

Managerial decision-making in the process of managing corporate changes in Slovak production enterprises in the context of strengthening competitiveness

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Abstract

The study analyzed the importance of the emergent approach for the competitiveness of manufacturing companies in Slovakia. It also examined the current market environment for managing initiatives aimed at achieving corporate change and the current approach to corporate change management. The aim of the paper is to identify the key factors of the emergent approach that contribute to the effective implementation and management of corporate changes. The research explored the relationship between assumptions and satisfaction with the implemented change. The study employs Pearson's chi-squared test and Fisher's exact test to verify the significance of critical assumptions in the implementation of corporate changes. Through the research, we found that, for effective corporate change management, it is important to define the objective that the change is intended to achieve, as well as to monitor data on the progress of the corporate change implementation. In managing corporate changes within manufacturing companies, it is crucial to define critical factors such as regular monitoring, informing participants, preparing a comprehensive plan, and implementing a system to track incremental successes achieved through change. These factors can enhance the competitiveness of a manufacturing company in the market environment. Based on the results of the conducted research, it can be concluded that the impact of the emergent approach has a significant influence on the development of the competitiveness of manufacturing companies in the international market environment.

Keywords: *change management, emergent change management approach, corporate changes, strengthening competitiveness, critical factory change management*

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1 INTRODUCTION

The business environment is significantly influenced by extensive changes in the technological landscape, various crises, and unstable economic and political situations at the international level. In this context, companies must effectively adapt their corporate change management practices. Standardized approaches to corporate change management introduce top-down methods (from managers to employees). The traditional assumption regarding corporate change management is also discussed by Heyden et al. (2016). However, the current development of the business environment also requires new approaches to corporate change management. These approaches are referred to as emergent principles of change management. The emergent approach is also discussed internationally by authors such as Hernandez-Betancur et al. (2020). They argue that it is a process that develops organically from the interactions and experiences of employees within the organization. According to the authors, it is an innovative approach to corporate change management, which assumes that changes often occur unpredictably. They

suggest that the best solutions and new directions can emerge through dialogue, experimentation, and adaptation to the current environment. If a company responds quickly and effectively to such changes, it can enhance its competitiveness in the market environment. This opinion is also supported by Teczke et al. (2018). According to a research study by Bowonder et al. (2010), manufacturing companies employing an emergent approach achieve a 25% higher adaptation speed to corporate changes compared to companies using standard planned strategies. Based on this study, the emergent approach in corporate change management helps companies maintain their market position and enhance their competitiveness. Also, the pace of change in the business environment continues to accelerate, constantly presenting new challenges to companies (Fischer et al., 2019). According to Mohd et al. (2013), globalization has also influenced the dynamics of corporate change, forcing companies to reconsider changes and create new strategies.

This paper focuses on the area of change management within manufacturing companies in Slovakia as a response to crises that were dominant in the market environment. In 2000, the Slovak government actively promoted economic diversification, particularly in the automotive sector, attracting significant foreign investments. This led to the development of specialized management practices in this sector. Political changes in the country influenced business management through the introduction of various policies and procedures related to business regulations and taxation. Global economic challenges, including the 2008 financial crisis and the COVID-19 pandemic in 2020, affected corporate management by necessitating adjustments in response to economic downturns, changes in consumer behavior, supply chain disruptions, and a weakening competitive position in the market. Growing global concerns about sustainability and environmental protection have influenced corporate management in Slovakia by requiring the adoption of greener practices. As elsewhere, digital transformation has also become a prominent aspect of company management in Slovakia, with businesses increasingly embracing digital technologies, e-commerce, and automation to maintain their competitiveness.

Each of these milestones has played a significant role in shaping corporate management in the Slovak environment. At the same time, businesses have had to adapt to changing economic, political, and global conditions and adopt modern management practices to maintain their competitiveness in the evolving business environment.

The aim of the paper is to identify key factors of the emergent approach that contribute to the effective implementation and management of corporate changes. We consider this objective to address a gap in current research. The relationship between the emergent approach and corporate changes is currently less explored and analyzed; therefore, we decided to verify these assumptions under the conditions of Slovakia and subsequently generalize the results to support and develop businesses in the international market environment.

Thus, we analyzed various aspects that support the implementation of corporate changes, such as the importance of teamwork, the need for an independent management element, clear definition of goals and objectives of the planned changes, informing employees about upcoming changes, developing employee competencies through education during transformation processes, ensuring employee satisfaction after changes are implemented, and more. All these factors are based on the assumptions of the emergent approach in corporate change management. For selected factors, we established scientific hypotheses whose statistical significance was tested. The theoretical significance of examining the proposed hypotheses is further elaborated in the theoretical section of this article.

The outcome of the study is the generalization of these factors in the discussion section of the article, making them suitably applicable to other companies as well, to support and enhance their competitive position in the international market environment.

2 LITERATURE REVIEW

Currently, the field of corporate change management serves as a key pillar for the development of business activities. Change management in companies represents a multifaceted approach focused on correcting organizational deficiencies, with an emphasis on supporting and strengthening a company's competitive position (Doval, 2016). Garrido (2017) clarifies the concept of competitiveness as intensified rivalry that arises within a market sector, particularly when the balance between supply and demand is disrupted by an increase in the number of market participants. Competitiveness thus includes a company's ability to face, navigate, and endure within an environment full of competitors. Furthermore, it refers to the ability to secure and maintain a competitive advantage (Small et al., 2016). The area of corporate change management is closely linked to a company's competitiveness, a relationship proposed by Kuzminski et al. (2020). It is a process intended to facilitate the seamless assimilation of changes within the work environment. In terms of corporate change, it involves fundamental transformations at the level of individual companies, structural configurations, technological systems, and overall organizational frameworks (Brown et al., 2016). Every manager's role is to skillfully navigate the complexities of change, whether involving structural reconfigurations, technological advancements, or managing the human element (Kim & Park, 2022).

Brown et al. (2016) highlight the symbiotic relationship between corporate change management and knowledge management. According to them, this symbiosis is based on the formulation of management policies, the support of open communication channels among various segments of the company, and the recognition that managing transformation efforts cannot be solely dictated by top management levels. Instead, the internal environment must be prepared to embrace the need for change across all stakeholders (Stouten et al., 2018; Pikhart & Klimova, 2020). In a corporate setting, change may manifest at the project, team, or process level, or in the context of overall system overhauls (Baran et al., 2019).

