and evaluating risks.

On the positive side, most companies trained their employees in risk-related topics. However, the use of advanced tools and digital support is still very limited. The results highlight the need to expand awareness of qualitative evaluation and systematic risk management as key elements of effective project management in construction. The questionnaire for conducting the survey is included in the Supplementary Materials.

4.2. Proposal for Implementation of the Best Value Approach at Brno University of Technology (BUT)

The procedures at BUT are based on the principles of Dean Kashiwagi, the author of the BVA method, and the Dutch model. At BUT, all core BVA criteria are used—level of expertise (LE), risk assessment plan (RA), value added (VA), interview, and price. Their weights and combinations are adapted to the type of contract. The qualitative part (LE, RA, VA) is evaluated anonymously. After evaluation, an interview with the key person follows. Only then is the price part of the offer open and the overall evaluation compiled. Offers are submitted electronically, ensuring maximum transparency.

The BVA method is based on so-called dominant information—clear, verifiable, and quantifiable data (e.g., time, cost, reliability, satisfaction)—which help the contracting authority assess the value of the offer. These data connect the "non-expert" client with the expert supplier. Bidders should present their offer using dominant information that demonstrably expresses the value of the solution. If not expressed numerically, such information has only neutral weight and does not increase the evaluation score.

In the BVA concept, the goal of a public contract is to clearly define what should be achieved through its implementation. These goals reflect the needs and strategic intentions of the contracting authority, are stated in the tender documentation, and are reflected in the evaluation criteria—quality, time, safety, sustainability, innovation, etc.

Each BVA criterion plays a specific role in the evaluation process. The following descriptions show their contribution to achieving the client's goals, minimizing risks, and ensuring quality implementation:

- Level of Expertise (LE)—assesses the extent to which the bidder possesses the expertise, experience, and standards necessary to fulfill the contract's purpose. It evaluates the quality of personnel, know-how, methodologies used, technical background, and experience with similar projects. The bidder should present only relevant and concise information that demonstrably benefits the client.
- Risk Assessment Plan (RA)—the bidder identifies specific risks that are not on their side but may affect project success (e.g., risks related to the client or third parties). They also propose verifiable measures to eliminate these risks. Risks must be clearly defined, specific, and supported by experience or data.
- Value Added (VA)—allows bidders to offer solutions beyond the client's requirements. The goal is to encourage innovation and benefits aligned with the contract's purpose. Bidders may present advanced tools or approaches, with benefits supported by dominant information (e.g., references, statistics). At BUT, this criterion is not used for contracts with binding documentation (e.g., construction works with detailed design), where there is no room for creativity. However, it is applied in design competitions, where the university has obtained advanced outputs such as BIM models or 3D scanning.
- Interview—verifies the capabilities of the bidder's representative, such as project management, risk response, and communication skills. The interview is structured similarly to a job interview, lasts 15–20 min, and follows a standardized methodology.
- Price—in the BVA, the price criterion has a specific meaning; it evaluates not only the amount but also its adequacy in relation to the bidder's expertise and quality. The aim is to prevent the selection of unrealistically low prices at the expense of quality. It is advisable to set price limits—minimum and maximum.

4.3. Recommended Procedure for Implementing the Best Value Approach (BVA)

The procedure for conducting a tender can be graphically represented as the so-called Performance Information Procurement System (PIPS). The basic principle of the PIPS is shown in Figures 1 and 2.

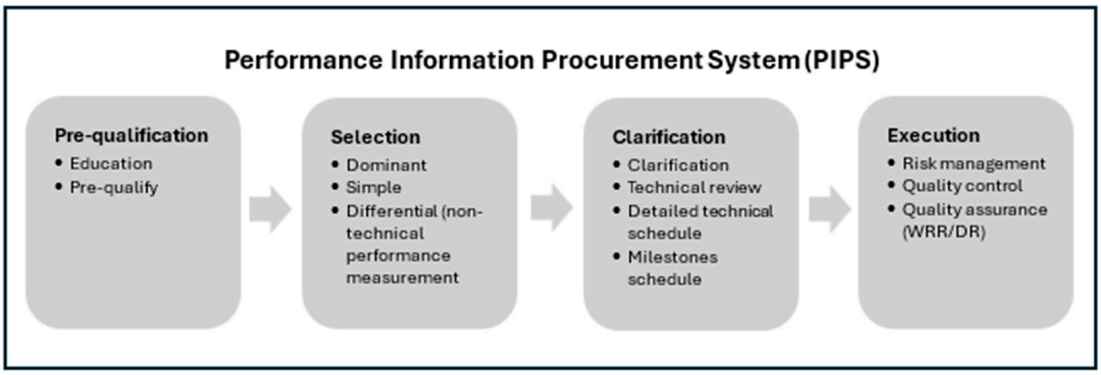

Figure 1. Performance Information Procurement System [35].

