

Modernizing Organizations' Dynamic Capabilities for Competitiveness: The Balanced Scorecard Perspective

Organizasyonların Rekabet Edebilirlik İçin Dinamik Yeteneklerinin Modernleştirilmesi: Dengeli Puan Kartı Perspektifi

#### **Abstract**

The changing trends in business environments have made obsolete the traditional performance measurement of focusing on external accounting data within organizations. Organizations must now view all processes, activities, and strategies holistically, in order to achieve their business strategic objectives, vision, and mission. The major objective of this article is to report the findings on how organizations can modernize their dynamic capabilities by using the balanced scorecard approach to achieving competitiveness. Six strategic perspectives namely relationships and culture strategy, stakeholders' strategy, processes and practices strategy, intellectual-capital strategy, value-creation strategy, and the corporateconscience strategy were proposed to influence the use of the balanced scorecard approach to modernize dynamic capabilities. Data were collected from a serviceoriented organization in South Africa using a close-ended questionnaire. Results indicated that, of the six perspectives suggested, the value-creation strategy ranked higher, whereas the corporate-conscience strategy ranked lowest. From the findings, a model was developed that could help organizations to modernize their dynamic capabilities using a balanced scorecard approach.

Keywords: Balanced scorecard, business analytics, business strategies, dynamic capabilities, performance management

# Öz

İş ortamlarındaki değişen eğilimler, kuruluşlar içindeki dış muhasebe verilerine odaklanma şeklindeki geleneksel performans ölçümünü geçersiz kıldı. Kuruluşların artık iş stratejik hedeflerine, vizyonlarına ve misyonlarına ulaşmak için tüm süreçleri, faaliyetleri ve stratejileri bütünsel olarak incelemeleri gerekiyor. Bu makalenin temel amacı, kuruluşların rekabetçiliğe ulaşmak için dengeli puan kartı (BSC) yaklaşımını kullanarak dinamik yeteneklerini (DC'ler) nasıl modernleştirebileceklerine ilişkin bulguları rapor etmektir. DC'leri modernize etmek için BSC yaklaşımının kullanımını etkilemek üzere ilişkiler ve kültür stratejisi, paydaşların stratejisi, süreçler ve uygulamalar stratejisi, entelektüel sermaye stratejisi, değer yaratma stratejisi ve kurumsal vicdan stratejisi olmak üzere altı stratejik perspektif önerildi. Veriler Güney Afrika'daki hizmet odaklı bir kuruluştan kapalı uçlu bir anket kullanılarak toplandı. Sonuçlar, önerilen altı perspektiften değer yaratma stratejisinin daha üst sıralarda yer aldığını, kurumsal vicdan stratejisinin ise en düşük sırada yer aldığını gösterdi. Bulgulara dayanarak kuruluşların DC'lerini BSC yaklaşımını kullanarak modernleştirmelerine yardımcı olabilecek bir model geliştirildi.

Anahtar Kelimeler: kurumsal Karne; iş analizi; iş stratejileri; Dinamik yetenekler; performans yönetimi

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### Introduction

Today, there is an explosion of data, often spread across distributed environments, with data both on premises and in the cloud. Effective data management, governance, and analytics can help organizations manage their data efficiently, thus maximizing

their potential. With increasing digitization, scalable, agile, and comprehensive data-management and governance are essential to leveraging critical analytics and advanced applications for artificial intelligence and machine learning. Remaining abreast of technology trends, real-world experiences, and the latest practices is paramount for any organization that wants to maintain competitiveness.

Currently, many organizations are striving to ensure that their customers are able to receive the services they require. It is becoming increasingly evident to many organizations, both profit- and service-oriented, that satisfying customers is paramount in achieving desired competitiveness. However, worldwide, customers' needs are becoming progressively more complex, due to the increasing number of communication channels and the ubiquitousness of business information (Cheng & Zheng, 2022). The rapidly growing use of information technology in almost all business sectors has enormously transformed today's customers, and such has made serving them with traditional business methods more challenging (Muchandigona & Kalema, 2023). Change is endemic; organizations have to embrace these changes in order to remain abreast of the global competition and also to share in the world market. Organizations have to be sufficiently innovative to support stakeholders effectively and efficiently by leveraging modern technologies for better financial and business analytics, thus augmenting vying procedures.

