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ECONOMIC RATIONALE FOR CHOOSING STRATEGIC ALTERNATIVES FOR THE DEVELOPMENT OF SERVICE ENTERPRISES IN CONDITIONS OF HIGH MARKET COMPETITION

ABSTRACT

The purpose of this study is to quantitatively assess the relationship between the strategic characteristics of service enterprises, the economic outcomes associated with their implementation, and enterprise development indicators under conditions of high market competition. The economic rationale behind Strategic Choice was assessed by evaluating the four elements of financial performance, operating efficiency, investment intensity, and the alternatives' contribution to business competition. To establish an evaluation framework for assessing this rationale, the researchers used both comparative and cluster analyses as well as correlation analysis to identify measurable development criteria. An empirical sample of 60 businesses that provide computer and communications equipment repairs (in Ukraine) and five EU countries (Germany; France; Poland; Czech Republic; Spain) provided data for the observations collected during the time period of 2019-2023. Data for these observations were obtained from statistical databases, company statements, and non-financial reports published by international organizations. Comparison indicated significant differences between Ukrainian and EU companies on all major strategic performance metrics. Digitalization of business models and employee participation exhibited strong positive associations with outcomes. Conversely, there was a weak direct association between CSR spending and outcomes. However, this relationship is typical of a long-term implementation process. Three distinct clusters emerged from cluster analysis of the companies based upon their performance characteristics. A majority of the Ukrainian companies were categorized into the lowest-performing cluster. In contrast, most of the EU companies were categorized into the highest-performing cluster. This research provides managers with a practical framework to sequence initiatives aimed at digital transformation, innovation, and employee engagement. Managers may prioritize initiatives such as adopting CRM software systems, integrating ERP systems, implementing select AI services, or making more systematic ESG reporting among SMEs. Policymakers can also use these findings to guide policy decisions. Tax relief policies and competitive grant programs that are targeted toward digital innovation services and incubators for digital services can support innovation capacity and promote rapid modernization throughout the industry.

Keywords: digital transformation, service enterprises, innovation, sustainable development, cluster analysis, correlation analysis, Ukraine, European Union, competitiveness, economic efficiency

JEL Classification: L80, L84, M10, M21, O30, O52

INTRODUCTION

With growing competition and a rapidly changing business environment, the development of service businesses is becoming increasingly difficult. As global markets become more integrated with new digital technologies, and consumers' expectations continue to evolve, service businesses are being challenged to make strategic decisions that will allow them to achieve both short-term success and long-term viability. Thus, strategy has two roles: It enables service businesses to react to today's challenges while creating the foundations from which they can achieve lasting competitive advantages.

From an economics perspective, alternative strategies will need to be evaluated based upon their impact on productivity, cost efficiency, capital investment capacity, and long-term financial sustainability.

In recent years, there have been increasing numbers of research studies that focus on the role of innovative and digital business models in generating efficiencies in service organizations (Agustian et al., 2023; Zhang et al., 2022a), as well as those focusing on the environmental sustainability of service organizations (Omowole et al., 2024) within the European Union. In contrast, in Ukraine, the major priorities are improving competitiveness and integrating into international service markets (OECD, 2025; World Bank Group, 2023); thus, in order to determine whether regional strategic alternatives should be developed or utilized when evaluating computer and communications equipment repair services, this study will examine how these structural and technological changes affect performance in each region.

The assumption for this research is that the strategic factors for developing services will affect different results in the service development process. For example, as employees are engaged digitally in their work environment, they will be positively affected by the investment in an engagement strategy (digitalization). On the other hand, if a company invests in Corporate Social Responsibility (CSR), there will be less immediate positive impact and possibly a less significant one than digitalizing its service delivery. The relationship between CSR, digitalization, employee engagement, and service development results can also be measured statistically.

LITERATURE REVIEW

A number of studies have been conducted lately regarding service companies creating developmental plans based on changing competitive situations. Yokhna and Shatrovskiy (2025) stated that one part of why services are able to become competitive is through the organizational and structural connections that exist between service providers and their industrial counterparts. The connections between these two types of organizations will determine the direction and content of a company's marketing plan. Service company development plans can be viewed as adaptive decision-making systems that allow companies to respond quickly to a rapidly changing marketplace. Bahorka et al. (2024) support this perspective using analysis of real-world marketing alternatives that present challenges when implementing them.

In addition, researchers from around the world continue to look at the role of innovation and productivity. Leppänen et al. (2023) found that the performance of new business models is dependent on the environment they operate within. Sudirjo (2023) states that developing a strong marketing strategy is essential for increasing competitiveness globally. Perifanis and Kitsios (2023) examined how AI impacts both business value and managerial decisions. Therefore, digitalization is an area where many service companies are focusing their efforts for growth. Zhang et al. (2022b) demonstrated with empirical data that digital transformation has increased production efficiencies.

Research also occupies an important strand of literature focusing on sustainable development and green strategies. Lopes et al. (2022) identify main drivers that motivate firms to adopt strategies for sustainable innovation. Omowole et al. (2024) look at the conceptualization of environmental practices among small enterprises, while Tanova and Bayighomog (2022) study nuances of "green" human resource management in service. Anthony (2024) also stresses the importance of public engagement in innovation processes necessary to cultivate sustainable urban ecosystems. Arici and Uysal (2021) systematize research on leadership and green innovation and establish a comprehensive framework for service enterprises.

Strategic management uses the resource base according to Varadarajan (2023), who looks at competitive advantages of competition across markets, and Abbasi Kamardi et al. (2025) substantiate the potential to build competitive advantages in IT. Dumanska et al. (2021) stress the importance of information support in investment decisions, and Orlov et al. (2020) correlate strategic success of enterprises with sustainability initiatives. Fan et al. (2022) study external factors that shape the evolution of service enterprises and show that public policy plays a key role in spreading environmental innovations.

The authors state that the majority of the scholarly research is focused on developing appropriate adaptational models. The authors provide examples of such. A recent example provided by Blyzniuk (2023) provides new paradigmatic views for the development of businesses. Another scholar has shown the importance of using marketing strategies as one means to increase competitiveness. Finally, another author identifies foreign economic activities as an important method to improve the competitive position of businesses.

Chernyshov and Shkolenko (2023) identified ecologically based marketing strategies that are currently in vogue with regard to meeting the increasing expectations of consumers to be environmentally responsible. In summary, there are a variety of ways service-based firms can develop their enterprises. In addition to traditional strategic frameworks, service firms are now beginning to utilize digital transformations as well as sustainable business practices. Unfortunately, however, there are still many unexamined gaps in existing literature. Some of these include: regional differences in how service-based

enterprises operate; limited international empirical comparisons; and variable levels of success when implementing green strategies.

These areas of concern represent the primary analytical focus of this research. Additionally, a major shortcoming exists in terms of providing adequate economic justification for each of the various strategic options previously developed. Prior research rarely compared the potential outcomes of different strategic options to determine which would result in improved productivity, lower operational costs, reduced consumption of resources, or increased long-term economic viability.