Research conducted by Keller and Schaninger (2019) stresses the importance of considering employee feedback and opinions during the implementation of corporate changes. Their findings emphasize that prioritizing employee ideas leads to a fourfold greater likelihood of achieving successful change outcomes. In this context, the authors highlight the significance of the emergent approach. According to research by Ekman et al. (2021) involving 200 companies, implementing an emergent approach can systematically alter a company's internal logic and create new value for customers. Similarly, Quasar (2024) argues that emergent changes are more effective than continuous planning due to the unpredictability of the market environment. In this regard, he emphasized that in a rapidly changing market environment, adaptability and agility of internal business processes are crucial components of the emergent approach. Thus, he confirms that emergent corporate changes dominate over traditional continuous changes in today's market environment. This view is also shared by Mohd et al., 2013. We also explored this relationship in our research, confirming interdependence through hypothesis 2.

When examining the complexity of the emergent approach, it is also necessary to analyze the relationship between the prerequisites for corporate change management and satisfaction with the outcomes. In other words, fulfilling the conditions for managing corporate changes significantly impacts employee satisfaction. It is important to consider which critical factors have positive or negative effects on stakeholder satisfaction. A scientific study by Woo and Jun (2020) identifies various critical factors influencing the implementation of corporate change, including time, employees, teamwork, communication, and change management programs. Their findings highlight which factors are most likely to jeopardize successful corporate change implementation. According to Park et al. (2022), critical factors can also be referred to as prerequisites responsible for the successful implementation of corporate changes. Research by

Sittrop and Crowthwaite (2022) also considers additional critical factors such as employee resistance to change, leadership support for change initiatives, the dynamics of team collaboration, and corporate communication. According to Hyajneh et al. (2020), prerequisites for successful corporate change implementation include effective communication, leadership support, employee readiness for change, analysis of change perception data, satisfaction with implemented changes, and management's approach to change. Some of these prerequisites are even defined through models.

There are many models identifying how to properly implement change management in relation to the emergent approach within the international environment. Authors like Mork et al. (2018) and Harrison et al. (2021) advocate that change management models build upon originally developed management models. However, Harrison et al. (2021) argue that most models fail to integrate the full complexity of factors on which the success of corporate change depends. According to Chen (2021), Lewin's original change model focuses on unfreezing existing business practices. Another significant model is Kotter's model, which includes prerequisites such as: raising urgency, building a change coalition, identifying a change vision and strategy, communicating the vision, delegating tasks, generating short-term wins, consolidating gains, and embedding new approaches into business practices (Burnes, 2020). Another successful model is ADKAR, integrating elements like awareness of the need for change, willingness to support change, acquiring and expanding knowledge, employee skills for change implementation, reinforcement, and acceptance (Cummings et al., 2016; Stouten et al., 2018; Hussain, 2018). Authors Banerjee et al. (2022) and Jaaron et al. (2021) share the view that Leavitt's model includes factors such as people, managerial roles, technology, and structure. The McKinsey 7S Model integrates seven basic factors for successful change implementation: strategy, structure, systems, shared values, style, staff, and skills (Demir & Kocaoglu, 2019).

All these studies and models show significant overlap in factors like employees, data analysis, and management, making them critical for implementing corporate changes. Authors MacCarter and Farina (2021) concluded that international companies striving for competitiveness must implement changes from the bottom up. This supports the importance of managing corporate change using the emergent approach and defining prerequisites that foster successful change implementation. This view is complemented by Payne et al. (2022), who assert that many change efforts fail due to employees' reluctance to collaborate, leading to resistance to change.

All models and elements of change management consider employees, communication, time sensitivity, and managerial knowledge as essential prerequisites in the change management process (Demir & Kocaoglu, 2019; Teixeira et al., 2017). Therefore, these elements form the basis for hypothesis 1, which tests the relationship between the prerequisites for corporate change management and satisfaction with change outcomes.

3 DATA AND METHODOLOGY

This paper focuses on the analysis of the prerequisites for corporate change management, with the aim of identifying those that have a statistically significant impact on the successful achievement of transformational initiative outcomes. In addition to assessing the significance of individual factors, we also examine emergent approaches to corporate change management in domestic and international companies operating under the conditions in Slovakia. Based on the gathered information, we generalize critical factors applicable to manufacturing companies in the international market. We consider this objective to be beneficial for business practice not only in Slovakia but also for providing recommendations to companies operating in the international environment.

3.1 Determining the size of the statistical sample

The statistical set consists of manufacturing enterprises in Slovakia. In order to obtain valuable data, we used a non-standardized questionnaire method. We distributed the questionnaire electronically via the online platform Google Forms among manufacturing companies. The survey was conducted from June 1, 2022, to November 30, 2022.

During April 2022, we carried out pilot testing on 30 manufacturing companies in Slovakia. The pilot study and the main research also included enterprises with an international presence operating within the Slovak territory.

Before determining the size of the statistical sample, we identified the number of manufacturing enterprises. To determine the number of manufacturing enterprises operating in Slovakia, we used the HitHorizons database (2022) and the sectoral classification of enterprises. As of December 31, 2022, there were 36,459 manufacturing enterprises operating in Slovakia. This figure was used to calculate the statistical sample size needed for our survey.

We calculated the minimum sample size for the survey using the following formula.

$$n = \frac{Z^2 \cdot p \cdot (1 - p)}{c^2} \quad (1)$$

where:

Z value from statistical tables,

p share of the character,

c permissible range of errors,

n sample size.

According to the results, the relevant statistical sample size is 384 respondents. We further verified this result by calculating it using the Gpower software, which generated the same result, namely 384 respondents. From the total number of production enterprises in Slovakia listed in Table 1, we approached 5,600 enterprises. The total return of correctly filled questionnaires was 318. The return rate of the questionnaire can be defined at 5.68 %. In December 2021, a scientific article was published in which the authors Mac Carte and Farina (2021) addressed the issue of corporate change management maturity and identified an index for determining corporate change management maturity. The research of these authors was carried out on a sample of 151 manufacturing enterprises, and the authors classified this sample as useful in relation to the results of their research, which took the form of a non-standardized questionnaire. Considering that the number of complete answers obtained from the respondents in our case is 318, we consider this sample to be sufficient and relevant.

3.2 Determination of research hypotheses and methods

To fulfill the main goal of the research, we defined two hypotheses. In the first hypothesis, we investigated which assumptions are significant in the current market environment for managing initiatives to achieve corporate changes. In the second hypothesis, we verified which approach to the management of corporate changes prevails in the current period. Since the market environment is very dynamic and is influenced by technological developments and sudden changes in customer needs, we assume that most companies will proceed emergently in the management of changes, i.e., they start solving changes now when the stimulus that causes the change appears. For the approach that currently dominates within the management of corporate changes, we will subsequently find out which critical factors are relevant for the given approach.

Hypothesis No. 1:

H1: All prerequisites of management of managerial business changes are significant for achieving satisfaction with the results of business changes.

H1-0: All managerial business change management prerequisites are insignificant for achieving satisfaction with the results of business changes.