According to Krogdahl and Cesaretti (2023), organizations should modernize any approaches that could enable them to conduct insightful business analytics, leading to the realization of more business and ambitious marketing. The abovementioned researchers indicate that the use of business analytics can improve workflow, processes, and decision-making across an organization. Furthermore, using business analytics organizations can identify inefficient processes such as bottlenecks, and decide on the most effective ways of ameliorating them. In addition, financial analytics allows organizations to make more accurate financial forecasts and investing decisions. When combined with predictive business models, analytics can provide answers to a variety of fiscal questions, including determining of a customer's lifetime value, analyzing churn and net new-customer effects, and measuring how much initiatives such as implementing environmental, social, and governance best practices influence profits (Mikalef et al., 2020).

In general, business analytics informs overall business strategies, such as determining whether a gap exists in the market for an additional product line essential to prioritizing the organizational goals (Krogdahl & Cesaretti, 2023). Using these analytics, organizations gain insight into business expenses, overall financial health, and investments, including research and development investments (Mikalef et al., 2020). However, skills needed to optimize approaches, such as business analytics that use data to inform decision-making, predict outcomes, identify and mitigate problems, and drive improvements, are still limited within organizations, and many are failing to cope with currently developing trends (Krogdahl & Cesaretti, 2023).

This calls for organizations to modernize their dynamic capabilities (DCs) in order to cope with the developing technological trends. Dynamic capabilities refer to an organization's ability to integrate, build, and reconfigure internal competencies in response to changes in the business environment; DCs are underpinned by organizational routines and managerial skills (Teece, 2018). These DCs are vital to maintaining profitability over the long term, including the ability to design and adjust business models (Kareem & Alameer, 2019). Hence, for competitiveness, organizations must modernize their DCs, thus being able to analyze increasing data volumes, integrating such easily, and making DCs accessible to everyone who needs them.

The DC theory posits that organizations can improve their DCs by reconfiguring their resources in response to the waves of change (Teece, 2023). In addition to helping organizations adapt to changing environments, DCs can also improve their competitiveness, thereby augmenting organizational performance (Chen & Zheng, 2022). It is important to note that reconfiguration of resources requires organizations to draw better insights from the generated data through proper analytics; hence the need for modern skills and techniques (Torres et al., 2018). Researchers such as Kareem & Alameer (2019) and Mikalef et al. (2020) remark that the successful construction of DC is extremely important for continuous improvement of an organization's performance. Dynamic capability can follow the changes of the market, re-establishing organizations' operational capability to adapt to change by integrating and utilizing resources appropriately (Cheng & Zheng, 2022).

This study therefore sought to address ways in which organizations can modernize their DCs by leveraging the balanced scorecard (BSC) approach. This is because the BSC acts as a lens through which to measure the holistic view of an organization's performance by using its perspectives of financial, customer, internal process, as well as learning and growth (Oliveira et al., 2021).

### Literature Review

Kaplan and Norton (1991) noted that organizations often measured their success solely on a financial basis, leading to a lack of broader and more strategic perspectives. These researchers observed that, should organizations want to achieve their strategic objectives, they must align their activities with required strategies. However, to achieve this goal, organizations must establish strategic frameworks that all stakeholders, including employees, must follow, and these frameworks must align the organizations' activities with its mission and vision. Kaplan and Norton (1991) named this framework the balanced scorecard (BSC). In their later study, Norton and Kaplan (2008) indicated that an organization can monitor its performance by balancing financial, customer, internal, as well as learning and growth perspectives. The researchers recommend that organizations develop indicators and monitoring tools that track their financial performance. Economic indicators and tools play a vital role in revealing the economic impacts of other organizational perspectives. Furthermore, such indicators will measure the financial performance of the organization, which contributes to its overall success. From this understanding, an organization will improve its service delivery, thereby retaining customers and ensuring their satisfaction. Other researchers such as Oliveira et al. (2021) and Tawse & Tabesh (2023) concurred that the BSC framework is essential in ensuring that everyone is working toward a common goal—a key to achieving the organization's vision and mission.