AIMS AND OBJECTIVES

The objective of this study was to quantitatively examine the relationship that exists among the strategic attributes of service organizations; the financial results achieved by implementing these strategies; and those factors used as measures of how well each organization has developed in an extremely competitive marketplace. The objectives of this study are as follows:

1. To organize the various strategic elements that contribute to the development of service organizations in an extremely competitive marketplace.
2. To establish a set of metrics that can be measured and used to evaluate both strategic attributes and developmental performance of service organizations.
3. To statistically analyze the relationships existing between strategic characteristics and developmental indicators.
4. To use quantitative models to define common strategic profiles and provide economically rational justification for preferred developmental options for service organizations.

METHODS

The research aims were to be addressed and the suggested hypothesis to be tested through the integration of multiple empirical procedures in one methodological unit. Figure 1 describes the logical sequence of the study, from data collection to the conclusion for the development of practical recommendations.

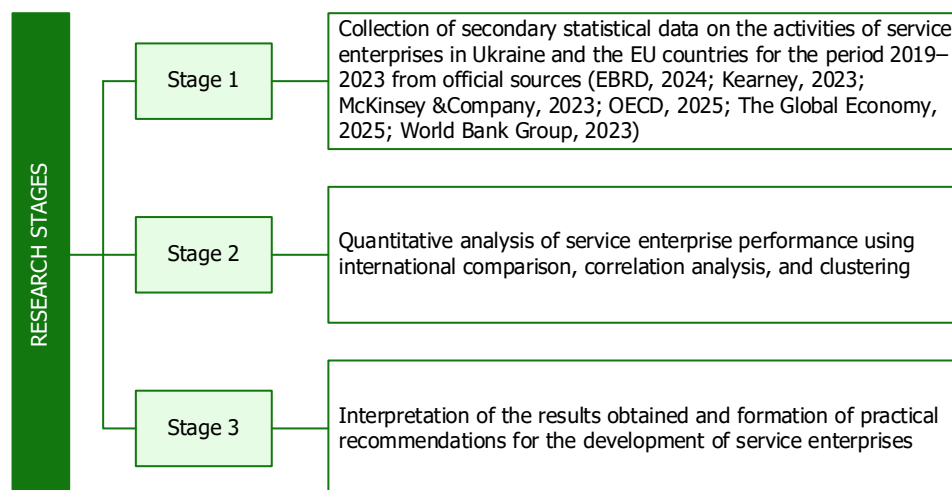


Figure 1. Research stages.

The total number of service providers that were part of this research is greater than 300 in the case of the Ukrainian participants and nearly 250 in the cases of France, Germany, Poland, and the Czech Republic/Spain. All are service-based computer and telecommunication equipment repair firms. Those countries were selected because they have similar service market environments, relatively highly competitive forces, and represent different parts of Europe. As such, it allows researchers to compare service sectors at various developmental stages. The participating service providers served as the basis upon which the selection criteria would be applied to form an analytically comparative sample. 2) In order to obtain a comparable sample for the analysis of the service providers from all countries, the selection process involved selecting service providers based on certain selection criteria.

1. A purposive (criterion-based) sampling strategy for forming the sample ensured that enterprises participating in the research were as similar as possible in terms of their characteristics and analytic relevance. The target population consisted of all enterprises operating in the market of services related to the maintenance of computers and telecommunications equipment in Ukraine and selected EU states. Enterprises were selected for inclusion in the research based upon:
2. Enterprise size; Enterprise sizes considered were SMEs of equivalent operational scales.
3. Sustainable operation from January 2019 through 2023.
4. Number of employees; Generally, this is in excess of ten but less than or equal to 250 employees.
5. The availability of comparative financial and non-financial information regarding enterprise performance, such as innovation activity, digitalization, and the adoption of environmental, social, and governance (ESG)-related practices.
6. Industry specialization in high-tech service industries to enable structural comparisons.

The sample was also balanced between Ukraine and an aggregation of all the EU countries; i.e., 30 firms were chosen from Ukraine, and 30 firms were selected from the EU. The firms in the EU subsample were distributed evenly among Germany, France, Poland, the Czech Republic, and Spain; that is, there were six firms in each of these five countries (Table 1), so as to allow for a balanced comparison of the characteristics of the Ukrainian and EU firms while still retaining geographic diversity within the EU sample.

Table 1. Distribution of the research sample by country. (Source: compiled by the authors based on the structure of the research sample)

Country	Number of enterprises	Share of the total sample (%)
Ukraine	30	50.0
Germany	6	10.0
France	6	10.0
Poland	6	10.0
Czech Republic	6	10.0
Spain	6	10.0
Total	60	100.0

Thus, the final analytical sample consisted of 60 companies – 30 Ukrainian companies and 30 companies from the selected EU countries. By providing an equally representative number of Ukrainian and aggregate European Union (EU) groups, the study facilitated a comparative analysis among these two regions. In addition, by assigning six firms to each of the six EU member states included in this study, the study was able to include a variety of geographic locations across Europe.

We compared four strategic development indicators. Adoption of formal codes of ethics was coded as binary: 1 if there was a valid and public code and 0 if there was no code. Intensity of social investment was measured as the percentage of enterprise revenue spent annually on programs related to social issues, environmental matters, employee matters, and other Corporate Social Responsibility (CSR) initiatives. Intensity of ESG initiatives is the number of documented new or improved environmental, social, and governance initiatives carried out or continued during the reporting year. Intensity of internal innovation projects was measured as the number of documented projects aimed at introducing new or substantially improved services, digital solutions, operational processes, or organizational practices. Values at the enterprise level were collected each year separately from 2019 to 2023 and averaged over five years. Country-level indicators were calculated as the arithmetic mean of enterprise-level observations except for code adoption, which was calculated as the share of enterprises with a formal valid code. Routine operational activities, equipment replacement that follows standard procedures, and regular software maintenance were not considered innovation projects. Primary data sources included financial statements, annual reports, ESG and sustainability reports, and management reports, along with official disclosures by companies. International reports and databases (EBRD in 2024; Kearney in 2023; McKinsey & Company in 2023; OECD in 2025; The Global Economy in 2025; World Bank Group in 2023) were used for cross-checking and interpretation across countries.

Quantitative model components in this study were correlation-based evaluation of relationships and clustering (based on the enterprise's strategic profile) in addition to other forms. The correlation-based assessment was conducted independently for each of the strategic variables X_j as well as the enterprise development indicator Y , utilizing Pearson's Product-Moment Correlation Coefficient:

$$r_{X_jY} = \frac{\sum_{i=1}^n (X_{ij} - \bar{X}_j)(Y_i - \bar{Y})}{\sqrt{\sum_{i=1}^n (X_{ij} - \bar{X}_j)^2 \sum_{i=1}^n (Y_i - \bar{Y})^2}},$$

where r_{X_jY} is the correlation coefficient between strategic variable X_j and the enterprise development indicator Y ; X_{ij} is the value of strategic variable j for enterprise i ; Y_i is the value of the normalized enterprise development indicator for enterprise i ; $\bar{X}_j$ and $\bar{Y}$ are the corresponding sample means; and $n = 60$ is the number of enterprises in the analytical sample.

The coefficient was calculated separately for employee engagement, the number of strategic initiatives, business model digitalization, and CSR investment. Positive values indicate a direct relationship, negative values indicate an inverse relationship, and the absolute value reflects the strength of the relationship.