For this hypothesis, we also set the assumptions under which we will verify the given hypothesis. The prerequisites for verifying the validity of the hypothesis are as follows:

1. Working teams operate in the company for the purpose of managing corporate changes.
2. The change management section operates in the company for the purpose of managing corporate changes.
3. Business change always has a specific purpose and goal that needs to be achieved.
4. Employees are always familiar with the change plan and its impacts (both positive and negative).
5. During the business change process, data is collected about the course of this process.
6. Concern for employees' opinions, attitudes, needs, and problems when implementing changes.
7. Employees are given a space to express their ideas and thoughts that could be a potential reason for the implementation of the change.
8. It is possible to implement new ideas and thoughts from employees into corporate practice.
9. Training and other development programs are provided to the employees, which help them adopt the new way of working that the company change requires.
10. After achieving the change, we are interested in the feelings of the employees and want to find out if they are satisfied or dissatisfied with the new procedures.

Hypothesis No. 2:

H2: In the current market environment, emergent business changes dominate over continuous changes.

H2-0: In the current market environment, emergent business changes do not dominate over continuous changes.

3.3 Determination of Research Methods

For statistical verification of the significance of categorical variables in the examined hypotheses, the statistical software IBM SPSS Statistics was used. In the context of statistical verification, we applied the following research methods:

Pearson's Chi-square Test: was used within the analysis of cross-tabulations to determine whether there is a statistically significant dependence between categorical variables.

Cramér's V: using the contingency coefficient, we evaluated the strength of the relationship between two categorical variables. The results were then interpreted based on the p-value of the examined variables. When interpreting the strength of the relationship, we followed the assumptions below:

- p-value from 0 to 0.3 indicates a weak relationship,
- p-value from 0.3 to 0.8 indicates a moderate relationship,
- p-value from 0.8 to 1 represents a strong relationship.

If $p \leq \alpha$, the null hypothesis is rejected, as a low p-value signals the unacceptability of the null hypothesis (Lee, 2016).

Fisher's Exact Test: was used in cases where the conditions for applying for the Chi-Square test were not met (e.g., when expected frequencies were ≤ 5).

MANOVA (Multivariate Analysis of Variance): this method was used to test the influence of one or more independent variables on a set of multiple dependent variables. This method was applied to identify the critical factors (assumptions) that influence the emergent approach to managing business changes.

4 RESULTS

Next, we define the results of the survey conducted. As stated in Chapter 3, as part of the research, we approached a total of 5,600 production enterprises. The return rate was 318 correctly completed questionnaires from production companies.

We categorized respondents according to size, which results from the number of employees and revenue (Fig. 1). The manufacturing businesses we analyzed fall into the following areas: metal manufacturing and processing, electrical equipment manufacturing, furniture manufacturing, machinery and equipment manufacturing, food and beverage manufacturing, chemical and plastic manufacturing, motor vehicle manufacturing, textile manufacturing, and paper manufacturing.

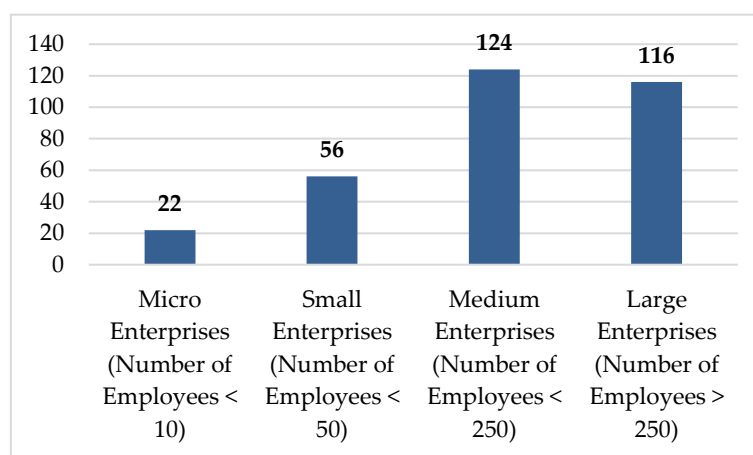


Fig. 1 – Categorization of respondents

Source: own research

4.2 Prerequisites for successful management of business changes and their statistical significance

Based on theoretical knowledge, we compiled 11 assumptions that make up the elements of corporate change management, which were mentioned by other authors as important in their implementation. Our goal was to find out to what extent the proposed assumptions of corporate change management are significant from the point of view of manufacturing companies operating in Slovakia. In hypothesis 1, we examined whether there is a dependence between the assumptions of corporate change management, which should be part of such management, and the resulting satisfaction with the implemented change. The evaluation of this hypothesis required a partial evaluation of each of the investigated assumptions and its importance for achieving satisfaction with the results of business changes separately.

A) Assumption 1: Work teams operate in the company for the purpose of managing corporate changes

Based on testing the above assumption, we found that the p-value is higher than the defined significance level of $\alpha = 0,05$. According to the Pearson Chi-Square test, the value was 0,811, and according to the Fisher Exact test, it was 0,879. According to the parameters defined in the

research methods, we can state that there is no dependence between the first assumption and satisfaction with the results of the change.

Result: The assumption is not significant for achieving satisfaction with the results of business changes.

B) Assumption 2: A change management section operates in the company for the purpose of managing corporate changes

Based on the testing of the second hypothesis, we found that the p-value is higher than the established significance level of $\alpha = 0,05$. According to the Pearson Chi-Square test, the value was 0,105 and according to the Fisher Exact test, it was 0,112. So we can conclude that there is no dependence between the second assumption and satisfaction with the results of the change.

Result: The assumption is not significant for achieving satisfaction with the results of the corporate change.

C) Assumption 3: Business change always has a defined purpose and goal that needs to be achieved

Table No. 1 shows the results of the Pearson Chi-Square test, including the result of the Fisher Exact test.

Tab. 1 – The result of the Pearson Chi-Square test and the Fisher Exact test for the verification of assumption No. 3. Source: own research

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6,595 ^a	1	0,010		
Continuity Correction ^b	5,400	1	0,020		
Likelihood Ratio	5,684	1	0,017		
Fisher's Exact Test				0,025	0,014
N of Valid Cases	318				

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 5,75.

According to the results shown in Table No. 1, the p-value is less than $\alpha = 0,05$, this also applies to the Chi-square test result: 0,010 and to the Fisher Exact test result: 0,025. From the mentioned result, it follows that there is mutual dependence between the examined variables. After determining the dependence, we verified the strength of the contingency coefficient with the Cramer's V test. We displayed the result in the following table.

Tab. 2 – Verification of the strength of dependence on the contingency coefficient by Cramer's method in assumption No. 3. Source: own research

		Value	Approximate Significance
Nominal by Nominal	Phi	0,144	0,010
	Cramer's V	0,144	0,010
N of Valid Cases		318	

Table No. 2 shows that the value of the contingency coefficient Phi is 0,144. Moreover, if $p \leq \alpha$, then the dependence between the variables is statistically significant, and according to this value, there is a weak dependence between the investigated variables.