In the traditional BSC, there are four perspectives: namely, financial, customer, internal process, and learning and growth (Kaplan & Norton, 1991). To reflect the importance of building internal capacity in order to improve internal processes, the original BSC concept of "learning and growth" has been changed to "organizational capacity" (Tawse & Tabesh, 2023). Organizational capacity consists of four components: human capital, technology, infrastructure, and governance. These components are summed up as people, knowledge, and technology (Oliveira et al., 2021). Organizational learning and growth occurs throughout the whole organization and during strategy execution. According to Amer et al. (2022), the new approach of the BSC emphasizes the organizational capacity concept that entails the people, knowledge, and technology, and how these three can be optimized to achieve competitiveness. The abovementioned researchers express that people are responsible for doing the work by following processes and that this work can be conducted more efficiently with the help of technology. Optimizing the relationships between people, processes, and technology can help businesses achieve organizational efficiency. Krogdahl and Cesaretti (2023) note that to facilitate information dissemination, transparency and speed must be provided. Hence, it is important to use the acquired knowledge in facilitating the mapping of personal skills needed for each task. Competitiveness can only be achieved if an organization has the ability to efficiently use its resources in providing products and services that exceed customer expectations (Mikalef et al., 2020).

According to Amer et al. (2022), the BSC approach, when leveraged, could lead to the realization of the organization's strategic objectives, including relationships and culture strategy (RCS), stakeholder's strategy (SS), processes and practices strategy (PPS), intellectual-capital strategy (ICS), value-creation strategy (VCS), and the corporate-conscience strategy (CCS). Tawse and Tabesh (2023) aver that the BSC controls behavior within an organization; hence, its effectiveness could be measured should validating indicators or attributes be properly constituted. Kaplan and Norton (1991) recommended four or five indicators for each perspective. On the other hand, Amer et al. (2022) suggest that the number of indicators to be included for each construct depends entirely on the nature and structure of the organization. From the literature, this study established 6 perspectives and 35 indicators. The identification of these perspectives and their indicators ensured sufficient coverage of both managerial and operational tasks within organizations. These strategic perspectives are explained as follows:

a) Relationships and Culture-Strategic Perspective:
 This construct assumed that the organization is

embedded within the cultural background in which it operates. Organizational cultures set expectations for the ways in which people work together and how well they behave. As a result, culture can reduce silos between teams, guide decision-making, and enhance overall workflow (Lancefield, 2022). Every organization faces specific challenges and contexts. It is common for organizations to experience strategic moments that have a disproportionate impact on outcomes. The process of achieving such correctly multiplies the effect of other activities, as people learn new ways of working. In addition, employees become more active in advocating for the program rather than resisting the new changes. From this perspective, nine indicators were identified; these are as follows: interdependence of relationships between stakeholders, stakeholders' concerns and contributions, financial reporting, obligations toward local communities, triple-bottom-line reporting, generally accepted accounting principles, use of external auditors, treatment of employees, and commitment in decision-making. From this perspective, the first hypothesis (H1) of the study was formulated.

**H1:** Improving the relationship and culture within an organization will influence the use of the BSC approach to modernizing DCs, thus achieving competitiveness.