The applied approach allows identifying the direction and relative strength of statistical relationships between strategic variables and enterprise development outcomes without interpreting these relationships as evidence of causality or constructing a formal regression model. Within this framework, the economic component of strategic choice was operationalized primarily through the normalized financial performance indicator (F), while operational efficiency, transaction-cost effects, investment intensity, and business model sustainability were considered in the economic interpretation of the results. The normalized financial performance indicator for enterprise i was calculated as follows:

$$F_i = \frac{\overline{OM}_i - \min(\overline{OM})}{\max(\overline{OM}) - \min(\overline{OM})},$$

where F_i is the normalized financial performance index of company i (between 0 and 1), $\overline{OM}_i$ is the average operating profit margin of company i for the period 2019-2023, and $\min(\overline{OM})$ and $\max(\overline{OM})$ represent the smallest and largest average operating profit margins for all companies included in this study.

The min-max normalization process allows us to normalize the values of the average operating profit margins of all companies with respect to each other on a scale that allows us to compare them directly regardless of their size or country. Thus, if one company has an index value of ($F_i = 1$), it means that its financial performance compared to the other companies in the sample is better than those of the others. On the contrary, a company with an index value of ($F_i = 0$) will have a financial performance worse than all the other companies. F_i has other uses in addition to its use for comparative analysis at a given point in time. It is possible to apply it to analyze changes through time of one single firm's position on a financial level. The average operating profit margin was calculated as follows:

$$\overline{OM}_i = \frac{1}{T} \sum_{t=2019}^{2023} \left(\frac{OP_{it}}{R_{it}} \times 100 \right),$$

where OP_{it} is profit from operations of enterprise i in year t ; R_{it} is revenue of enterprise i in year t ; and $T = 5$ is the number of years in the analysis period.

Annual profit margin was calculated as the ratio of profit from operations to revenue, and the arithmetic mean for 2019 to 2023 was used as the initial normalization value for performance. Accordingly, preference for strategic alternatives was assessed by considering the relationship to performance of the enterprise, resource efficiency, and innovation activity along with sustainability of business model.

Here we ensured that each of the variables used in the analysis would be available on a comparable basis using a methodology designed to support inter-temporal comparison. For example, "I" represents enterprises, "t" is years within our study period, and "T = 5" refers to the number of years in which data have been collected. These annual measurements came from corporate financial statements; annual reports; environmental, social governance ("ESG") reports; sustainable development reports ("Sustainability Reports"); management reports; and other official public announcements made by the corporations. Using this process, we established long-term averages ("five-year values") for each of the annual measures (using an arithmetic average). All of these values fell into the range of 0 to 1.

Employee engagement (X_1) was measured through five documented practices: strategic working groups, suggestion schemes, engagement surveys, innovation-project participation, and continuous-improvement programs. Each practice received 1 when documented for a given year and 0 otherwise. The annual score was normalized and averaged as:

$$X_{1i} = \frac{1}{T} \sum_{t=1}^T \left(\frac{1}{K} \sum_{m=1}^K e_{imt} \right),$$

where e_{imt} is the binary value of practice m for enterprise i in year t , and $K = 5$.

Thus, X_1 measured documented engagement mechanisms rather than employees' subjective attitudes. Its original unit was points from 0 to 5, while the normalized value ranged from 0 to 1.

The number of strategic initiatives (X_2) was obtained from strategic plans, annual reports, management reports, and official corporate announcements. An initiative was counted when it was formally approved, non-routine, and directed toward market expansion, partnerships, restructuring, service development, or organizational change. Projects classified as internal innovation projects were excluded to prevent double counting. The original unit was the number of initiatives per enterprise per year. The indicator was calculated as:

$$X_{2i} = \min \left(\frac{\frac{1}{T} \sum_{t=1}^T S I_{it}}{10}, 1 \right),$$

where $S I_{it}$ is the number of eligible strategic initiatives implemented by enterprise i in year t .

The benchmark of ten initiatives represented the highest stable annual level observed in the sample and reviewed reporting sources. Values reaching or exceeding this benchmark received a normalized score of 1.

The variable for Business Model Digitalization (X_3) was created from the above-mentioned data sources, including Annual Reports, IT Disclosures, Management Reports, and Official Corporate Disclosure documents. The six categories used in the coding process included: Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), Cloud Services, Digital Customer Channels, Business Analytics, and Artificial Intelligence (AI)-enabled Automation. All of these categories were assessed on an individual basis per year. In cases where an enterprise had documented use of a category, it was assigned a value of 1. Here are categories that did not have implementation documentation at that time, receiving a score of zero. Consequently, each enterprise's original annual score ranges from 0 to 6 points. Then we created a new variable using normalization at the enterprise level defined before:

$$X_{3i} = \frac{1}{T} \sum_{t=1}^T \left(\frac{1}{D} \sum_{q=1}^D d_{iq t} \right),$$

Here $d_{iq t}$ represents binary values of components q for enterprise i in year t , and D equals 6. Results ranged from 0 to 1.

Investment intensity for Corporate Social Responsibility (X_4) comes from financial statements, reports on ESG, sustainability reports, and notes to annual accounts. Expenditures related to documented social, environmental, employee matters and communities are included. The original unit for this is the percentage of annual CSR expenditure relative to the enterprise's revenue.

$$CSR_{it} = \frac{CSRExp_{it}}{Revenue_{it}} \times 100\%,$$

The five-year value was normalised to a maximum value (the highest 5-year value) as follows: Where $CSRExp_{it}$ is CSR expenditure, and $Revenue_{it}$ is the revenue of enterprise i in year t .

$$X_{4i} = \min \left(\frac{\frac{1}{T} \sum_{t=1}^T C SR_{it}}{1.0}, 1 \right),$$

where 1.0 represents one percentage point of annual revenue. Values equal to or exceeding 1% of revenue received a normalized score of 1.

The composite enterprise development indicator (Y) combined profitability, revenue growth, and asset-use efficiency. Data were obtained from audited financial statements, annual reports, and official corporate disclosures. Profitability was represented by the normalized operating profit margin F_i defined above. Revenue growth was calculated as:

$$G_i = \left(\frac{Revenue_{i,2023}}{Revenue_{i,2019}} \right)^{1/4} - 1.$$

Asset-use efficiency was represented by the five-year average asset turnover:

$$AT_i = \frac{1}{T} \sum_{t=1}^T \frac{Revenue_{it}}{AverageAssets_{it}},$$

where $AverageAssets_{it}$ is the mean of total assets at the beginning and end of year t .

Revenue growth and asset turnover were normalized across the 60 enterprises using min–max transformation:

$$Z_{ik}^N = \frac{Z_{ik} - Z_k^{\min}}{Z_k^{\max} - Z_k^{\min}},$$

where Z_{ik} is the original value of component k , while $Z_k^{\min}$ and $Z_k^{\max}$ are sample limits.

The final enterprise development indicator was calculated as:

$$Y_i = \frac{F_i + G_i^N + AT_i^N}{3}.$$

Equal weights were used because no reliable theoretical basis supported assigning different weights to the three outcome dimensions. None of X_1 – X_4 was included directly in Y , which prevented mechanical correlation between the explanatory variables and the outcome indicator. Higher values of Y indicated stronger overall development within the analyzed sample.

