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HOW INNOVATION REQUIREMENTS, PRODUCT CREATIVITY, EMPLOYEE INGENUITY, AND DIGITAL CHANGE SHAPE STRATEGIC ORIENTATION

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Abstract. *Purpose.* This study investigates the influence of innovation-related factors on strategic orientation in contemporary organizations. Specifically, it examines the impact of four variables: Innovativeness as a Job Requirement, Product Innovation, Employee Innovativeness, and Digital Transformation.
Design/methodology/approach. A quantitative approach was adopted using a structured survey distributed via social networks (Instagram, Telegram, WhatsApp) through Google Forms. The survey gathered responses from 69 participants of diverse gender, age, and education levels within Kazakhstan. Regression analysis was employed to assess the relationships between the variables.
Findings. The results indicate that Employee Innovativeness and Digital Transformation significantly influence Strategic Orientation, explaining 77% of its variance. In contrast, Innovativeness as a Job Requirement and Product Innovation showed no significant impact. The findings suggest that innovation embedded in organizational culture and supported by digital processes contributes more meaningfully to strategic adaptability than product-based innovation alone.
Originality. This study contributes to the growing body of literature on strategic orientation by highlighting the comparative influence of internal innovation-related factors. It emphasizes the critical role of employee-driven innovation and digital transformation in shaping effective strategic frameworks. The research also points out limitations in existing models by showing that certain innovation indicators may not always predict strategic orientation in specific contexts. Recommendations for future research include using longitudinal designs and expanding geographic and industry scope to validate and generalize findings.
Key words: strategic orientation, employee innovativeness, digital transformation, product innovation, job innovativeness.

Introduction

Managers within organizations tend to emphasize different strategic actions depending on the specific objectives they are striving to achieve (Olson et al., 2005). These strategic priorities are not chosen arbitrarily; rather, they are guided by a deliberate alignment with the company's overarching goals, competitive landscape, and available resources. For example, firms that place a high value on customer orientation focus their efforts on generating long-term customer satisfaction and building strong relationships by consistently delivering value to their clients. These companies aim to create a customer-centric environment where feedback, loyalty, and personalized experiences are central to their strategic framework.

On the other hand, organizations that adopt a competitor-oriented strategy invest time and effort in thoroughly analyzing their market rivals. This entails the identification of competitor strengths and weaknesses, forecasting what they are likely to do next, and adjusting internal strategy to beat them. Concurrently, cost-oriented firms work at maximizing their internal processes with a view to minimizing waste and maximizing productivity across their value chain. Their aim is to be operationally excellent by reducing costs without detracting from performance or quality (Day, 1990; Porter, 1985). It must be acknowledged, however, that such var-

ied strategic orientations are not necessarily mutual. Firms tend to follow a mix strategy instead, using a combination of customer, competitor, and cost-based strategies simultaneously in order to be dynamic and adaptable in dynamic markets (Gatignon and Xuereb, 1997). A multi-dimensional strategy enables firms to cope more efficiently with complex environments and take advantage of emerging opportunities.

Strategic orientation is deeply embedded in the broader framework of organizational culture. It reflects the values, beliefs, and assumptions shared by members of the organization, which collectively influence behavior and decision-making processes (Deshpande et al., 1993; Hurley and Hult, 1998; Narver and Slater, 1990). This culture serves as an intangible yet powerful asset that shapes strategic behavior and performance. According to scholars such as Barney (1991) and Grant (1991), organizational culture can be viewed as a valuable resource that offers firms a unique advantage that is difficult to replicate. The way these cultural resources–manifested as strategic orientations–are deployed can result in varying degrees of success or failure depending on the market context and internal alignment (Day, 1994). Fundamentally, strategic orientation is a guiding mechanism for channeling organizational resources–be it human, financial, technological, or intellectual–towards long-term business success. It is an operating guide that defines how firms compete, innovate, and sustain performance in rapidly changing environments.