Result: The assumption is important for achieving satisfaction with the results of business changes, and there is a weak dependence between the categorical variables. This dependence is statistically significant.

D) Assumption 4: Employees are always familiar with the change plan and its impacts (both positive and negative)

The following table shows the result of the Pearson Chi-Square test, including the result of the Fisher Exact test.

Tab. 3 – The result of the Pearson Chi-Square test and the Fisher Exact test for the verification of assumption No. 4. Source: own research

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6,411 ^a	1	0,011		
Continuity Correction ^b	5,688	1	0,017		
Likelihood Ratio	6,217	1	0,013		
Fisher's Exact Test				0,013	0,009
N of Valid Cases	318				
a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 22,39.					

According to Table No. 3, the p-value is less than = 0,05. The p-value of the Pearson Chi-Square test is 0,011, and the value of the Fisher exact test is 0,013. It follows that there is mutual dependence between the studied variables. Based on the result, we approach the assessment of the strength of the contingency coefficient using Cramer's V mathematical-statistical method. The results of the verification of the strength of dependence between categorical variables are shown in the following table.

Tab. 4 – Verification of the strength of dependence of the contingency coefficient by Cramer's method in assumption No. 4. Source: own research

		Value	Approximate Significance
Nominal by Nominal	Phi	0,142	0,011
	Cramer's V	0,142	0,011
N of Valid Cases		318	

According to Table No. 4, the value of the contingency coefficient Phi is 0,142, which represents a weak dependence between the investigated variables, and this dependence between the investigated variables is statistically significant.

Result: Assumption 4 is important for achieving satisfaction with business-change outcomes, and there is a weak relationship between them that is statistically significant.

E) Assumption 5: During the course of the business change process, data is collected about the progress of this process

In assumption 5, we verified whether, during the course of the business change process, data on this process is collected. We have shown the results of Pearson's Chi-Square test and Fisher's Exact test in the following table.

Tab. 5. – The result of the Pearson Chi-Square test and the Fisher Exact test for the verification of assumption No. 5. Source: own research

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6,592 ^a	1	0,010		
Continuity Correction ^b	5,885	1	0,015		
Likelihood Ratio	6,559	1	0,010		
Fisher's Exact Test				0,011	0,008

N of Valid Cases	318				
a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 27,93.					

Table No. 5 shows the result of Pearson's Chi-square test, where the p-value is 0,015 and the Fisher exact test is a p-value of 0,011. According to the above, there is a dependency between this assumption of corporate change management and satisfaction with the results of the changes, because the p-value is smaller than the level of significance α we set. For statistical significance, we verified the strength of significance through Cramer's V.

Tab. 6 – Verification of the strength of dependence on the contingency coefficient by Cramer's method in assumption No. 5. Source: own research

		Value	Approximate Significance
Nominal by Nominal	Phi	0,144	0,010
	Cramer's V	0,144	0,010
N of Valid Cases		318	

According to the result of Cramer's V, the value of Phi is 0,144, which means that it is a weak dependence. The dependence between the variables is statistically significant.

Result: The fifth assumption is critical for achieving satisfaction with the outcomes of business changes, and there is a statistically significant weak dependence between them.

F) Assumption 6: Interest in the opinions, attitudes, needs, and problems of employees in the implementation of corporate changes

In assumption 6, we verified interest in the opinions, attitudes, needs and problems of employees in the implementation of corporate changes. We have shown the result of Pearson's Chi-Square test and Fisher Exact test in the following table.

Tab. 7 – The result of the Pearson Chi-Square test and the Fisher Exact test for the verification of assumption No. 6. Source: own research

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5,769 ^a	1	0,016		
Continuity Correction ^b	5,112	1	0,024		
Likelihood Ratio	5,881	1	0,015		
Fisher's Exact Test				0,017	0,011
N of Valid Cases	318				
a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 29,52.					

Based on the test in Table 7, the p-value of the Pearson Chi-Square test is shown to be 0,016 and the p-value of the Fisher Exact test is 0,017. Based on the results, we can claim that the p-value is smaller than α and thus there is a statistical dependence between these investigated variables. We evaluated the strength of the contingency coefficient by Cramer's V. The result is shown in the following table.

Tab. 8 – Verification of the strength of dependence on the contingency coefficient by Cramer's method in assumption No. 6. Source: own research

		Value	Approximate Significance
Nominal by Nominal	Phi	0,135	0,016
	Cramer's V	0,135	0,016
N of Valid Cases		318	

The strength of the contingency coefficient Phi represents a value of 0,135 and thus indicates a weak dependence between the investigated variables, which is statistically significant.

Result: Assumption 6 is important for achieving satisfaction with the results of business change, and there is a weak dependence between them. This dependence is statistically significant.

G) Premise 7: Employees are given space to express their ideas, thoughts that could be a potential reason for the implementation of the change

Based on the testing of the seventh assumption, we found that the p-value in this case is higher than $\alpha = 0,05$. According to the Pearson Chi-Square test, the value was 0,221 and according to the Fisher Exact test, it was 0,258. We can thus conclude that there is no dependence between the seventh assumption and satisfaction with the results of the change.

Result: Assumption 7 is not significant for achieving satisfaction with the results of corporate change.

H) Assumption 8: It is possible to implement new ideas and thoughts of employees into business practice

By testing the eighth assumption, we found that the p-value in this case is higher than $\alpha = 0,05$. According to the Pearson Chi-Square test, the value was 0,718 and according to the Fisher Exact test, it was 0,779. Based on the results, we can conclude that there is no dependence between satisfaction with the results of corporate changes.

Result: The 8th assumption is not significant for achieving satisfaction with the results of corporate changes.

4) Assumption 9: Employees are provided training, coaching and other development programs to help them learn the new way of working that the business change requires

Based on the results of the ninth assumption, the p-value is greater than $\alpha = 0,05$. Pearson's Chi-Square test showed a value of 0,250 and Fisher Exact test 0,262. In this case too, it can be concluded that there is no dependence between the ninth assumption and satisfaction with the results of corporate changes.

Result: the 9th assumption is not significant for achieving satisfaction with the results of the corporate change.

J) 10 assumption: After achieving the change, we are interested in the feelings of the employees and find out if they are satisfied or dissatisfied with the new procedures

In Table 9, we have shown the result of Pearson Chi-Square test and Fisher Exact test.

Tab. 9 – The result of the Pearson Chi-Square test and the Fisher Exact test for the verification of assumption No. 10. Source: own research

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5,991 ^a	1	0,014		
Continuity Correction ^b	5,322	1	0,021		
Likelihood Ratio	6,049	1	0,014		
Fisher's Exact Test				0,017	0,010
N of Valid Cases	318				
a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 31,30.					