Resource efficiency was not calculated as a separate composite indicator. It was interpreted through operating profit margin and asset turnover, which reflected profitability and asset-use efficiency. Internal innovation project intensity was based on formally documented projects introducing new or substantially improved services, digital solutions, processes, or organizational practices. Data were obtained from annual reports, innovation reports, management reports, and official corporate disclosures. Routine maintenance, standard equipment replacement, and regular software updates were excluded. The original unit was the number of projects per enterprise per year. The normalized indicator was calculated as:

$$IP_i^N = \min \left(\frac{\frac{1}{T} \sum_{t=1}^T IP_{it}}{10}, 1 \right),$$

where IP_{it} is the number of eligible internal innovation projects implemented by enterprise i in year t .

ESG initiative intensity was obtained from ESG reports, sustainability reports, annual reports, and official corporate disclosures. The original unit was the number of documented ESG initiatives per enterprise per year. The normalized indicator was calculated as:

$$ESG_i^N = \min \left(\frac{\frac{1}{T} \sum_{t=1}^T ESG_{it}}{10}, 1 \right),$$

where ESG_{it} is the number of documented environmental, social, or governance initiatives in year t .

Ethical code adoption (EC_i) - calculated as the five-year mean of annual binary observations:

$$EC_i = \frac{1}{T} \sum_{t=1}^T EC_{it},$$

where, $EC_{it} = 1$ when a Valid Formal Code was publicly disclosed, and $EC_{it} = 0$ otherwise.

The Innovation Activity Indicator was calculated as the arithmetic mean of three equally weighted normalized components:

$$I_i = \frac{IP_i^N + X_{2i} + X_{3i}}{3}.$$

The Business Model Sustainability indicator was calculated as:

$$S_i = \frac{EC_i + X_{4i} + ESG_i^N}{3}.$$

All components ranged from 0 to 1. Higher I_i values indicated stronger innovation activity, while higher S_i values indicated greater business model sustainability. The enterprise-level values of I , F , and S were subsequently averaged within each cluster. Standard deviations characterized variation among enterprises assigned to the same cluster. The analysis therefore focuses on the comparative economic characteristics of strategic profiles rather than on a formal investment appraisal of individual projects.

1. *The comparative assessment* was based on four indicators: the share of enterprises with formal ethical codes, social investment intensity, the average annual number of ESG initiatives, and the average annual number of internal innovation projects. For each country, Enterprise-level Observations were first averaged over the period 2019–2023 and then averaged across all enterprises included in the corresponding national subsample. The country-level value of indicator j was calculated as:

$$x_{cj} = \frac{1}{n_c} \sum_{i=1}^{n_c} \left(\frac{1}{T} \sum_{t=2019}^{2023} x_{ictj} \right),$$

here x_{cj} is the initial value of indicator j for country c ; x_{ictj} is the value of indicator j for enterprise i from country c in year t ; n_c is the number of enterprises representing country c ; and $T = 5$ is the number of analyzed years.

The share of enterprises with ethical codes was calculated as the number of enterprises with a valid formal code divided by the total number of sampled enterprises in the respective country. Since this indicator is naturally bounded (between 0 and 1), no additional transformation was applied. Social Investment intensity was calculated as average annual social and CSR-related expenditure as a percentage of enterprise revenue. The ESG and Innovation Indicators were the average annual number of documented initiatives or projects per enterprise. The remaining indicators were converted to a Uniform Scale using Benchmark normalization:

$$z_{cj} = \min \left(\frac{x_{cj}}{B_j}, 1 \right),$$

where z_{cj} represents the normalization of indicator j for Country c ; and B_j , the reference point for the given indicator.

Reference points were established as follows: 1% of an enterprise's total annual revenue (social investment intensity); 10 documented ESG initiatives per enterprise per year; and 10 internal innovation projects per enterprise per year. This threshold represented the most stable levels identified from the sample data analyzed in this study, and referenced by the reviewed source materials on reporting for 2019-2023. When values reached or exceeded these reference points, they were valued at 1. Each of the 4 indicators was treated as a stimulus for their respective strategic development; therefore, higher values indicated greater levels of strategic development. Identical definitions, time frames, and reference points were utilized across each country. A 5-year smoothing factor was employed to reduce the impact of any temporary fluctuation of annual values and provide comparable country-level values.

2. *Correlation analysis* was conducted to study relationships between enterprise development indicator Y and strategic variables: employee engagement (X_1), number of strategic initiatives (X_2), digitalization of business model (X_3), and intensity of CSR investment (X_4). Pearson product-moment correlation coefficients were calculated separately for each pair X_j and Y using the formula described in Methods. Before calculating Pearson coefficients, we used the Shapiro-Wilk test to check the distribution of each variable. The null hypothesis assumed that observations followed a normal distribution. Since the significance levels obtained were above 0.05, we concluded that no deviations from normality were statistically significant and Pearson coefficients could be used. Statistical significance of each Pearson correlation coefficient was evaluated using Student's t statistic.

$$t = r \sqrt{\frac{n-2}{1-r^2}}$$

where t represents the calculated test statistic, r is the Pearson correlation coefficient, $n = 60$ is the number of data points (observations), and $n - 2$ represents the number of degrees of freedom; a relationship was regarded as statistically significant at $p < 0.01$.

The 95 % confidence intervals for Pearson's coefficients were calculated based on Fisher's transformation. In the first step, the original correlation coefficient was transformed to Fisher z-scales. Then, with the help of the standard error, which can be determined from the sample size, the confidence interval for the parameter was estimated. The finally obtained limits were transformed back to the scale of correlations and presented as the confidence interval for Pearson's correlation coefficient in the table of results. Additionally, we also analyzed how robust our findings are by using Spearman's rank correlation coefficient:

$$\rho_s = 1 - \frac{6 \sum_{i=1}^n d_i^2}{n(n^2 - 1)}$$

ρ_s represents the Spearman rank correlation coefficient, and d_i is the difference in ranks of variables for enterprise i . $n = 60$ is the number of enterprises.

When ties occur in ranks, Pearson correlation is calculated using transformed ranks. Results of Spearman coefficients showed similar direction and similar relative strength of relationships to Pearson coefficients. Strength of relationships is interpreted as follows: $|r| \geq 0.70$ indicates a strong relationship, values from 0.50 to 0.69 indicate a moderate relationship, and values from 0.30 to 0.49 indicate a weak relationship. Positive coefficients indicate direct relationships, and negative coefficients indicate inverse relationships. Pairwise correlations among X_1 – X_4 were also looked at to assess possible multicollinearity. Since absolute values did not exceed 0.50, variables were treated as representing distinct development dimensions.