Strategic orientation is also an essential force behind organizational success in the current VUCA world. The rapid pace of technological advancement, heightened competition, and shifting consumer demands call for firms to respond quickly and intelligently. Firms endowed with clearly defined strategic orientation are better positioned to withstand uncertainties, respond to market signals, and capitalize on opportunities. In a bid to stay competitive, companies must continually align their objectives with present market trends, technological breakthroughs, and organizational competencies.

One of the critical enablers in this adaptation process is innovation. Innovation should not be confined to product development or service enhancement alone; it must also permeate all levels of the organization–from frontline employees and middle managers to senior leadership. Cultivating a culture of innovation strengthens employee engagement, encourages experimentation, and fosters a proactive approach to problem-solving.

This paper focuses on four interrelated variables and examines their influence on shaping and enhancing a firm's strategic orientation. These variables are: Innovativeness as a Job Requirement, Product Innovation, Employee Innovativeness, and Digital Transformation. Each of these elements plays a distinct yet interconnected role in enabling organizations to define and execute effective strategies. For example, embedding innovativeness as a core job requirement ensures that creative thinking becomes a standard expectation across roles. Incentivizing product innovation makes products relative and desirable. Fostering employee innovativeness creates an employee base that continually generates new ideas, and adopting digital transformation offers them the technology and equipment required to be successful in the digital age. The examination presented in this study offers insights into each factor's relative impact on strategic orientation. The study will provide business leaders with actionable recommendations for how effort and investment should be directed on which dimensions in order to generate performance and long-term competitiveness in an increasingly fast-moving environment.

Literature review

According to Yuan and Woodman (2010) innovation acts as a fundamental for achieving success in the position. Workers who recognize innovation as an essential job requirement tend to see novelty alongside new idea creation and utilization as performance-improving factors. This job requirement reflects outside expectations thus creating a social and political acceptance for employee innovative actions. Product innovation entails both production of new original products and enhancement of existing ones with unique attributes or improved worth (Setyawati, A. et al, 2024). Quality along with functionality with design and technology represent different components under product innovation. The new ideas help organizations succeed in competitive markets by responding to market developments thereby achieving better business performance.

Employee innovativeness entails an individual creating new ideas and promoting them to achieve productive results (Khan, M. et al, 2021). Employee Innovativeness defines the capacity for workers to enhance innovation through their creative thinking combined with new skills and original concepts which deliver enhanced value to organizational work. Digital transformation operates through digital technology application to boost business operations

with model innovation and enhance performance improvement (Malewska, K. et al, 2024). The process combines the alignment of strategy with culture and people and leadership through operational process and structure redesign. Digitalization includes the collection of data as well as the development of improved interconnection and user interfaces and better communication methods. Based on Khan, M. et al (2021), Strategic orientation describes the extern and pace with which organizations obtain market information before they distribute it for making necessary strategic decisions. The success of new products depends on it and becomes vital for organizations which operate in markets containing high uncertainty and require both customer-driven and technology-based approaches. The research model is presented in the figure 1.

Hypotheses:

H1: Innovativeness as a Job requirement has a positive impact on shaping Strategic Orientation

H2: Product Innovation has a positive impact on shaping Strategic Orientation

H3: Employee Innovativeness has a positive impact on shaping Strategic Orientation

H4: Digital Transformation has a positive impact on shaping Strategic Orientation