According to Table 9, the p-value is less than the determined level of significance $\alpha = 0,05$, where the result of the Pearson Chi-Square test is 0,014 and the result of the Fisher Exact test

is 0,017. According to this value, we can say that there is a dependency between the variables. The strength of the Phi contingency coefficient is determined in the following table.

Tab. 10 – Verification of the strength of dependence of the contingency coefficient by Cramer's method in assumption No. 10. Source: own research

		Value	Approximate Significance
Nominal by Nominal	Phi	0,137	0,014
	Cramer's V	0,137	0,014
N of Valid Cases		318	

For the contingency coefficient Phi in the 10th assumption, its value is 0,137. The indicated value means that the investigated variables are dependent, and there is a weak dependence between them that is statistically significant.

Result: The 10th assumption is important for achieving satisfaction with the results of business changes, and there is a weak dependence between them that is statistically significant.

The result of the verification of hypothesis H1 is as follows: Based on the evaluation of the listed 10 assumptions of corporate change management and their impact on satisfaction with the changes, we can verify the confirmation, or non-confirmation of the established hypothesis H1. Since we found that only 5 out of 10 assumptions of corporate change management show a statistically significant dependence on satisfaction with change results, we accept the null hypothesis and reject the alternative hypothesis.

We reject H1: All prerequisites of corporate change management are significant for achieving satisfaction with the results of corporate change.

We accept H1-0: All assumptions of corporate change management are not significant for achieving satisfaction with the results of corporate change.

4.2 Identification of critical factors in the company's management of emergency business changes

The identification of critical factors in the management of emergent business changes was preceded by the verification of the second hypothesis. We established this as an assumption that, under the current conditions, production companies operating on the market in Slovakia approach the solution and subsequent management of changes emergently, when the stimulus that caused the change appears. We verified the second hypothesis based on the binomial test, the results of which are shown in the following table.

Tab. 11 – The result of the MANOVA test in the identification of critical factors. Source: own research

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	A clear and shared vision of management business change	47,185 ^a	1	47,185	15,639	0,000
	Availability of resources for change	0,860 ^b	1	0,860	0,416	0,520
	Skills of change participants	0,297 ^c	1	0,297	0,117	0,732
	Regular inspection	12,182 ^d	1	12,182	5,006	0,026
	Organizational readiness	14,886 ^e	1	14,886	7,462	0,007
	Collection of data on the course of change	35,156 ^f	1	35,156	17,026	0,000

Awareness of participants	19,163 ^g	1	19,163	9,349	0,003
Employee motivation	12,912 ^h	1	12,912	5,177	0,024
Motivation of implementers	13,554 ⁱ	1	13,554	5,133	0,025
Assembling a work team	36,567 ^j	1	36,567	12,704	0,000
Mutual communication	17,790 ^k	1	17,790	4,819	0,029
Participation in education	1,920 ^l	1	1,920	0,594	0,442
Readiness assessment	0,722 ^m	1	0,722	0,262	0,609
Two-way communication	6,462 ⁿ	1	6,462	2,547	0,112
Employee feedback	0,020 ^o	1	0,020	0,009	0,923
Employee space	0,754 ^p	1	0,754	0,332	0,565
Assessing employees' ideas and consideration	1,150 ^q	1	1,150	0,478	0,490
Staff readiness	0,436 ^r	1	0,436	0,220	0,640
Shared purpose	1,990 ^s	1	1,990	0,767	0,382
Personal performance	2,356 ^t	1	2,356	1,092	0,297
Effective management	0,700 ^u	1	0,700	0,323	0,570
Employee engagement	8,615 ^v	1	8,615	3,460	0,064
Preparation of a comprehensive plan	13,772 ^w	1	13,772	4,895	0,028
Employee cooperation and management	5,877 ^x	1	5,877	2,081	0,151
Employee flexibility	1,955 ^y	1	1,955	0,737	0,392
Skills of change leaders	0,318 ^z	1	0,318	0,127	0,721
Acceptance of change by employees	0,085 ^{aa}	1	0,085	0,030	0,863
Adherence to the time frame	1,477 ^{ab}	1	1,477	0,617	0,433
Tracking partial successes	15,360 ^{ac}	1	15,360	6,173	0,014

Based on the results presented in Table 11, we accept as critical factors for emergent business changes all factors for which the p-value is less than the established significance level $\alpha = 0,05$. Based on these results, we found that 11 of the 29 investigated factors influencing the management of business changes are critical for the successful achievement of results during sudden changes in manufacturing companies operating in Slovakia. Managers should pay attention to these critical factors of business change management and deal with them more deeply during their implementation.

5 DISCUSSION

Our research has revealed that the implementation of corporate changes is of paramount importance for businesses and can significantly influence their standing in the market environment. This view is corroborated by the collective of authors Hussain et al. (2018) in international research. Furthermore, we have found that when implementing corporate changes, it is crucial to ascertain the interest of employees, their opinions, attitudes and needs. This perspective already reflects the perception of an element of the emergent approach in the introduction of changes, thereby indirectly confirming this approach. According to our research, the responsibility for implementing changes consistently originates from company managers, and a traditional continuous system for introducing corporate changes is employed. If resistance to change is removed, the level of commitment of stakeholders to better address the different stages of the change process will increase (Mac Carte & Farina, 2021). According to Yin and Li (2022) and Singh et al. (2022), the manager is responsible for leading change and should encourage their employees, eliminate their resistance, and solicit feedback from them, which they consider essential aspects of a successful change process in the corporate environment. Nawaz and Guribie (2022) emphasize that the very process of change leadership, in which an individual can influence a group of participants involved in the change process, underlines the importance of leadership during the change process.

Through research, we have reached several important findings, which we include in proposals and recommendations for the practice of manufacturing companies operating in the market environments of Slovakia. One of the aspects investigated was to find out which assumptions are statistically significant in the field of corporate change management for successfully achieving their results. We were interested in whether all 10 of the defined assumptions are significant in terms of achieving the results of business changes. We discovered which of these factors is directly related to satisfaction with the outcomes of corporate changes. Our assumption was that satisfaction with the achieved results would depend on all ten assumptions. Through our research, we found that only five of them met the assumptions we defined. Therefore, we would emphasize the five assumptions involved and recommend that manufacturing companies operating in Slovakia pay more attention to them when introducing corporate changes. These assumptions include the following: Corporate changes must always have a specific purpose and goal in order to be successful; 2. Employees must always be informed about the change plan and its consequences (both positive and negative); 3. During the process of corporate change, it is important to collect data about the process, 4. To show interest in the opinions, attitudes, needs, and problems of employees during the implementation of changes and their consideration 5. After the implementation of the change, an initiative should be developed to find out the opinions of employees about whether they are satisfied with the changes achieved or not. These 5 assumptions should be considered exceptionally important when implementing corporate changes. According to international research by Garg et al. (2023), employees are also a crucial prerequisite for the implementation of corporate change, as they must identify with and simultaneously accept the change. This also streamlines the production process. Mac Carte and Farina (2021) highlighted the significance and management of corporate changes, their continuous improvement, data collection, and the gathering of employee opinions. This research aligns with the assumptions of our scientific investigation. Authors Babenko et al. (2021) claim that the efficiency of production processes also depends on sufficient information support in all phases of the production process. Thus, informational support must be directed towards the employees, but it must also be directed from the employees to the management of the company. According to Chromjakova et al. (2021), part of the changes should have been the philosophy of standardization of workplaces in the sense of setting work procedures and motivating and educating employees. Chromjakova et al. (2021) thus confirmed that, through the mentioned elements, it is possible to reduce the influence of critical factors in the management of corporate changes. The authors thus confirmed the result of our research, as we found statistical significance in the individual assumptions and also confirmed a certain degree of dependence.