Stakeholders-Strategic Perspective: Competitive advantage helps a business become more successful by differentiating itself from its competitors, attracting and retaining customers, and increasing profits. In accomplishing such, organizations must build trust and loyalty between their stakeholders, manage risks and opportunities, and enhance their social and environmental impact (Torres et al., 2018). Additionally, the stakeholder theory offers a broader perspective on business processes and outcomes. Furthermore, it examines how general managers behave in dynamic settings in which many stakeholders influence the outcomes of the firm and are, themselves, affected by its actions. In fact, organizations compete not only on their own products and factors but simultaneously on behalf of all their stakeholders (Bosse & Sutton, 2019). A company's strategy in a competitive environment is to increase agility and to ensure that it stays ahead of its competition by exploring and pursuing new sources of competitive advantage. Additionally, the stakeholder theory indicates that the organization must build its capability of exploiting current resources-capability exploitation and capability building. Hence, an organization is conceptualized as having the ability to absorb new possibilities and to exploit old certainties (Mikalef et al., 2020). Under the SS perspective, five indicators were identified. These are as follows: maximization of stakeholders' and shareholders' wealth, acknowledgment of customers, consideration of government contributions, recognition of community care, as well as debt provisions from financiers. Based on this perspective, the second hypothesis (H2) of this study was developed.

**H2:** Effective management of stakeholders influences the use of the BSC approach in modernizing DCs to achieve organizational competitiveness.

- Practices and Processes-Strategic Perspective: This perspective examines the internal operations and ways of accomplishing endeavors within an organization. In today's business environment, organizations must deal with globalization, rapid environmental changes, enhanced competition, and complex client requirements. As a result of continuous change, rivalry, and open markets, there is an increase in competitive pressure among all firms in the industry. This further leads to concepts being introduced, such as innovation, flexibility, and differentiation from the competition (Zuñiga-Collazos et al., 2019). Organizations create and enhance capabilities that interact with their environments as they alter, and such requires companies to be adaptable, flexible, and productive (Cheng & Zheng, 2022). Competitiveness becomes essential for a company to achieve greater profitability, superior performance, and competitive advantage. A company's competitiveness is a function of its elevated performance and the development of its employees' skills and competencies needed in the modern digitized business environment. The following indicators were identified in measuring this perspective: interdependence of efforts and rewards among stakeholders, allocation of organizational wealth, stakeholders receiving sufficient benefits for continued collaboration. fair payment of suppliers, financial support to educational projects, contribution to the welfare of society, processes that address concerns of stakeholders, benchmarking to improve its business processes, measuring the social impact of operations, using customers' feedback, and corporate performance indicators. From this perspective, the third relationship (H3) was hypothesized.
  - **H3:** Improving the internal business processes and practices influences the use of the BSC approach in modernizing DCs needed for achieving competitiveness.
- Intellectual Capital-Strategic Perspective: In the contemporary era, intellectual capital refers to all resources within an organization that add to its value and competences. Therefore, managing intellectual capital effectively can increase an organization's value and performance (Abdulaali, 2018). An organization cannot gain a competitive advantage in a specific market or industry without intellectual capital (Zuñiga-Collazos et al., 2019). This implies that the concept of intellectual capital could also be viewed as the knowledge resources that a company has at its disposal, of great use in the era of the knowledge economy. It is therefore imperative for an organization to foster an environment promoting information-sharing among its employees in order to increase knowledge transfer (Abdulaali, 2018). Knowledge transfer leads to the development of capabilities that result in better processes and structures within organizations. Additionally, the dynamic development of an organization's DCs is essential to enhancing its competitive advantage. For this perspective, five indicators were identified: enhancing of human capital development, installing of a knowledge-management system thus promoting innovation, promotion of knowledge of local culture, supporting employees' knowledge, as well as