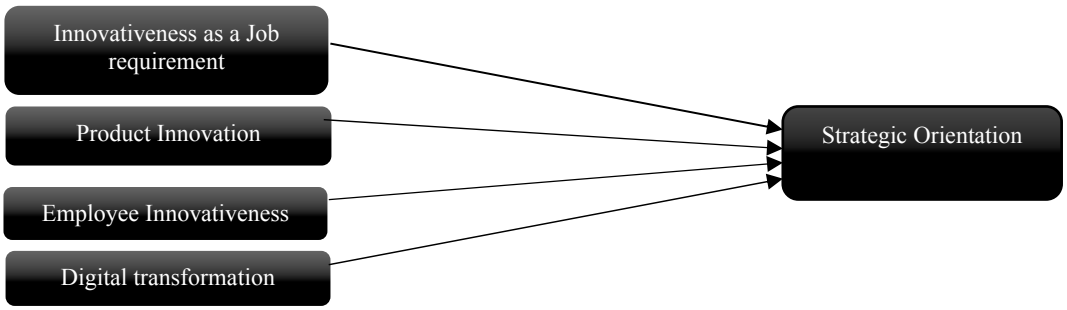

Figure 1 – Research Model

Methodology

This study used quantitative method, namely a survey. It enables to gather data from different groups of multitude of genders, ages and levels of education. The survey was created through Google forms and distributed through social networks such as: Instagram, Telegram, WhatsApp. Since the topic of innovation concerns every modern person, the survey was conducted among different segments of the population. The total amount of participants is 69.

The survey began with general questions and then consisted of 5 variables. There were 5 questions in each block. All questions are listed in Appendix. The answers were presented in the form of a likert skale, where 1 – completely disagree, and 5 – completely agree. Since the questionnaire was conducted in Kazakhstan, all questions were translated into Russian for better understanding.

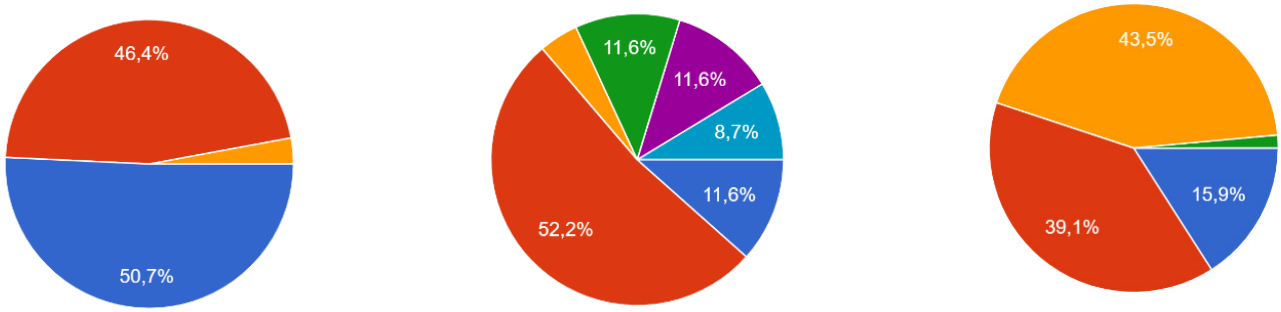

Figure 2 – Gender, Age and Level of education of respondents respectively

The first picture shows the gender of the participants. Both sexes took part in the survey approximately equally, but the number of male respondents is higher. 50.7% of respondents were men, while women were 46.4%. There was also an answer I prefer not to answer, which was chosen by 2.9% of the participants (Fig.2).

Slightly more than half of the participants, namely 52.2% were between ages of 19 and 25. Three age groups: under 18 years old, 36-45 and 46-55 were the same number of the total amount (11.6%). Then there were people over 55 (8.7%). The smallest number of participants was between the ages of 26 ang 35 – 4.3%. Most people have higher (43.5%) or incomplete higher education (39.1%). Only 15.9% of respondents have an average level og education (Fig.2).

A scale designed by Yuan and Woodman was used to assess how innovativeness is considered a part of job duties. It included questions like: "My job duties include searching for new technologies and techniques". Setyawati's et al. scale helped to evaluate the level of product innovation. The scale featured questions such as: "Products/services we sell are unique". The Scott and Bruce's scale assessed the innovativeness of employees in their workplace. It included items like: "I create new ideas for difficult issues". A scale created by Nasiri et al. was used to evaluate digital transformation. It included questions such as: "In our company, we aim to digitalize everything that can be digitalized". Khan's et al. scale was developed to evaluate the company's strategic orientation. It consists of questions such as: "It is easy for us to "promptly detect shifts in our markets.