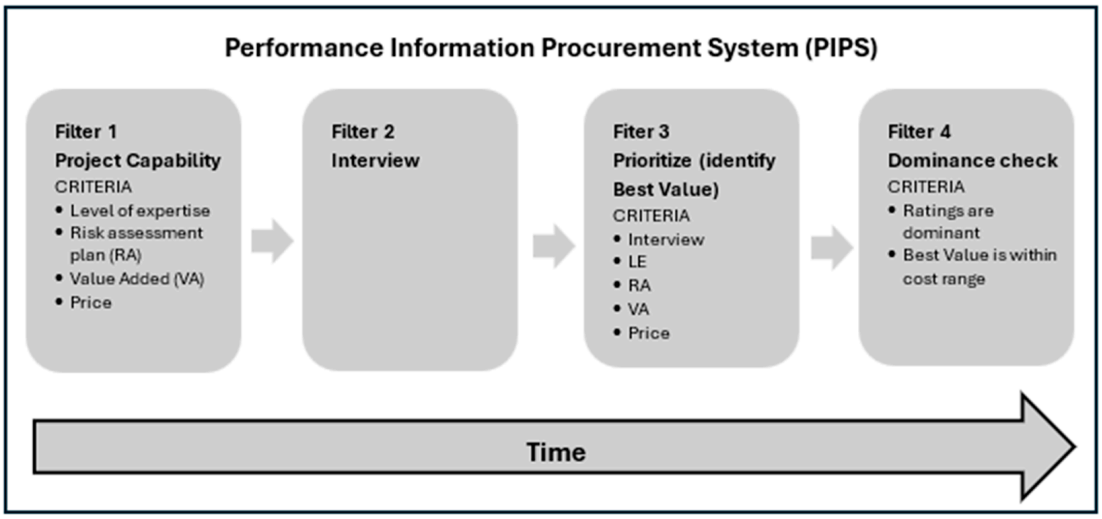

Figure 2. Stages of selecting the best supplier [35].

Implementing the BVA is a systematic process that requires understanding of key principles and thorough preparation. Below is an overview of the main steps that an organization should take—or at least consider—when introducing the method:

- Motivation and Needs Analysis for BVA Implementation

Introducing the BVA method can help improve the quality and transparency of procurement procedures, which are often focused solely on price. BUT applies the BVA as an advanced tool for public procurement. The university has experience with FIDIC, BIM, CDE systems, and CAFM, and, as an academic institution, it naturally explores and implements new methods in practice.

- Leadership Support and Communication

At BUT, the implementation of the BVA was the result of a well-considered decision by university leadership and relevant departments. Staff from procurement, investment, legal, finance, and operations departments, as well as faculty representatives, were actively involved. The method was used not only for construction contracts but also for service provider selection.

- Education and Training

After establishing contacts in the Netherlands, BUT organized a "Best Value B+ Certificate" training in 2018, led by instructors from Best Value Europe. Successful participants received certification and began contributing to BVA implementation. The university also conducts preliminary market consultations to introduce bidders to the method and the

specifics of the contract. After selecting the contractor, BUT organizes evaluation interviews with unsuccessful bidders to facilitate mutual feedback.

- Development of Methodologies and Criteria

Successful implementation of the BVA requires the creation of clear procedures, rules, and evaluation criteria. It is recommended to test methodologies on pilot projects, allowing for refinement before full-scale deployment. At BUT, new templates for tender documentation, bid forms, and evaluation checklists for individual criteria were developed specifically for the BVA. Preparation also included creating an optimal timeline for the procurement process, which serves to inform both bidders and internal staff and contributes to overall transparency (see Table 3).

Table 3. Procurement timeline.