3. *Cluster analysis* was performed using enterprises based on normalized indicators of innovation activity, financial performance, and sustainability of business models. The optimal number of clusters was determined using the elbow method, which distinguished groups of enterprises with similar development profiles. Cluster characteristics are reported as $M \pm \sigma$, where M is the arithmetic mean, and σ is the standard deviation within each group. n indicates the number of enterprises assigned to a specific cluster. For example, 0.88 ± 0.07 means that the cluster mean equals 0.88 and the corresponding standard deviation is 0.07. Thus, $M \pm \sigma$ describes the distribution of observations and should not be taken as a confidence interval. Largest differences were seen for performance and innovation activity: leading cluster values were roughly twice as high as those in the weakest cluster (Table 2). Results are consistent with Farida and Setiawan (2022), who identify innovativeness as an important source of competitive advantage. In this sample, enterprises scoring highest on innovation were assigned to Cluster 1. Classification quality was assessed using silhouette coefficients, and an average value around 0.55 was obtained. This result indicated that there was satisfactory separation among the identified groups. We repeated the k-means procedure using different initial centroids, and the allocation of enterprises remained broadly stable again, which confirmed the stability of the three-cluster structure.

The K-Means Procedure produced a total of 60 enterprises in 3 groups: Group #1 had 15 enterprises, Group #2 had 25, and Group #3 had 20. Although the enterprise numbers were not equal per group, this is simply due to how we used the K-Means algorithm to create groups based on similarities in all three normalized variables for Innovation Activity, Financial Performance, and Business Model Sustainability. For example, enterprises in Group #1 averaged the greatest amount of innovation activity ($I = .88$), the greatest amount of financial performance ($F = .81$) as well as the greatest amount of business model sustainability ($S = .85$). Enterprises in Group #2 represent an intermediate strategic approach averaging

the amounts of $I = .57$, $F = .46$ & $S = .50$. Lastly, enterprises in Group #3 averaged the least amount of innovation activity ($I = .32$), the least amount of financial performance ($F = .24$), and the least amount of business model sustainability ($S = .37$). The mean and standard deviation of each indicator for each group can be found in Table 2.

Table 2. Average normalized indices of detected clusters, presented as mean $\pm$ standard deviation ($M \pm \sigma$)*. Note: M is the arithmetic mean, σ is the standard deviation, and n is the number of enterprises in the cluster. (Source: calculated by the authors based on data from EBRD (2024), Kearney (2023), McKinsey & Company (2023), OECD (2025), The Global Economy (2025), World Bank Group (2023))

Indicator	Cluster 1 (n=15)	Cluster 2 (n=25)	Cluster 3 (n=20)
Innovative activity, I	0.88 ± 0.07	0.57 ± 0.10	0.32 ± 0.09
Financial performance, F	0.81 ± 0.05	0.46 ± 0.08	0.24 ± 0.06
Business model sustainability, S	0.85 ± 0.06	0.50 ± 0.09	0.37 ± 0.08

The clusters comprising countries are presented below. Cluster 1 included 15 enterprises from the following countries: six from Germany and five from France; two from Spain; one from Poland; and one from the Czech Republic. No enterprise from Ukraine was assigned to this cluster. Cluster 2 included 25 enterprises from the following countries: 13 from Ukraine, four from Spain, four from the Czech Republic; three from Poland; and one from France. No enterprise from Germany was assigned to this cluster. Cluster 3 comprised 20 enterprises from the following countries: 17 from Ukraine, two from Poland, and one from the Czech Republic. No enterprise from Germany, France, or Spain was assigned to this cluster. Therefore, all enterprises in Cluster 1 were based in EU countries. Cluster 2 comprised 13 Ukrainian and 12 EU enterprises. Whereas Cluster 3 was dominated by Ukrainian enterprises, with a composition of 85%. The country of origin was not used as an input variable in the k-means procedure. Country composition was determined after enterprises had been classified into clusters based on their normalized innovation activity, financial performance, and business model sustainability indicators.

To enable comparable data across different regions in Europe, a method of both normalization and harmonization of the used indicators was implemented. All measures were standardized on an identical 0–1 scale. Additionally, each measure was defined identically throughout all participant countries. Thus, it is possible to directly compare, for example, the level of sustainability within each country as it relates to their respective levels of environmental, social governance (ESG) implementation. On the other hand, countries progressed at different rates toward sustainable economic development and digital transformation. Practices related to these topics have been established through institutional structures (for example, regulations) within European Union member states (Omowole et al. 2024). The accumulation of experience in the use of sustainability and digital transformations is a process that has just begun within Ukraine-based organizations (World Bank Group, 2023; OECD, 2025). Standardizing and limiting distortion due to national contexts, combined with selecting indicators appropriately, contributed to the increased reliability of comparisons among the results obtained.

RESULTS

The comparative analysis revealed a number of significant differences between service organizations operating in Ukraine and those operating in Europe using the same strategic measures. As is shown in Table 3, each of the measured indicators resulted in lower values from Ukrainian providers of computer and communications services. Only approximately 50 percent of Ukrainian companies have written and formalized codes of ethics, while over 95 percent of German companies in this study are at or near the top (as well as many other leading EU countries) regarding expenditures related to social programs, the number of ESG initiatives, and the number of internal innovation projects. Enterprises located in Europe have incorporated sustainability into their strategic plans; therefore, they exhibit greater levels of ESG performance than do their Ukrainian counterparts.

Table 3. Normalized strategic indicators of service enterprise development (0–1). (Source: calculated by the authors based on data from EBRD (2024), Kearney (2023), McKinsey & Company (2023), OECD (2025), The Global Economy (2025), World Bank Group (2023))

Country	Share of companies with ethical codes	Investments in social programs	Number of ESG initiatives	Internal innovation projects
Ukraine	0.50	0.30	0.40	0.30
Germany	0.95	0.80	1.00	1.00
France	0.90	0.75	0.90	0.90
Spain	0.80	0.60	0.70	0.60
Poland	0.70	0.40	0.50	0.40
Czech Republic	0.75	0.50	0.60	0.50

These differences seem to reflect contrasts at structural and institutional levels between Ukraine and the EU. Generally, enterprises in Europe operate in regulatory systems that are more predictable and receive stronger support for innovation, digitalization, and integration of ESG. Service firms in Ukraine face tighter investment constraints, greater economic uncertainty, and fewer institutional practices for sustainability. Digital infrastructure is less developed, and participation in global value chains is weaker, which further limits adoption of advanced strategic approaches. Consequently, many enterprises in Ukraine focus more on immediate resilience and survival in the market than on long-term innovation and sustainability.

Correlation analysis showed that there was a positive and statistically significant association between strategic practices and enterprise development. Table 4 reports correlations with values ranging from .58 to .78. The strength of the relationship between employee engagement and the composite development indicator was .78. Also, business model digitalization has a strong association with enterprise development outcomes ($r \approx .73$). This result is consistent with studies linking Digital technologies to higher operational efficiency and competitive advantage. In addition, the number of strategic initiatives was positively related to enterprise development ($r \approx .66$). Economically, digitalization may reduce transaction costs by streamlining processes and enhancing the scalability of service delivery. Digital tools support automation, customer interaction, and faster managerial decision-making. These mechanisms can improve enterprise performance; however, their effect vary across firms and conditions of implementation. Also, a larger portfolio of strategic initiatives will probably enhance adaptability and responsiveness to market changes. On the other hand, additional projects do not necessarily create proportionate value, and returns on them may diminish when resources are overstretched.