Results and discussion

Descriptive statistics. The statistics for six variables span over 69 observations according to this table. Gender data exhibits a mean of 0.478 which shows that gender values of 0 and 1 are distributed evenly while its standard deviation measures 0.503 (Table 1). The variables Innovativeness as a Job requirement, Product Innovation, Employee Innovativeness, Digital Transformation and Strategic Orientation have their ratings distributed on a scale of 1 to 5. Variables obtained mean results from 3.800 (IaJR) to 4.067 (SO) with standard deviation levels between 0.844 to 1.001. Respondents provided mainly positive evaluations that showed average yet controlled disposition across the sample.

Table 1 – Descriptive statistics

Statistic	N	Mean	Std. Dev.	Min	Max
Gender	69	0.478	0.503	0	1
IaJR	69	3.800	0.970	1.000	5.000
PI	69	3.864	1.001	1.000	5.000
EI	69	3.930	0.901	1.000	5.000
DT	69	4.012	0.893	1.000	5.000
SO	69	4.067	0.844	1.000	5.000

Correlation table. The table 2 shows how strongly and what direction the variables Innovativeness as a Job requirement (IaJR), Product Innovation (PI), Employee Innovativeness (EI), Digital Transformation (DT) relate to Strategic Orientation (SO).

A high level of digital transformation creates the strongest association with more developed strategic orientation among all independent variables. The positive correlation between SO and DT reaches 0.8589 in this evaluation. The relationship between product innovation and strategic orientation exhibits a cubstantial positive value of 0.7576 according to the examination. Companies that prioritize employee innovativeness as a recruitment criterion exhibit a significant relationship (0.7355) to their strategic orientation as gauged by SO. Employee innovativeness contributes significantly to organization strategy according to the correlation measurement of 0.8143.

Table 2 – Correlation table

	IaJR	PI	EI	DT	SO
IaJR	1.0000	0.7217	0.6875	0.7314	0.7355
PI	0.7217	1.0000	0.8457	0.7487	0.7576
EI	0.6875	0.8457	1.0000	0.7580	0.8143
DT	0.7314	0.7487	0.7580	1.0000	0.8589
SO	0.7355	0.7576	0.8143	0.8589	1.0000

Boxplots and p-values. All the boxplots demonstrate the distribution of strategic orientation by gender (1 – females and 0 – males) across various aspects of innovation (Innovativeness as a Job requirement, Product Innovation, Employee Innovativeness and Digital Transformation). For all variables, the medians are at more or less the same level (around 4) for men and women, which means that the ratings are similar between genders. Nevertheless, there are disparities in the data spread: for females, the propagation of values is wider, which may mean a higher level of picture variance in the perception (Fig. 3).