Step	Estimated Duration in Calendar Days (Counted from Completion of the Previous Step)
Opening of bids (excluding price sections of bids)	0 (without undue delay after the deadline for bid submission)
Completion of evaluation in criteria: professional level, risks	+20
Announcement of interim evaluation results	+2
Completion of evaluation in the criterion: properties and capabilities of the contractor's representative	+10
Announcement of interim evaluation results	+2
Opening of price sections of bids and evaluation in the criterion: Bid price	+1
Invitation to the best-rated supplier to carry out the verification phase	+2
Completion of the verification phase	+15
Decision on selection of the most suitable bid	+2
Contract signing	+2

The implementation of the BVA at BUT was a demanding challenge for the author and the entire team. It required not only the development of methodology and documentation but also the transfer of international experience into the Czech context. The preparation process lasted nearly a year and took place alongside the regular agenda of the university's public procurement and investment departments.

4.4. Pilot Projects

For successful BVA implementation, it is advisable to start with smaller-scale pilot projects. These allow the methodology to be tested in practice, weaknesses to be identified, and adjustments to be made without risking major investments. Pilot projects serve as valuable training for both staff and bidders and provide feedback for fine-tuning procedures before broader deployment.

BUT began using the BVA in 2019 on two smaller contracts—reconstruction of a heat exchange station (CZK 2.8 million) and reconstruction of hot water distribution systems (CZK 7.7 million). These projects were used to test the established rules and methodology. The reason for using these two projects as pilots was mainly due to their simplicity and short duration. They were also the first two projects commissioned using the BVA. For example, in the hot water distribution project, the evaluation weights were set as follows: 40% for level of expertise, 20% for risk assessment, 20% for interview, and 20% for price with a clearly defined price range. Only two specialized companies participated, but the project provided important practical insights for future tenders.

At BUT, instead of the Dutch 1-6-8-10 scale, an extended scale of 0-3-6-8-10 was introduced. From the authors' point of view, this is more understandable for both parties—the applicant and the evaluator—and ultimately brings another positive effect. This consists of a larger point difference between the individual offers, and the overall point score is then factually and optically more different. This does not lead to any possible considerations by the applicants that the results and ranking are very close. The final evaluation of the two bidders' offers is seen in Table 4.

Table 4. Evaluation of bids for the pilot project using the BVA—reconstruction of hot water distribution systems, Kraví Hora.

Bid	Applicant 1	Applicant 2	Weight
Professional level			
Claim	8	8	40
Weighted score	40	40	
Risks			
Risk 1	8	6	
Risk 2	6	6	20
Average	7.00	6.00	
Weighted score	20.00	17.14	
Characteristics and skills of a project manager			
Interview	8.50	10.00	20
Weighted score	17.00	20.00	
Bid Price			
Price	7,650,000	7,493,370	20
Weighted score	19.59	20.00	
Total score	**96.59**	**97.14**	

The pilot project revealed several insights. Both bidders demonstrated a high level of expertise and received 8 points. Only one of them identified a relevant risk with an adequate mitigation measure, earning 8 points for that criterion. Other risks were evaluated neutrally. In the interview, one bidder received 8.5 points, losing some due to weaker justification of their role in the project. The bid prices were 97% and 99% of the maximum allowed price. The overall score was very close, with a difference of only 0.55 points.

Key findings are listed below:

- The low weight of the price criterion (20%) eliminated pressure to offer low prices; bidders submitted realistic amounts.
- Risk identification is challenging even for experienced companies; only one risk was identified appropriately.
- Interviews revealed differences in the preparedness of key personnel.
- There is a need to expand the scoring scale to better differentiate the quality of bids.
- The impact of price on the overall bid evaluation is less significant than the weight of the criterion might suggest. For example, a 20% weight for price does not mean that a bidder can gain up to 20 weighted points over competitors.

Table 5 presents how many weighted points correspond to combinations of price differences between two bids and the respective weight of the price criterion. The blue-shaded area defines combinations that represent the optimal use of the BVA method. The price criterion does not dominate over other criteria, and its weight ranges between 10% and 50%. The minimum and maximum acceptable bid price is defined within the interval of 70% to 100% of the realistic estimated price.

Table 5. Weighted points corresponding to combinations of price differences and price criterion weight.