Table 4. Results of correlation analysis of strategic variables and development level within service enterprises (taking into account the significance level and relationships interpretation). (Source: calculated by the authors based on data from EBRD (2024), Kearney (2023), McKinsey & Company (2023), OECD (2025), The Global Economy (2025), World Bank Group (2023))

Variable	Marking	Pearson's coefficient (r)	Significance level (p)	95% confidence interval for r	Relationship interpretation
Staff Engagement Index	X ₁	0.78	<0.01	0.70–0.85	The higher the level of employee participation in strategic processes, the better the enterprise's development results
Number of strategic initiatives	X ₂	0.66	<0.01	0.55–0.74	The increase in the number of projects contributes to increased competitiveness, but the effect is moderate and not always linear
Digitalization level of the business model	X ₃	0.73	<0.01	0.63–0.80	The utilization of digital tools directly affects enterprise performance and operational efficiency
Investments in CSR	X ₄	0.58	<0.01	0.46–0.68	Social spending correlates with development, but weakly; the effect is often delayed and not always apparent in the short-term perspective

The weakest correlation was between CSR investments and business growth ($r = 0.58$), which also appeared to be lower than all of the correlations found for employee engagement, digitalization, and corporate strategy. The findings suggest that there could be an indirect effect of social investments on performance, or it takes a while before an impact is seen. It would make sense for this type of relationship to occur with SME's as they rarely see short-term financial results from CSR activities.

There are several reasons why the associations were weak, including the fact that it often takes some time to see business results from CSR expenditures. The effects of digitalization and employee engagement likely will have quicker impacts on productivity due to changes in processes and employees participating in them. CSR efforts generally create value through reputation, increased confidence among stakeholders, employee relations, and long-term resilience. Therefore, their potential to positively impact a firm financially over a 5-year period is potentially limited. This delayed benefit is even more important in emerging markets where institutional support for ESG and market-based incentives are still developing.

Correlational Analysis identified the degree of association between the Primary Indicators of strategy and overall enterprise Development. A Pearson coefficient was provided for each indicator along with an estimated 95 percent Confidence Interval (CI) and a probability ($p < .01$) that represented the level of statistical accuracy of each correlation. This information represents the accuracy of the correlations and provides a basis for comparison in terms of the association between variables. As such, we can identify employee engagement as X₁; Strategic Initiatives as X₂; Business Model Digitalization as X₃; and CSR Investment as X₄. All four measures are presented with respect to the Pearson coefficients, 95% CI, p-values, and what these statistics mean practically, within Table 4.

Pearson Coefficients represent how much one variable is related to another compared to all other possible relations between two variables. There was a strong positive relation found between Employee Engagement ($r = .78$) and Digitalization ($r = .73$) relative to Enterprise Development. The number of Strategic Initiatives had a moderate positive relation to Enterprise Development ($r = .66$), while CSR Investment had the weakest relation ($r = .58$). Therefore, the results support our hypothesis regarding varying degrees of effect among strategic factors on various enterprise development outcomes.

Cluster Analysis yielded three distinct strategic profiles. The nature of each of these clusters, as well as their respective countries, can be found in the Methods section and in Table 2. There is considerable difference among them. In terms of economic performance and innovation, Cluster 1 exhibited the best results, while Cluster 3 indicated poor performance. Therefore, the comparisons will be based upon relative strategic performance. These findings do not suggest an appropriate universal model for all service-based businesses.

In addition to providing a comparative view of enterprise development, the findings of this study provide a structural view. Rather than grouping firms solely by singular characteristics or attributes, they were grouped into recurring patterns or combinations of characteristics. As such, Cluster 1 combined superior levels of digitalization and innovation activity with higher levels of employee engagement, ultimately resulting in better overall performance. Conversely, Cluster 3 had poorer performance compared to Cluster 1, but demonstrated consistent inferiorities when measured along similar dimensions. Ultimately, this suggests that successful strategy implementation is dependent upon the interaction of multiple variables and not upon a solitary variable.

The geographic composition of the clusters illustrated a significant international disparity (See Figure 2). Each member of Cluster 1 was comprised exclusively of EU enterprises, consisting of six German and five French companies. All other members were composed of Spanish, Polish, and Czech Republic companies. Cluster 3 was composed entirely of seventeen Ukrainian enterprises and only three EU companies: two Polish and one Czech Republic company. As a result, Ukrainian companies made up 85 percent of this group. Cluster 2 was much more evenly distributed in terms of its membership as it consisted of twelve EU companies and thirteen Ukrainian companies. Its EU membership included companies from Spain, Poland, the Czech Republic, and France. Also evident through cluster analysis is that Cluster 1 demonstrated the highest level of strategic activity through implementing anywhere from 7 to 9 ESG initiatives per enterprise. Cluster 2 implemented traditional practices combined with moderate levels of digitalization and socially responsible investments. Conversely, Cluster 3 demonstrated little to no expenditures for social issues, nor did it have a systematic approach to innovation, which was reflective of its poorer benchmark results.

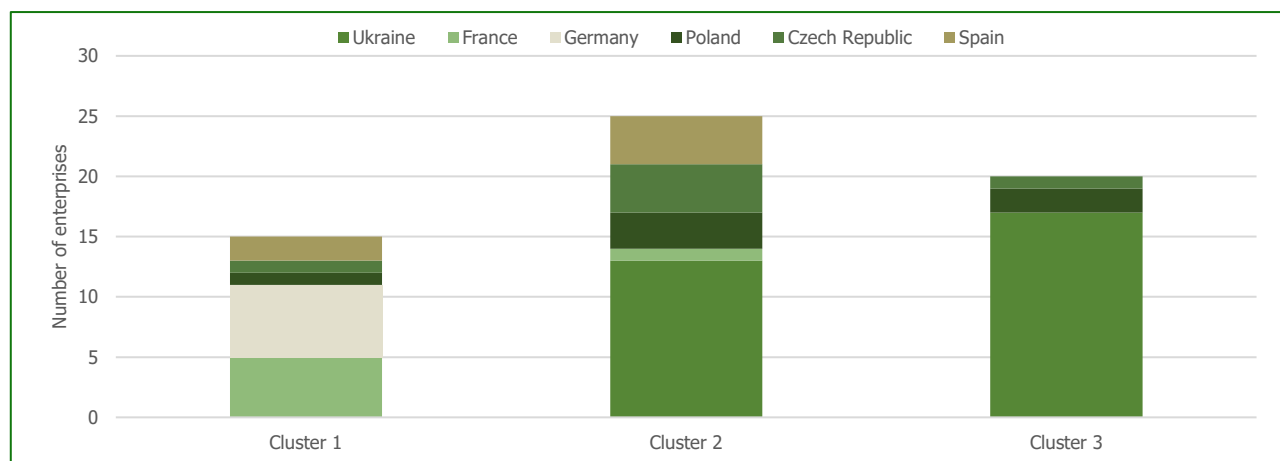


Figure 2. Distribution of enterprises by clusters and countries.