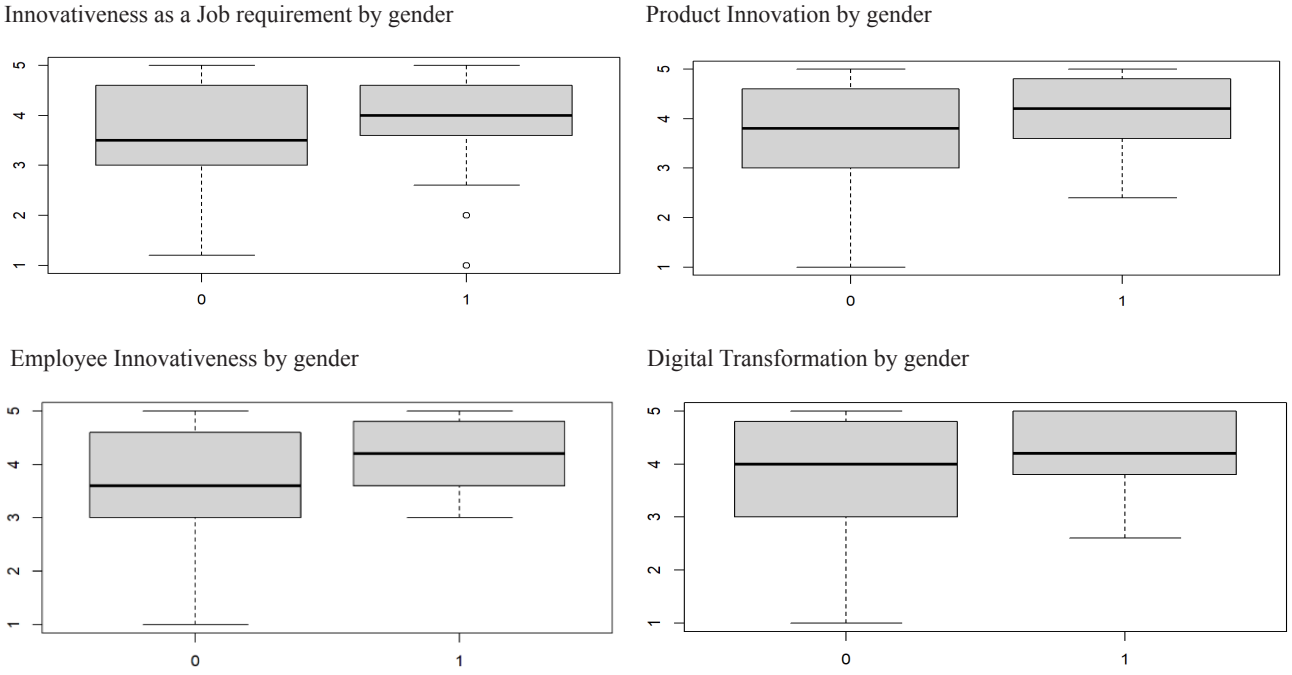

Figure 5 – Boxplots and p-values

Regression model. The regression model required application of the following formula:

$$SO \sim DT + IaJR + EI + PI$$

*Coefficients***.** The intercept value stands at 0.52200 indicating that when all predictor variables equal zero Strategic Orientation measures 0.52200. The Employee Innovativeness variable resulted in a coefficient value of 0.35886. The influence of Employee Innovativeness upon Strategic Orientation amounts to 0.35886 units for each unit of change. The relationship between Employee Innovativeness and Strategic Orientation reaches statistical significance because the p-value (0.00367) lies below 0.01.

Strategic Orientation rises by 0.06863 units when Innovativeness as a Job Requirement increases by one unit according to IaJR. The effect between Employee Innovativeness and Strategic Orientation remains non-statistically significant due to the p-value exceeding 0.05 (0.37827).

No strong correlation exists between Product Innovation and Strategic Orientation based on the obtained coefficient of 0.03032. The computed p-value (0.78306) exceeds 0.05 thus showing that the relationship between variables lacks statistical significance.

According to the statistics Digital Transformation shows a proportionate relationship with Strategic Orientation at 0.43779. Table 3 reveals that the p-value indicates an extremely significant link with a value below 2.2e-16.

Table 3 – Regression Model Coefficents

	Estimate	**Std. Error**	**t value**	**p-value**	**Significance**
(Intercept)	0.52200	0.24918	2.095	0.04015	*
EI	0.35886	0.11897	3.016	0.00367	**
IaJR	0.06863	0.07735	0.887	0.37827	
PI	0.03032	0.10967	0.276	0.78306	
DT	0.43779	0.08890	4.925	6.25e-06	***

According to pic EI and DT are statistically significant predictors of Strategic Orientation, while IaJR and PI are not.