	Criterion Weight in %										
		10	20	30	40	50	60	70	80	90	100
Price difference in %	0	0	0	0	0	0	0	0	0	0	0
	10	1	2	3	4	5	6	7	8	9	10
	20	2	4	6	8	10	12	14	16	18	20
	30	3	6	9	12	15	18	21	24	27	30
	40	4	8	12	16	20	24	28	32	36	40
	50	5	10	15	20	25	30	35	40	45	50
	60	6	12	18	24	30	36	42	48	54	60
	70	7	14	21	28	35	42	49	56	63	70
	80	8	16	24	32	40	48	56	64	72	80
	90	9	18	27	36	45	54	63	72	81	90
	100	10	20	30	40	50	60	70	80	90	100

At a 20% weight for the price criterion, the difference between a bid price corresponding to the minimum acceptable price (set at 80% of the estimated price) and a bid price corresponding to the maximum acceptable price (set at 100%) results in only 4 weighted points.

Based on Table 5, the following settings for the maximum possible and minimum countable bid price range and the following price criterion weight range can be recommended:

- The maximum acceptable and minimum acceptable bid price range of 80–100%;
- The price criterion weight of 10–50%.

Pilot projects played a crucial role in mastering the method, and without them, implementing the BVA for larger contracts would have been significantly more challenging. Both contracts were successfully completed, and since 2020, the BVA method has been used for larger investment projects at the university.

The limitation of the above conclusions is the absence of information about the actual progress of individual contracts, although the available information indicates that they were successful. For this reason, it is necessary to define key parameters for assessing the success of the project. Here, we can use the iron triangle, known from project management, and define the parameters as follows:

- Compliance with the agreed price;
- Compliance with the agreed deadline;
- Change management;
- Compliance with the agreed scope of the project and quality;
- Compliance with other agreements and obligations on the part of the contractor arising from the contract negotiations.

4.5. Monitoring and Evaluation

After implementing the BVA method, it is essential to regularly monitor its performance and effectiveness. Monitoring provides insight into the practical impact of the method and helps identify strengths and weaknesses. Feedback from participants and its evaluation in relation to the organization's goals allow for further optimization of the method. This phase supports trust in the BVA and ensures its long-term functionality. Without evaluation, there is a risk of incomplete or ineffective implementation.

The university focuses on gathering feedback from all participants and encourages internal discussions and presentations of the method. Communication with external part-

ners takes place through preliminary consultations and evaluation interviews. Feedback confirms both the benefits and the higher demands of the BVA.

4.6. Adjustments and Improvements

This phase allows the BVA method to be continuously adapted to the current needs of the organization. Based on feedback, processes and communication procedures can be optimized, increasing the overall efficiency of the system. At BUT, the adjustment and improvement phase is a permanent part of BVA implementation. The team regularly updates methodologies, forms, and procedures based on experience from completed contracts.

Key changes include a broader scoring scale, simplified forms, adjusted weight of the risk assessment plan criterion, and a decision not to use the value added criterion for standard construction contracts tendered with detailed design and bill of quantities. A new role of Contract Manager was also introduced to oversee the fulfillment of contractual obligations.

This phase also includes monitoring BVA implementation in the Czech Republic and abroad. In the Czech Republic, there are still few case studies, with BUT having the most practical experience. Published domestic professional texts often focus more on legal than technical aspects. Abroad, especially in the Netherlands and Norway, practice is more widespread, but sharing of specific insights remains limited.

5. Discussion

Based on literature reviews, survey findings, and the practical experience of the authors, the use of the BVA method and the risk-related evaluation criteria can offer the following advantages (set according to the literature review and empiric experiences at BUT):

Elimination of potentially low-quality bidders:

- The BVA is designed to select suppliers with high expertise and project management capabilities. Evaluation is based on experience, ability to identify risks, and present concrete solutions. This naturally eliminates those who cannot demonstrate practice, expertise, or submit a quality offer. The BVA helps select reliable and qualified suppliers, reducing the risk of failure (supported at BUT).

Elimination of abnormally low bid prices:

- Low prices often indicate a lack of resources and risk to quality. The BVA addresses this by prioritizing the overall value of the offer over the lowest price. Bidders must prove their price is realistic and feasible, discouraging unrealistically low bids and encouraging economically balanced offers. It is also recommended to define acceptable price ranges, limiting point gains for bids below a certain threshold (literature-based).