Based on the mentioned results and opinions of the authors from similar research, we recommend manufacturing companies place more emphasis on these assumptions, which could lead to achieving positive results when evaluating initiatives for corporate changes in the future. There would be room for the implementation of tools such as lean production, six sigma, and the like. The company would thus be able to produce more efficiently with lower costs and ultimately be able to satisfy the needs of customers at a higher level. In this way, the desired result could be achieved, which would strengthen the market position of production companies in Slovakia. Karpenko et al. (2021) and Strukelj et al. (2019) also agree with the stated opinion, arguing that there is an inverse relationship between the manufacturing enterprise and the final consumer. If the manufacturing enterprise produces more efficiently and can better adapt to business changes, the customer will have their final needs satisfied at a higher level. In this way, it is possible to connect corporate changes with the marketing area, which affect not only the internal corporate environment but also the final satisfaction of the customers' needs. Liu et al. (2021) confirm the stated statement and recognize the importance of supporting a balanced

strategy. This should be in line with the introduced corporate changes and the final satisfaction of the customer's needs.

Part of the scientific research was also to identify the critical factors of the emergent approach that contribute to the effective implementation and management of corporate changes. We found that, out of the 29 established factors, 11 were perceived as critical. These were the following factors: 1. A clear and shared vision of corporate change – this factor assumes that the vision of the change under consideration should be clear; therefore, it should be known exactly where the company should go with the implementation of the given change, and at the same time, it is necessary that the vision of the change be supported by all the participants who participate in it. 2. The preparation of a comprehensive plan, which includes a detailed definition of individual parts of the business change process. 3. Preparation of the organizational environment – this factor directly emphasizes the readiness of the business environment due to the more flexible responses of the company to circumstances that require a solution through the implementation of business change. (Ettlie et al., 2021) 4. Formation of a work team – All participants of the shift should work based on team cooperation, which results in the creation of work teams and the redistribution of individual tasks among these work teams. In the case of a smaller number of employees, we recommend working based on cooperation between the participants, unless it is possible to create a work team. The significance of work team formation in the implementation of change is also addressed in the research conducted by Khaw et al. (2022). 5. Information of all participants affected by the change – in this factor, it is important that none of the participants affected by the change be excluded from being informed about all the positives and negatives that the change can bring. 6. Motivating employees to support business changes – it is critical for businesses to consider the motivation of employees who will be involved in the implementation of the given change. 7. Motivation of the implementers of the change to successfully manage it – in this case, the implementers are the leading entities, whose competence is the management of the corporate change. Their motivation to effectively manage the change process is very important, because their approach, which can be influenced through motivation, depends on the correct management of the change process, correct communication with others, and, in general, on their approach to the change process. 8. Mutual communication between change participants – we emphasize the importance of communication between participants, as communication informs all parties involved in the change process about shifts in the change process, and through communication it is possible to detect deviations from the goal of the introduced change. 9. Regular control of the change management process – this factor has proven to be critical in the implementation of the process of sudden business changes; therefore, we emphasize the importance of this factor and suggest that each company, in terms of its needs corresponding to the change, determine the frequency of control of the business change process from its subjective point of view. 10. Collection of data on the progress of the change – in this factor, we emphasize the importance of recording data related to the progress of the corporate change. Assuming the change process is documented, it can be managed more effectively, and if necessary, it is possible to revisit previous stages of the change process and subsequently evaluate them. 11. Monitoring partial successes in achieving change – this factor can also be understood in the context of achieving partial milestones in the process of corporate change until the end of the change process. According to Edwards et al. (2020) and Coper et al. (2023), enterprises operating within the international milieu commonly employ a cascading model of change, an integral component of which comprises the formulation of a comprehensive plan and reciprocal communication among change participants. These authors also corroborate the findings of our study, in which we determined that the creation of a comprehensive plan and the fostering of communication, not only from management but also among employees, constitute critical factors.

The importance of these factors in production enterprises was also confirmed by Tiwari et al. (2020). The authors claim that proper communication, information, employee motivation, and regular control are important factors for supporting the sustainability of the production process and are a suitable prerequisite for the introduction of innovative tools such as lean production, Six Sigma, and the like. In this way, it is possible to achieve a certain level of optimization of business processes (not only production ones) in the company. Even though these factors proved to be critical in our research, they must be considered significant from the point of view of change management. Based on this monitoring, it is possible to continuously evaluate the state of the change process in terms of its vision and goal. At the same time, it is possible to reveal the weak points of the corporate change process, which would require the adoption of corrective measures to make the given change process more efficient. Therefore, we emphasize the importance of these 11 factors and encourage manufacturing enterprises operating in the Slovak market to address these factors during change initiatives and include them in the process of managing these corporate changes. If the change is successfully implemented, it can support the competitiveness of the company in the market environment.

The findings derived from our study furnish a pertinent scientific foundation for the establishment of an academic model with broad applicability to manufacturing enterprises. Through rigorous scientific inquiry, we have delineated recommendations warranting heightened consideration by Slovak manufacturing enterprises, inclusive of those engaged in international operations, during the implementation of corporate transformations. Furthermore, we have identified critical determinants that possess the potential to impede the effective introduction of corporate changes within the manufacturing sector. This research has also elucidated the fundamental prerequisite for the management of corporate changes within manufacturing enterprises operating in the market environment of Slovakia. We have delineated the scope for the promotion of a judicious corporate strategy, wherein potential convergence with cognate academic disciplines may be discerned. Such a strategy ought to be aligned with the instituted corporate changes and the ultimate satisfaction of consumer demands. Consequently, it is imperative to apprehend corporate changes from a holistic vantage point, and the implementation of their management within the domain of marketing is deemed judicious. This juncture introduces a further avenue for scholarly investigation, namely the emergent paradigm in the management of corporate changes in relation to the consumer.