Model Fit. The Residual Standard Error value at 0.4142 represents the typical deviation of observed values from estimated values. A model with reduced values indicates better prediction accuracy. The multiple R-squared value indicates 77.33% of Strategic Orientation variance that the model effectively explains (Table 4). Adjusted R-squared reached 0.7592 due to the introduction of model predictors in the statistical analysis. The model demonstrates statistical significance while effectively explaining a large portion of Strategic Orientation changes through an **F-statistic value** of 54.59 and a remarkably low **p-value** less than 2.2e-16.

Table 4 – Model Fit

Statistic	**Value**
Residual Standard Error	0.4142 (df = 64)
Multiple R-squared	0.7733
Adjusted R-squared	0.7592
F-statistic	54.59 (df = 4, 64)
p-value	< 2.2e-16

Strategic Orientation receives substantial positive correlations from Employee Innovativeness and Digital Transformation yet shows no significant influence from Innovativeness as a Job Requirement and Product Innovation in this particular context.

The model effectively aligns with the data points since it accounts for more than 77% of Strategic Orientation.

Conclusion

The research focused on analyzing the impact of Innovativeness as a Job requirement and Product Innovation alongside Employee Innovativeness and Digital Transformation on Strategic Orientation. The findings from regression research demonstrated Employee Innovativeness coupled with Digital Transformation play substantial role in shaping Strategic Orientation because organizations with advanced innovation among staff and sophisticated digital operations perform better in developing market-aligned strategic guidelines.

The research shows that Strategic Orientation remains independent from both Innovativeness as a Job Requirement and Product Innovation. The specific nature of the examined industry alongside the selected sample might be the cause of this result. Strategic Orientation demonstrates a 77% variance between Employee Innovativeness along with Digital Transformation which functions as essential variables to reach business outcomes across contemporary organizations.

Limitations and Future research. The validity of the results may be affected by the cross-sectional design, which does not allow researchers to establish casual joins between studied variables. Longitudinal research methods would offer better comprehension of the relationship between internal factors through time monitoring. The researchers assessed a restricted demographic from Kazakhstan exclusively. The research would benefit from conducting surveys of numerous participants from various geographic areas across different industries to create stronger research findings.

Other researchers should incorporate qualitative investigation tools, such as interviews or case studies in future research to help them understand the operational processes that shape strategic orientation.

This study proves that business success requires organizations to prioritize innovation development combined with digital transformation to build their strategic orientation in contemporary competitive markets. The organizations which focus on these aspects develop stronger readiness to succeed over extended periods.

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Appendix. Survey Items Used in the Study

Innovativeness as a Job requirement

1. My job duties include searching for new technologies and techniques.
2. Introducing new ideas into the organization is part of my job.
3. I don't have to be innovative to fulfill my job require ments. (reverse-coded)
4. My job requires me to try out new approaches to problems.
5. Suggesting new ideas is part of my job duties.

Product innovation

1. Products/services we sell are unique
2. Products/services are able to compete and outperform among other
3. Product/service has its own variation of innovation compared to other
4. Products/services have a different sales power value than others.
5. Products/services involved new materials and technology

Employee innovativeness

1. I create new ideas for difficult issues
2. I promotes and champions ideas to others
3. My workplace provides opportunities for acquiring approval to innovative ideas
4. Workplace culture provides opportunities to evaluating the utility of innovative ideas
5. I develop adequate plans and schedules for the implementation of new idea

Digital Transformation

1. In our company, we aim to digitalise everything that can be digitalised.
2. In our company, we collect massive volumes of data from different sources.
3. In our company, we aim to create stronger networking between the different business processes with digital technologies.
4. In our company, we aim to enhance an efficient customer interface with digitality.
5. In our company, we aim to achieve information exchange with digitality.

Strategic Orientation

1. At my workplace “management and employees encourage each other to (learn to) innovate and to show creativity and daring.
2. It is easy for us to “promptly detect shifts in our markets.
3. Compared to our “major competitors, we place more emphasis on customers of the future, as opposed to existing customers.
4. “In our company, we regularly look for new markets
5. “Our market research efforts are aimed at obtaining information about customers’ needs in the future, relative to their current needs.

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