Risk management during the tender process and before contract signing:

- The BVA enables risk identification and management already during the tender phase. Bidders submit risk proposals and mitigation measures, giving the contracting authority insight into their capabilities and foresight. This approach facilitates comparison of binders' expertise and ensures that key risks are known and addressed before signing the contract, reducing the likelihood of problems during project execution (supported at BUT).

Opportunity to obtain advanced solutions beyond the basic scope:

- Through the value added criterion, bidders can offer innovative solutions that go beyond the client's requirements, demonstrating expertise, creativity, and the ability to enhance project outcomes (literature-based).

Greater engagement and understanding of the project by bidders:

- The BVA motivates bidders to thoroughly study the documentation and understand the project goals. As a result, offers are not based solely on pricing the bill of quantities but reflect deeper project understanding, company know-how, and efforts to identify key challenges and opportunities (supported at BUT).

Use of a modern tool for supplier selection:

- The BVA represents a distinct and innovative approach to supplier selection. With professional engagement from all parties, it leads to fair outcomes and mutual satisfaction win–win situations (literature-based).

Contribution to standardization in construction:

- Czech construction still has room for improvement in areas such as digitalization, BIM adoption, CDE and CAFM usage, and quality of tender documentation. The BVA, with its focus on transparency, risk management, and expert involvement, can help improve these areas. Broader use or application of its principles could lead to the standardization of procedures and increased efficiency and transparency in public procurement (supported at BUT).

Cultivation of the procurement environment and paradigm shift:

- The BVA introduces an innovative approach to public procurement that requires a shift in thinking for both clients and suppliers. It emphasizes clear goal setting, transparent documentation, fair evaluation criteria, and a qualified evaluation committee capable of qualitative assessment. It promotes collaboration, eliminates poor-quality bids, and motivates suppliers to improve. While it does not solve systemic issues on its own, its proper use can contribute to cultivating the environment and serve as an example of best practice (literature-based).

Use of the BVA for benchmarking and enhancing organizational prestige:

- Using modern tools in project management enhances an organization's prestige, increases transparency, and improves communication efficiency. It supports automation, quality control, and risk management, boosting partner trust and internal satisfaction. It also facilitates benchmarking and identification of areas for improvement (literature-based).

However, in addition to the obvious advantages, the BVA-based approach also has some disadvantages (set according to the literature review and empiric experiences at BUT), listed as follows:

Limited applicability in regulated environments:

- Public procurement is often governed by strict legal frameworks that may conflict with the flexibility required by the BVA.

Insufficient emphasis on price:

- The BVA prioritizes value and performance, which can result in selecting more expensive suppliers even when cheaper options might be more economically advantageous.

Challenges in objective evaluation:

- Assessing performance and risk can be subjective and difficult to quantify, potentially undermining transparency and accountability.

High demands for the buyer's expertise:

- The contracting authority must possess deep knowledge of the BVA methodology; otherwise, there is a risk of misapplication or ineffective implementation.

Reduced competition:

- Suppliers unfamiliar with the BVA may avoid participating, leading to fewer bids and diminished competitive pressure.

Communication complexity:

- The BVA requires intensive interaction between buyer and supplier, which can be time-consuming and organizationally demanding, especially for large projects.

Risk of formalism:

- If the BVA is applied mechanically without understanding its principles, it may lead to formal evaluations that do not truly enhance selection quality.

Unsuitability for certain types of contracts:

- For example, contracts involving standardized goods or services may not benefit from the complexity of the BVA.

6. Conclusions

The implementation of qualitative evaluation criteria, especially through the BVA, comes with several challenges. One of the main obstacles is the concern about subjectivity in evaluation, which can be overcome by building transparent methodologies, open communication, and education.

It is important to demonstrate that subjective evaluation can be effective and fair, provided the process is professionally designed. The Risk Assessment Plan criterion gives the contracting authority direct insight into the bidders' ability to manage project risks and brings valuable market knowledge into project preparation. This element forms a bridge between supplier selection and project execution, allowing not only the winner's output to be used but also the risk overviews from other bidders.

It is important to recognize that the BVA is not the only way to improve the quality of public procurement. Its principles can be combined with traditional methods or applied selectively. The key is an open and pragmatic approach, which supports even small steps forward.