In addition, Ukrainian services enterprises are found to be mainly located within the weak strategy clusters; meanwhile, EU firms represent the majority of Cluster 1 as well as “the leaders.” The observed trend is in line with international assessments of the attractiveness of business services. Thus, according to the Business Environment Risk Index (BERI), Poland has taken the second position in Europe, and the fourteenth worldwide, whereas Ukraine ranked forty-second. As follows from these results, a considerable gap exists between Ukrainian and European enterprises in terms of strategic development. On average, European firms tend to implement more innovative, active, and sustainable strategies. Ukrainian enterprises tend to use more conservative approaches that have an obviously lower level of innovation components. The obtained results emphasize the significance of innovation, digital transformation, and employee engagement for competitiveness in modern service markets. Therefore, enterprise development is influenced by a combination of various factors

rather than individual strategic decisions. Quantitative evaluation of the relative importance of different factors can be performed using correlation and cluster analysis methods.

Empirical data also provide a rationale for making practical recommendations concerning the choice of strategically viable alternative options. Ukrainian enterprises lag far behind EU counterparts in innovation, digitalization, and ESG adoption. This gap indicates that business-model renewal combined with a wider range of socially and ecologically oriented investments is required for Ukrainian businesses. Such practices are widely used in Germany and France. Correlation results demonstrate strong positive correlations between employee engagement and business-model digitalization, and also between employee engagement and enterprise development. Therefore, Ukrainian companies should give precedence to innovation and development of digitalized services in addition to promoting workplace culture supportive of employees' motivation. In case of introducing changes into their business processes, managers will gain benefits due to improved productivity as well as stronger competitive positions in conditions of increasing complexity of market demands. When evaluating the available options for action, managers should take into account potential increase in productivity of their business activities, costs associated with introduction of new solutions, and impact on medium-term financial stability.

DISCUSSION

The study confirms the research hypothesis that there is a relationship (to varying extents) between strategic factors and enterprise development. Using both correlation and model-based analysis methods, it was possible to distinguish clearly the degree of association and orientation of each of the individual relationships among the strategic factors. Of all of the strategic factors investigated, employee engagement and digitalization of business models exhibited the highest level of association with enterprise development indicators. By comparison, investments made in corporate social responsibility were significantly less associated than those two other strategic factors and appear to have a considerably longer temporal development horizon. Overall, the study's results suggest that while all strategic factors vary based on whether they exist or do not exist at a particular enterprise, they also vary in terms of their impact upon the overall performance of the enterprise. In general, from an economic perspective, implementation of strategies designed to improve productivity, operational efficiency, and reduce costs will generate greater short-term performance enhancements for an enterprise than would be generated by the implementation of CSR-related strategies. However, the latter type of strategy has the potential to provide indirect advantages to an enterprise such as increased reputation, enhanced stakeholder trust, and improved long-term resilience. Therefore, from a practical perspective, for resource-constrained enterprises, this hierarchy provides guidance regarding which set(s) of strategic actions should be undertaken first. Productivity, efficiency, and cost reduction initiatives are generally best implemented before undertaking CSR-related activities.

The contributions made by the science of this study lie in developing a comprehensive, quantitative, and comparative analysis of the effect of strategic elements on the development of service enterprises globally. Unlike previous studies that were based primarily on conceptual, qualitative, or singular factor approaches, this study employed both an international comparative assessment methodology and correlation and cluster modelling methodologies to demonstrate the existence of associations between strategic elements and developmental results and to quantify those associations across countries. With such an integrative approach, it was feasible to assess heterogeneity in the effects of strategic elements and to establish characteristic strategic profiles for various economic and developmental outcomes.

The findings of this study support previous studies which emphasized that service sector organizations should employ adaptive and innovation-based strategy (Zalutka & Hnat, 2024; Danyliuk et al., 2025). Previous studies typically presented conceptual or qualitative interpretations, while this study provided quantifiable evidence for varying levels of association. The data show that there is no direct association between all strategic elements and enterprise development. Rather, strategic elements exist in hierarchical order and can be demonstrated statistically.

The strong association between digitalization and enterprise development confirms the conclusions drawn by Agustian et al. (2023) and Zhang et al. (2022a), where both studies indicate digital transformation as a key source of competitive advantage. However, the current results expand upon these findings by demonstrating the relevance of digitalization as a critical element in determining business success within an internationally comparable group. Furthermore, the findings highlighted the interplay between digitalization and employee engagement as opposed to viewing technological change as separate processes. In contrast to digitalization, CSR investment displayed a weaker positive association with enterprise development in the short term. Although this result partially supports Omowole et al. (2024), who stated the long-term nature of green practices, this finding differs from other studies that reported CSR investments had a greater positive association with enterprise development due to the position of SMEs and firms operating in emerging economies. Practices

representing CSR remain under-institutionalized in many emerging markets and therefore represent potential future returns to firms investing in CSR. The extent to which CSR contributes to enterprise development will depend on local institutions and the market.

From the modelling aspect of the research, the values of the coefficients represent the degree of relationship between each strategic indicator and enterprise development. However, as previously noted, no actual regression equation was estimated, and no causal relationships were established in the current study. Nevertheless, by comparing the values of the coefficients, it can be seen which variables are statistically more significant for enterprises in the sample analyzed. X_1 and X_3 had a greater impact than did X_4 . Therefore, their larger values indicate a higher explanatory capability, and this interpretation is restricted to correlation-based evidence.

The differences found between Ukrainian and EU enterprises confirm what has been reported in international literature concerning institutional development and innovation capacity (OECD, 2025; World Bank Group, 2023). The current study offers an enterprise-level explanation of the reasons behind the aforementioned differences through identifying and linking them to particular configurations of strategic indicators. Ukrainian firms were typically represented in profiles characterized by less frequent use of digitalization and low levels of innovative activity. Thus, while the difference between Ukrainian and EU enterprises may reflect some institutional differences, they also reflect the differing strategic choices and capabilities of individual enterprises. Enterprise development can reflect the level of various broad economic conditions.

Cluster analysis is complementary to correlation analysis because cluster analysis will identify recurring patterns of strategy based upon combinations of different strategic characteristics without isolating one characteristic. Typically, clusters that contained enterprises that possessed strong digitalization and employee engagement characteristics would be those with strong development outcomes. Conversely, firms whose values for these characteristics were weak were typically grouped into lower-performing clusters. Consequently, the results of cluster analysis provide further support for the idea that where an enterprise is positioned depends upon the combined intensity of multiple strategic indicators.

The current study has several limitations, including the fact that our sample data represents a very small fraction of enterprises involved in the computer and communication equipment repair services. Furthermore, our analytical period (2019-2023) limits the generalizability of our results to the entire service sector; however, our sample will remain relevant to the specific industry we are studying. Additionally, our study is based on correlations. While the application of Pearson's Coefficients enables us to understand the direction and magnitude of the relationship between strategy and enterprise development indicators, correlational studies cannot provide information about causality. Thus, while we can conclude with some level of confidence that there exists an association between different aspects of strategy and enterprise development indicators, we would be overstepping if we were to infer that the same association was due to a direct effect on enterprise performance due to changes in one aspect of strategy. Finally, since we have used normalized indicators for purposes of comparison of strategic profiles, they do not reflect all costs associated with individual enterprises' execution of their strategies, nor do they account for differences in risk associated with implementing those strategies and/or benefits realized by each enterprise. As such, we believe that the strategic profiles we have developed represent relatively better approaches to developing strategy than universally applicable approaches to all service enterprises. We suggest future research utilize a larger sample base than ours to study multiple segments of the service economy. We also recommend applying panel regression, longitudinal analysis, or other time-series models to allow for a more thorough examination of both causal and time-dependent effects among variables.