6 CONCLUSION

The objective of this contribution was to identify the salient factors of the emergent approach that contribute to the effective implementation and management of corporate change. Based on our research, we found that, in the conditions of the mentioned market and the given type of enterprises, an emergent approach prevails, which is characterized by the fact that manufacturing enterprises approach the solution and subsequent management of changes when a stimulus appears that causes change. Based on this finding, we subsequently identified which critical factors prevail in this type of approach and thus become an important element that manufacturing companies operating in the Slovak market should monitor when managing business changes. 11 factors proved to be critical. The individual factors are sufficiently generalized to be readily applicable to manufacturing enterprises operating within the international market as well. Based on the findings, the set goals of our research have been met. We consider the respondents' reduced willingness to fill out our questionnaire to be the limiting elements of our research, which could be related to the time workload of the company's employees. We also encountered the fact that the respondents responded to the questionnaire with the excuse that they did not have enough capacity to fill out the questionnaire or that they could not provide us with answers due to confidentiality obligations. The research findings can

assist managers of Slovak manufacturing enterprises in the effective implementation of corporate changes and are also applicable to international businesses. Consequently, the implemented change can contribute to the reinforcement of a company's competitive standing within the international market environment. The research possesses a well-established foundation for its implementation within an international context. Future endeavors will extend this research to encompass service-providing enterprises and could be broadened to other business domains such as marketing, wherein an emergent approach may hold significant importance.

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References

1. Babenko, V., Demyanenkob, O. Lyba, V., & Feoktystova, O. Assessment the cost-effectiveness of information support for the business processes of a virtual machine-building enterprise in the framework of Industry 4.0. *International Journal of Engineering*, 34(1), 171-176. <http://dx.doi.org/10.5829/ije.2021.34.01a.19>
2. Banerjee, Y., Tuffnell, C., & Alkhadragy, R. (2020). Mento's change model in teaching competency-based medical education. *BMC Medical Education*, 19(1), <http://dx.doi.org/10.1186/s12909-019-1896-0>
3. Baran, B. E., Filipkowski, J. N., & Stockwell, R. A. (2019). Organizational change: Perspectives from human resource management. *Journal of Change Management*, 19(3), 201-219. <http://dx.doi.org/10.1080/14697017.2018.1502800>
4. Bowonder, B., Dambal, A., Kumar, S. & Shirodkar, A. (2010). Innovation strategies for creating competitive advantage. *Research-Technology Management*, 53(3), 19-32. <https://doi.org/10.1080/08956308.2010.11657628>
5. Brown, S., Manning, M. R., & Ludema, J. D. (2016). Organization identity: Its role in organization change. *Research in Organizational Change and Development*, 24, 145-183. <http://dx.doi.org/10.1108/S0897-301620160000024006>
6. Burnes, B. (2020). The origins of Lewin's three-step model of change. *Journal of Applied Behavioral Science*, 56(1), 32-59, <http://dx.doi.org/10.1177/0021886319892685>
7. Cummings, S. Bridgman, T., & Brown, K. G. (2016). Unfreezing change as three steps: Rethinking Kurt Lewin's legacy for change management. *Human Relations*, 36(1), 33-60. <http://dx.doi.org/10.1177/0018726715577707>
8. Cooper, S. C., Pereira, V., Vrontis, D. & Liu, Y. (2023). Extending the resource and knowledge based view: Insights from new contexts of analysis. *Journal of Business Research*, 156, 113523. <http://dx.doi.org/10.1016/j.jbusres.2022.113523>
9. Demir, E., & Kocaoglu, B. (2019). The use of McKinsey s 7S framework as a strategic planning and economic assessment tool in the process of digital transformation. *Press Academia Procedia*, 9, 114-119. <http://dx.doi.org/10.17261/Pressacademia.2019.1078>
10. Doval, E. (2016). Change management strategies related to the global environment complexity. *Annals of Spiru Haret University Economic Series*, 16(4), 35-42. <http://dx.doi.org/10.26458/1644>
11. Edwards, K., Praetorius, T. & Nielsen A. P. (2020). A model of cascading change: Orchestrating planned and emergent change to ensure employee participation. *Journal of Change Management*, 20(4), 1-43. <https://doi.org/10.1080/14697017.2020.1755341>
12. Ekman, P., et al. (2021). Emergent market innovation: A longitudinal study of technology-driven capability development and institutional work. *Journal of Business Research*, 124, 469–482. <https://doi.org/10.1016/j.jbusres.2020.10.061>

13. Ettlie, J., Muammer, O., Murthy, R. (2021). R&D dynamic capabilities in a changing regulatory context. *IEEE Transaction on Engineering Management*, 70(1), 98-111. <https://doi.org/10.1109/TEM.2020.3045650>
14. Fischer, R. J., Halibozek, E. P., & Walters, D. C. (2019). Contingency planning emergency response and safety. In *Introduction to security* (pp. 249–268). Elsevier. <http://dx.doi.org/10.1016/B978-0-12-805310-2.00011-1>
15. Garg, C. P., Gorcun, O. F., Kundu, P. & Kucukonder, H. (2023). An integrated fuzzy MCDM approach based on Bonferroni functions for selection and evaluation of industrial robots for the automobile manufacturing industry. *Expert Systems with Applications*, 213, 118863. <https://doi.org/10.1016/j.eswa.2022.118863>
16. Garrido, A. P. (2017). Competition in the globalization era and its effects on Geoeconomics. *Geopoliticas-Revista de Estudios Sobre Espacio y Poder*, 8(1), 29-49. <https://doi.org/10.5209/GEOP.52410>
17. Harrison, R., et al. (2021). Where do models for change management, improvement and implementation meet? A systematic review of the applications of change management models in healthcare. *Journal of Healthcare Leadership*, 13, 58-108. <https://doi.org/10.2147/JHL.S289176>
18. Heyden, M. L., et al. (2016) Rethinking ‘top-down’ and ‘bottom-up’ roles of top and middle managers in organizational change: Implications for employee support. *Journal of Management Studies*, 54(7), 961-985. <https://doi.org/10.1111/joms.12258>
19. Hernandez-Betancur, J. E., Montoya, I. A. & Montoya, L. A. (2020). The tree of science of deliberate and emergent strategies. *IIMB Management Review*, 32(4), 1-21. <https://doi.org/10.1016/j.iimb.2020.12.004>
20. Hussain, S. T., et al. (2018). Kurt Lewin’s change model: A critical review of the role of leadership and employee involvement in organizational change. *Journal of Innovation & Knowledge*, 3(3), 123–127. <https://doi.org/10.1016/j.jik.2016.07.002>
21. Hayajneh, N., et al. (2021). The relationship between organizational changes and job satisfaction through the mediating role of job stress in the Jordanian telecommunication sector. *Management Science Letters*, 11(1), 315–326. <https://doi.org/10.5267/j.msl.2020.8.001>
22. Chen, C. J. (2021). SoTL enculturation guided by Kotter’s model of change. *International Journal for Academic Development*, 26(4), 468-472. <https://doi.org/10.1080/1360144X.2021.1890605>
23. Chromjakova, F., Trentesaux, D., Kwarteng, M. A. (2021). Human and cobot cooperation ethics: The process management concept of the production workplace. *Journal of Competitiveness*, 13(3), 21-38. <http://dx.doi.org/10.7441/joc.2021.03.02>
24. Jaaron, A. A. M., Hijazi, I. H., & Musleh, K. I. Y. (2021). A conceptual model for adoption of BIM in construction projects: ADKAR as an integrative model of change management. *Technology Analysis & Strategic Management*, 655-667. <http://dx.doi.org/10.1080/09537325.2021.1915975>
25. Karpenko, Y., et al. (2021). Formation of the enterprise strategy based on the industry life cycle. *Independent Journal of Management & Production*, 12(3), 262-280. <http://dx.doi.org/10.14807/ijmp.v12i3.1537>
26. Keller, S., & Schaninger, B. (2019). *Beyond performance 2.0: A proven approach to leading large-scale change*. Wiley.
27. Khaw, W. K., et al. (2022). Reactions towards organizational change: A systematic literature review. *Heliyon*, 8(4). <https://doi.org/10.1007/s12144-022-03070-6>
28. Kim, J. & Park, M. J. (2022). Influence of entrepreneurship manifestation factor on organisational innovation: The role of corporate entrepreneurship and imperative