- increasing inputs from various stakeholders. Based on this understanding, hypothesis (H4) was formulated.
- **H4:** Managing an organization's intellectual capital influences the use of the BSC approach in modernizing DCs to achieve a competitive advantage.
- The Value Creation-Strategic Perspective: An organization's value is measured by the amount consumers are willing to pay for a product or service. Profitability is only realized should an organization create more value than it costs to perform the value-creation functions, such as procurement, manufacturing, and marketing (Prasadaa et al., 2021). Business is based on value creation, such as distinguishing an organization's brand and solution from that of its competitors, assuring long-term customers concomitantly with success. In the case of this study, it can be argued that the organization's DCs pride itself on products and services viewed as unique; and this helps the organization to excel in the market. However, to achieve this, an organization must create value, which can only be achieved by modernizing the existing DCs to cope with the needed competences (Teece, 2023). For an organization to gain a competitive advantage, it must either perform value-creation functions at a lower cost or do so in such a way that provides differentiation and a premium price (Prasadaa et al., 2021). This implies that by modernizing DCs an organization will not only gain the needed competences but will also create strategies of low cost or differentiation. From this perspective, five indicators were identified: improving of customer-oriented activities, management of internal business processes, leveraging social values of the local communities, benchmarking to improve its business processes, and supporting of human capital development. This perspective was relied on in hypothesizing the fifth relationship (H5).
  - **H5:** Maximizing value creation has the positive influence of using the BSC approach in modernizing DCs for competitiveness.
- Corporate Conscience-Strategic Perspective: The concept of corporate conscience, also known as corporate social responsibility (CSR), refers to a corporate model and culture that integrates socially beneficial programs and practices. By embracing CSR, companies can retain and attract customers, boost employee engagement, improve brand image, attract top talent, and make a positive impact on their bottom line (de Melo et al., 2019). Literature indicates that competitiveness is directly related to performance, which includes both financial and non-financial aspects (Krogdahl & Cesaretti, 2023). According to Oliveira et al. (2021), financial performance can be linked to socio-environmental benefits, based on indicators of financial performance such as growth, turnover, return on assets, efficiency, and profitability. However, in a competitive business environment, such can only be achieved should an organization stand out above its competitors, offering better value creation, which role is best played by the DCs (Prasadaa et al., 2021). Six indicators were identified along this perspective: obligations toward local communities, supporting others using organizational

wealth, interdependence of efforts and rewards among its stakeholders, stakeholders receiving sufficient benefits to assure their continued collaboration, taking direct responsibility for social problems, as well as contributing substantially to the overall welfare of society. From this understanding, the sixth hypothesis (H6) was developed. **H6:** The corporate conscience as a strategy influences the use of the BSC approach in modernizing DCs to achieve a competitive advantage.

### **Material and Methods**

The study was conducted in a service-oriented organization with the targeted population being management that forms the executive committee responsible for making and implementing the institutional decisions. Other respondents were from the finance department. These respondents included staff in the mainstream of executing the financial activities of the organization, in line with the institutional regulations. The last group was the human resource department responsible for the recruitment of staff. The overall population in these three sections of the organization was 87. By using Krejcie and Morgan's (1970) tool for computing the sample size from a finite population, the sample size of the study numbered 73. Data were collected from the respondents using simple random sampling.

Based on the six perspectives and their respective indicators, a measuring instrument was developed for data collection. The measuring instrument in the form of a questionnaire with close-ended questions was designed using a 5-point Likert scale; with 1 and 5 representing strongly disagree and agree, respectively, 3 representing neutral, and 2 and 4 being respective intermediate values. Overall, 80 questionnaires were distributed using simple random sampling. Of these, 69 completed questionnaires were returned, giving a response rate of 86.3%. However, of the returned filled questionnaires, only 62 were usable, whereas 7 had incomplete data and were discarded. Two screening methods are commonly used in research, namely physical screening that is used with small sample sizes and the Mahalanobis distance that is mostly used with larger sample sizes. In physical screening, each filled questionnaire is examined for completeness and patterns of filling, whereas with Mahalanobis distance, the dataset is tested for outliers in the normal distribution data using the normal probability plot (P-P plot) graph to provide a test for normality, linearity, and homoscedasticity between the independent variables-and the dependent one (Tabachnick & Fidell, 2013). In this study, physical screening was used to check the completeness of the answered questionnaires and the patterns that were followed when individuals were answering the question items.