If an institution is interested in using the BVA in public procurement, the following key points can be recommended based on empirical experience:

- Carefully familiarize yourself with the BVA method and review information on the experiences of entities that are already working with this method;
- Inform potential bidders with the principles of the BVA as part of market consultations;
- Start with small pilot projects in which you can easily verify the functionality of the proposed method and the established criteria;
- Use anonymous qualitative scoring with calibrated rubrics;
- Set the weight of the price criterion to 50%; limit the range between the maximum and minimum price offer to a maximum of 30%;
- Set criteria for evaluating the success of the tenders carried out and continuously monitor the fulfillment of these criteria; this will enable continuous improvement of the entire process.

Although a unified BVA practice may not be realistic, it makes sense to share experiences and examples of good practice. Open communication and mutual inspiration contribute to the gradual improvement of quality and the cultivation of public procurement. Any efforts to introduce standardization and innovation in the preparation and management of investment projects deserve attention and support—even if they only bring minor improvements with limited impact.

In this regard, the situation in the Czech Republic is gradually improving, thanks to initiatives emerging at various levels—from ministries and agencies, through regional and

municipal governments, to large public contracting authorities, universities and academia, consulting firms, and responsible suppliers.

One exemplary case of these positive efforts is the use of the BVA, which aims to select high-quality suppliers, eliminate abnormally low prices, mitigate risks, and create mutually beneficial relationships—like what has been successfully achieved in the Netherlands. These claims are not scientifically proven within the scope of this contribution; however, they can be derived based on knowledge of the principles of the method and the experience of experts.

The main goal of this paper was to create a structured framework that places the application of qualitative criteria for evaluating construction projects and their potential suppliers into a broader context.

The lack of information regarding the use of qualitative evaluation methods in the evaluation of public procurement in the Czech Republic is evident from the presented questionnaire surveys. Based on this data, a proposal for the implementation of the BVA at Brno University of Technology was developed. The functionality of this proposal was verified in two pilot projects implemented by the university. Based on the experience from the research and pilot projects, the strengths and weaknesses of the approach were developed. It can therefore be stated that the goal defined in the introduction to the article was met.

The authors also formulated the key research question as follows:

"What key factors and procedures ensure effective implementation of the Best Value Approach in public sector organizations?"

Experience shows that successful implementation of the BVA methodology requires the following:

- A shift in thinking about procurement methods;
- Support from leadership, middle management, and project users;
- Explanation of BVA principles, education, and experience sharing;
- Reliance on knowledge in project management, public procurement, and risk management;
- A commitment to persevere despite initial setbacks;
- A clear and meaningful approach, ideally starting with a small-scale pilot project.

The presented research naturally encounters certain limits, which must also be mentioned. To point out the significance of the problem addressed, only a simple questionnaire survey was used, which, although it fulfills the purpose for the purposes of the contribution, does not bring statistically demonstrable conclusions. The resulting proposals are related to only one institution, and verification of the functionality of the proposals was carried out only on two pilot projects. It is also necessary to consider the fact that the proposals implemented within the framework of the research were implemented in the legislative environment of the Czech Republic; conditions in other countries may differ to a certain extent. In the case of evaluating pilot projects, the research is limited to stating whether the contracts were successfully awarded, but more detailed success criteria were not considered here.

Therefore, in the framework of further research, it will be necessary to detail the questionnaire survey so that it meets the parameters for obtaining relevant statistical data. It will also be appropriate to focus on other institutions (ideally foreign ones) where the implementation of the BVA will be verified. It will also be desirable to expand the portfolio of projects—for case studies and to define in detail the parameters of "successful assignment" for further analysis.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/buildings15213981/s1. Forms for questionnaire surveys.

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Institutional Review Board Statement: The survey was conducted in the form of an online questionnaire, which was distributed among respondents—legal entities whose representatives anonymously commented on professional issues. No personal data was involved; the focus was solely on the approaches of individual entities—companies—to the issues of the BVA and public procurement.

Informed Consent Statement: Informed consent was obtained from all participants involved in this study. Participants were briefed on the purpose of the research, the voluntary nature of their participation, and the confidentiality of their responses. Written consent forms were collected prior to participation, and no personal identifiers were retained in the data set.

Data Availability Statement: The data is not publicly available but may be provided to editors or reviewers, upon request, by a correspondent author.

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