- innovation culture. *Journal of Entrepreneurship*, 31(3), 514-545. <https://doi.org/10.1177/09713557221135558>
29. Kuzminski, L., Jalowiec, T., Wojtaszek, H., & Masloch, P. (2020). Analysis of factors influencing the competitiveness of manufacturing companies. *European Research Studies Journal*, 23(2), 217-227. <https://doi.org/10.35808/ersj/1590>
30. Lee, D. K. (2016). Alternatives to P value: Confidence interval and effect size. *Korean Journal of Anesthesiology*, 69(6), 555-562. <https://doi.org/10.4097/kjae.2016.69.6.555>
31. Liu, W. H., et al. (2021). Cooperate or not? Strategic analysis of platform interactions considering market power and precision marketing. *Transportation Research Part E-logistics and Transportation Review*, 154, 102479. <https://doi.org/10.1016/j.tre.2021.102479>
32. Mac Carte, P., & Farina, P. (2021). Measuring the organizational change maturity of Chilean companies. *Frontiers in Psychology*, 12, 791106. <http://dx.doi.org/10.3389/fpsyg.2021.791106>
33. Mohd, W., Idris, S., & Momani, R. (2013). Impact of environmental dynamism on marketing strategy comprehensiveness and organizational performance. *International Journal of Business and Management*, 8(9), 40-49. <http://dx.doi.org/10.5539/ijbm.v8n9p40>
34. Mork, A., Krupp, A., Hankwitz, J., & Malec, A. (2018). Using Kotter's change framework to implement and sustain multiple complementary ICU initiatives. *Journal of Nursing Care Quality*, 33(1), 38-35. <https://doi.org/10.1097/NCQ.0000000000000263>
35. Nawaz, A. & Guribie, F. L. (2022). Impacts of institutional isomorphism on the adoption of social procurement in the Chinese construction industry. *Construction Innovation*, 24(3). <https://doi.org/10.1108/CI-02-2022-0035>
36. Park, J. E., Wang, Y. D. & Wei, S. J. (2022). Employees' perceptions and earnings benchmarks. *Pacific Accounting Review*, 35(2), 199-217. <https://doi.org/10.1108/PAR-04-2022-0051>
37. Payne, D., Trumbach, C., & Soharu, R. (2022). The values change management cycle: Ethical change management. *Journal of Business Ethics*, 188, 429-440. <http://dx.doi.org/10.1007/s10551-022-05306-8>
38. Pikhart, M. & Klimova, B. (2020). Information and communication technology-Enhanced business and managerial communication in SMEs in the Czech Republic. *Information*, 11(6), 336. <https://doi.org/10.3390/info11060336>
39. Quasar, S. (2024). Managing change in a rapidly evolving market: Lessons from leading firms. *Arabian Journal of Business and Management Review*, 14(4).
40. Singh, S. K., Del Giudice, M., Nicotra, M. & Fiano, F. (2022). How firm performs under stakeholder pressure: Unpacking the role of absorptive capacity and innovation capability. *IEEE Transactions on Engineering Management*, 69(6), 3802-3813. <https://doi.org/10.1109/TEM.2020.3038867>
41. Sittrop, D., Crosthwaite, C. (2022) Minimising risk-The application of Kotter's change management model on customer relationship management systems: A case study. *Journal of Risk and Financial Management*, 14(10). <https://doi.org/10.3390/jrfm14100496>
42. Small, A., et al. (2016). Using Kotter's change model for implementing bedside handoff: A quality improvement project. *Journal of Nursing Care Quality*, 31(4), 304-309. <http://dx.doi.org/10.1097/NCQ.0000000000000212>
43. Stouten, J., Rousseau, D. M., & De Cremer, D. (2018). Successful organizational change: Integrating the management practice and scholarly literatures. *Academy of Management Annals*, 12(2), 752-788. <https://doi.org/10.5465/annals.2016.0095>

44. Strukelj, T., & Zabukovsek, S. S. (2019). Enterprise values and enterprise policy interdependence. *Economic Research-Ekonomska Istrazivanja*, 32(1), 2829-2849. <http://dx.doi.org/10.1080/1331677X.2019.1650654>
45. Tiwari, P., Sadeghi, J. K., & Eseonu, C. (2020). A sustainable lean production framework with a case implementation: Practice-based view theory. *Journal of Cleaner Production*, 277, 123078. <http://dx.doi.org/10.1016/j.jclepro.2020.123078>
46. Teczke, M., Bespayeva, R. S. & Bugubayeva, R. O. (2018). Approaches and models for change management. *Jagiellonian Journal of Management*, 3(3), 195-208. <https://doi.org/10.4467/2450114XJJM.17.014.9785>
47. Teixeira, B., Gregory, P. A. M., & Austin, Z. (2017). How are pharmacists in Ontario adapting to practice change? Results of a qualitative analysis using Kotter's change management model. *Canadian Pharmacists Journal*, 150(3), 198–205. <http://dx.doi.org/10.1177/1715163517701470>
48. Woo, B., & Jun, H. J. (2020). Globalization and slums: How do economic, political, and social globalization affect slum prevalence? *Habitat International*, 98, 102152. <http://dx.doi.org/10.1016/j.habitatint.2020.102152>
49. Yin, J. H., & Li, C. C. (2022). Data governance and green technological innovation performance: A curvilinear relationship. *Journal of Cleaner Production*, 379(1), 134441. <http://dx.doi.org/10.1016/j.jclepro.2022.134441>

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