The study is different from previous ones in that it evaluates enterprise development using a totalized model of analysis rather than as separate components or mainly qualitative judgements. Instead of environmental configurations as emphasized by Leppänen et al. (2023), or competitive positioning as described by Varadarajan (2023), the present study compares the relative importance of various strategic elements contained in a single analytical framework. In contrast to particular aspects of digitalization examined by Khanom (2023) and their relation to employee engagement among an international enterprise population sample, these findings extend existing literature about alternative strategies of the services sector. These results show how a strong competitor can be developed for service enterprises across all national markets via digitalization, employee engagement, and innovation. These results will serve as a base for the development of new policies for the service sectors in Ukraine which encourage integration into the global market and at the same time promote the long-term economic and organizational sustainability.

CONCLUSIONS

The study examines a quantitative relationship between strategic features and development indicators among companies competing heavily within services. A cross-country comparative analysis shows there is a significant difference between

the main strategic characteristics of Ukrainian and EU countries. The results suggest that for sustainable success, Ukrainian firms will have to transition away from traditional (conservative) models toward more flexible, innovation-based models. Additionally, the alternative strategic options available vary significantly regarding their linkage to enterprise financial performance, operational efficiency, and long-term sustainability.

There are several conclusions to be made relative to this research. Employee commitment and digitalization of the business model had the greatest association with enterprise development according to the correlation coefficient. Social investment and environmental-social-governance (ESG) practices were positive but were less strong and developed more slowly than employee commitment and digitalization of the business model. Three strategic groups were created through cluster analysis. Most Ukrainian firms were classified in the lowest-performing cluster; most German and French firms were classified into the top-performing cluster. There is evidence that a number of international competitive imbalances remain to be addressed in order to create opportunities for growth in Ukrainian firms. Additionally, the research supports the hypothesis that strategic factors are related to enterprise development to varying degrees. The significance of the strategic factor will vary by type of initiative or program being implemented, the duration of time over which it is implemented, and/or its application within an institutionally variable environment.

In terms of applied significance, this research is related to the potential application of results by managers of Ukrainian service companies. Managers can apply the established relationships as an argument for investments in digitalization, create innovative solutions, and stimulate employees' involvement. Some early priority areas will be CRM systems, ERP platforms, and some AI services, which can contribute to better coordination of processes and decision-making at the managerial level. In addition, SMEs need to introduce ESG reporting in order to improve transparency and follow up on sustainability expectations.

From the point of view of public authorities, there are a number of ideas on how they can use these results to design more focused forms of supporting service businesses. Public authorities can provide tax incentives and competitive grants to encourage investments in digital technologies and ESG initiatives. Moreover, digital service incubators and innovation accelerators can facilitate the development of new business models. These actions can improve opportunities for Ukrainian companies to enter international markets and strengthen the competitive positions of national companies.

Scientifically, the novelty of this research consists in using correlational analysis, quantitative modelling, and clustering techniques to get a common economic explanation. Using such an approach allows identifying the presence of statistical relations between variables, but also distinguishing the differences in the intensity of these relations. Therefore, it provides a deeper insight into business development under competition.

Research that examines service industries such as Tourism, Logistics, education, etc., and addresses regional differences will be able to add to this line of inquiry. An application of a panel analysis would provide additional clarity regarding the operation of strategic factors over time. An examination of future trends related to Digitalization and ESG adoption using ARIMA models can provide insight into the longer-term implications of these initiatives. Additional research is also warranted considering the impact of Global Crises on Service Strategies. Separate studies are also recommended for International Franchising and Cluster Cooperation, as they both have the potential to assist Ukraine's Integration into EU Markets.

The overall results of the Study confirm the importance of Innovation, Digitalization, and Social Responsibility for Development in service enterprises. The Study has provided an Economic Framework by which Strategic Alternatives can be compared based upon their association with Productivity, Resource Efficiency, Competitiveness and Long-Term Sustainability.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

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CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

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ЕКОНОМІЧНЕ ОБҐРУНТУВАННЯ ВИБОРУ СТРАТЕГІЧНИХ АЛЬТЕРНАТИВ РОЗВИТКУ ПІДПРИЄМСТВ СФЕРИ ПОСЛУГ В УМОВАХ ВИСОКОЇ РИНКОВОЇ КОНКУРЕНЦІЇ

Метою дослідження є кількісне оцінювання взаємозв'язку між стратегічними характеристиками підприємств сфери послуг, економічними результатами, пов'язаними з їх реалізацією, та показниками розвитку підприємств в умовах високої ринкової конкуренції. Економічний вимір стратегічного вибору відображається в оцінці фінансових результатів, операційної ефективності, показників, пов'язаних з інвестиціями, та внеску стратегічних альтернатив у конкурентоспроможність підприємства. Для досягнення цієї мети в дослідженні систематизовано фактори стратегічного розвитку, розроблено набір вимірюваних показників і застосовано методи порівняльного, кореляційного та кластерного моделювання. Дослідження базувалося на вибірці з 60 підприємств України та країн ЄС (Німеччина, Франція, Польща, Чехія, Іспанія) у галузі ремонту комп'ютерного та комунікаційного обладнання. Дані були зібрані за період із 2019 по 2023 рік, отримані зі статистичних і нефінансових звітів міжнародних організацій. Були виявлені помітні розбіжності між Україною та країнами ЄС щодо стратегічних показників, що стосуються розвитку підприємств сфери послуг. Цифровізація бізнес-моделей і залучення співробітників мають найбільш виражений позитивний вплив на результати, водночас інвестиції в корпоративну соціальну відповідальність (КСВ) демонструють відкладений ефект. Кластерний аналіз сприяв визначенню трьох архетипних стратегій, при цьому українські підприємства переважно належать до когорти з найнижчими показниками ефективності, а європейські компанії зосереджені в «кластері лідерів». Результати дослідження можуть бути використані керівниками підприємств сфери послуг для розробки стратегій цифровізації, активізації інноваційних починань і підвищення залученості співробітників. Зокрема підприємствам рекомендовано пріоритетувати впровадження CRM-систем, ERP-рішень і послуг штучного інтелекту, а також розвиток ESG-звітності в секторі малого та середнього бізнесу. Для державної політики результати дослідження забезпечують основу для розробки ініціатив, спрямованих на підтримку бізнесу в сфері послуг. Доцільно запровадити податкові пільги, грантові програми та створити інкубатори цифрових послуг для прискорення інновацій і зміцнення стратегічних можливостей підприємств сфери послуг.

Ключові слова: підприємства сфери послуг, конкурентоспроможність, цифрова трансформація, інновації, кластерний аналіз, кореляційний аналіз, сталий розвиток, Україна, Європейський Союз, економічна ефективність

JEL Класифікація: L80, L84, M10, M21, O30, O52