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INTEGRATED ASSESSMENT OF SMALL BUSINESS COMPETITIVENESS IN THE PRESCHOOL EDUCATION SERVICES MARKET: EVIDENCE FROM ANDIJAN REGION

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Abstract

The development of small business in the preschool education services market requires a comprehensive approach to competitiveness assessment. Traditional indicators based solely on the number of organizations, enrolled children or financial performance cannot fully reflect the competitive position of preschool education organizations. This study proposes an integrated approach combining management capacity, service quality, human capital, material and information resources, parent satisfaction, market position, financial stability, innovation capacity and institutional compliance. Empirical evidence from Andijan Region is used to demonstrate the relevance of a multidimensional assessment framework. In 2024, the region had 4,324 preschool education organizations, 246,139 children and 17,859 pedagogical employees. The study also applies the Regional Operational Pressure Coefficient (ROPC/HOBK) as an analytical indicator of operational pressure. The findings demonstrate that territorial differences in organizational workload and human-resource utilization should be considered when designing competitiveness improvement mechanisms for small preschool businesses.

Keywords: small business, competitiveness, preschool education, education services market, integrated assessment, human capital, service quality, regional operational pressure, Andijan Region.

Introduction

The expansion of preschool education services has created new opportunities for small businesses and non-state providers. At the same time, the growth of the number of service providers increases the importance of competitiveness, service quality, operational efficiency and consumer trust.

Competitiveness in preschool education differs from competitiveness in conventional commercial markets because the service produces both economic and social outcomes. Parents evaluate not only price and accessibility but also educational quality, safety, staff qualifications, communication, reputation and the developmental outcomes of children.

Therefore, competitiveness assessment should integrate economic, organizational, service-related and consumer-oriented indicators rather than relying on a single performance measure.

Methodology

The study applies systematic and comparative analysis, economic-statistical analysis, grouping, dynamic and structural analysis, expert assessment, normalization, weighting and integrated indexing.

The proposed integrated framework consists of nine functional blocks:

1. management capacity and management processes;
2. education, care and service quality;
3. human capital;
4. material and information resources;
5. parent satisfaction and loyalty;
6. image and market position;
7. financial and economic stability;
8. innovation and adaptability;
9. institutional compliance.

The indicators are normalized according to their direction of influence and then aggregated into functional blocks and an overall integrated competitiveness index.

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An important methodological principle is that critical requirements such as safety, sanitation and licensing should not be completely compensated by high performance in other indicators. In other words, a high financial result cannot compensate for non-compliance with mandatory safety or institutional requirements.

Empirical Findings

The empirical analysis of Andijan Region demonstrates substantial territorial differences in preschool service capacity and human-resource utilization.

In 2024, Andijan Region had 4,324 preschool education organizations, 246,139 children and 17,859 pedagogical employees. The average number of children per organization was 56.9, while the average number of children per pedagogical employee was 13.8.

However, these regional averages conceal substantial differences among districts.

For example, Andijan city recorded approximately 84.1 children per preschool organization, whereas Oltinko‘l District recorded 43.3. The number of children per pedagogical employee was approximately 20.0 in Buloqboshi District, compared with 9.4 in Baliqchi District.

These differences demonstrate why a single indicator cannot be used as a direct measure of competitiveness. A high number of children per organization may indicate intensive capacity utilization, but it may simultaneously create additional operational pressure. Conversely, a low number of children per organization does not automatically indicate weak competitiveness because it may reflect organizational structure, the share of family-based organizations and differences in available capacity.

Regional Operational Pressure Coefficient

To address this problem, the study introduces the **Regional Operational Pressure Coefficient (ROPC)**, referred to in the Uzbek methodology as **HOBK – Hududiy operatsion bosim koeffitsienti**.

The indicator is designed to diagnose operational pressure by considering:

- the number of children per preschool organization;
- the number of children per pedagogical employee;
- deviations from the corresponding regional average.

The ROPC should not be interpreted as an independent competitiveness index. Instead, it functions as a diagnostic indicator within the integrated assessment system.

Its managerial value lies in identifying situations where additional resources are required. In high-pressure territories, expanding enrollment without strengthening human and material resources may increase operational risks. In territories with unused capacity, competitiveness strategies may instead focus on service diversification, additional educational programs and more effective utilization of existing infrastructure.

Small Business Development in the Market

The expansion of the preschool education market is particularly relevant to small business. In 2024, 797 new preschool organizations were established in Andijan Region. Of these, 753 were family-based non-state organizations, representing 94.5 percent of newly established organizations.

The newly established organizations provided coverage for 12,875 children, of whom 10,068 were covered by family-based preschool organizations.

These figures indicate the growing role of small and non-state providers in expanding the supply of preschool education services.

However, quantitative market expansion should be accompanied by improvements in service quality and organizational sustainability. Competitive advantage increasingly depends on the ability of small businesses to combine qualified personnel, effective management, service quality, parent communication, financial stability and innovation.

Discussion

The findings support a resource–process–result–market position approach.

Resources include pedagogical personnel, financial resources, infrastructure, information and technological resources and managerial competencies. These resources are transformed through service

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processes such as education, care, safety management, human-resource management, communication and quality control.

The results include child development, parent satisfaction, service quality and economic performance. These outcomes subsequently influence the organization's market position through trust, reputation, loyalty, recommendations, enrollment and financial stability.

This approach suggests that competitiveness improvement should not be based exclusively on attracting more customers. The sustainable competitive position of a preschool organization depends on the balance between capacity utilization, service quality and resource availability.

For small businesses, the following managerial priorities are therefore relevant:

- integrated competitiveness assessment;
- continuous monitoring of parent satisfaction;
- improvement of pedagogical qualifications;
- optimization of staff workload;
- diversification of additional educational services;
- digitalization of parent communication and administrative processes;
- strengthening financial stability;
- systematic monitoring of safety and institutional compliance.

Conclusion

The competitiveness of small businesses in the preschool education services market is multidimensional and cannot be adequately measured by the number of organizations, enrolled children or financial indicators alone.

The evidence from Andijan Region demonstrates significant territorial differences in operational pressure and human-resource utilization. Therefore, competitiveness assessment should combine economic, organizational, service-quality, consumer and institutional indicators.

The proposed integrated assessment framework and Regional Operational Pressure Coefficient provide complementary instruments for identifying operational constraints and supporting managerial decision-making.

For small preschool businesses, sustainable competitiveness can be strengthened through the coordinated development of human capital, service quality, financial stability, digital management, parent satisfaction and organizational adaptability.

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