After the screening processes, the questionnaire was transcribed for analysis into the Statistical Package for Social Sciences v19.0 (IBM SPSS Corp.; Armonk, NY, USA). However, before the survey, perspective indicators were revisited, and similar indicators were combined, whereas those repeating were eliminated. The questionnaire was then coded for easy

transcription. From the literature, this study identified 6 perspectives and 35 indicators. Each perspective formed a section of the questionnaire or construct, and the indicators formed the question items. On coding, each perspective was assigned a descriptive label that allowed identification during analysis. Hence, each perspective was abbreviated by taking each starting letter of the word, and the indicators were coded by adding number value on the perspective code. Perspective 1: relationship and culture strategy was coded as RCS, and its items were coded as RCS1-RCS9. Perspective 2: stakeholder strategy was coded as SS, and its items as SS1-SS5. Perspective 3: practice and process strategy was coded as PPS, and the items as PPS1-PPS5. Perspective 4: intellectual-capital strategy was coded as ICS, and its items as ICS1-ICS5. Perspective 5: valuecreation strategy was coded as VCS, and its items as VCS1-VCS4. Lastly, Perspective 6: corporate-conscience strategy was coded as CCS, while the items were coded as CCS1-CCS7.

#### **Ethical Consideration**

As a norm standards at the university where the main author is employed any research is supposed to apply for ethics approval before data collection starts. This procedure was followed, and ethics approval number FCRE/BFA/2022/03/006 was obtained.

## **Analysis and Presentation of Results**

### **Reliability Measures**

Cronbach's alpha  $(\alpha)$ , also known as the alpha coefficient, was used to determine the reliability of the measuring instrument as well as that of the suggested perspectives. The overall reliability of the measuring instrument was 0.821, a value greater than the recommended threshold of 0.7 (Heale & Twycross, 2015). All perspectives exhibited good reliability, with the exception of the ICS perspective whose value of 0.678 was just slightly below the threshold. However, ICS had only five measuring items; therefore, the reliability of above .5 was accepted as good interrelatedness and homogeneity, and the perspective was included for further analysis (Tamilmani et al., 2021).

# Demographics of the Respondents

Of the total number of respondents, 57% (n=35) were female, and a large number of the respondents, 61.9% (n=38), were working at an operational level. On the other hand, 59.5% (n=37) of the respondents had less than 2 years' working experience. That a good number of the participants had overall working experience of less than 2 years explains why the majority 64.3% (n=40) indicated that they were not familiar with the term BSC. More so, 76.2% (n=47) of the respondents were not certain whether the BSC was being used by their organization; although many 88% (n=55) were familiar with the term DCs. Results indicated that 43% (n=27) of the respondents were in management positions, including the decisionmaking body. This implies that the results obtained reflected a realistic picture of what was happening within the organization. Similarly, should the BSC approach be implemented to modernize DCs for competitiveness, such an approach has to receive approval from the management. This study targeted

respondents who were directly involved in financial decisionmaking, which implies that the findings of the study could be used with confidence because of their validity.

## **Correlation Between Perspectives**

Correlation was measured between the individual indicators of each perspective. Most of them showed a good and significant correlation between their indicators, apart from the SS and the VCS perspectives. Further still, correlation was measured between the perspectives. The CCS perspective was the most significantly correlated. The CCS had a significant correlation of 0.325 at p < .05 with the VCS perspective. The CCS also exhibited correlation coefficients of .454, 0.463, and 0.598 at p < .01, with SS, PPS, and ICS perspectives, respectively. Similarly, the ICS perspective was correlated significantly with other perspectives. Intellectual capital was significantly correlated with the SS perspective, with a coefficient of 0.350 at p <.05 and with values of 0.396 and 0.490 at p < .01 with the RCS and PPS perspectives, respectively. Lastly, the VCS perspective was significantly correlated with SS at p < .01, with a correlation coefficient of 0.499. Table 1 demonstrates the correlation coefficients for each perspective.

Based on the results of the correlation demonstrated in Table 1, it could be stated that modernizing DCs may improve competitiveness when there is an increase in the perspectives of the study. Positive corrections as indicated by the results imply that there is a direct relationship between the perspectives and competitiveness and increasing one will lead to the increase in gaining competitiveness. Furthermore, as Frost (2020) indicated, these results could be used to predict further occurrences of competitiveness. However, as demonstrated in Table 1, some perspectives, namely the CCS and the ICS, exhibited relatively high significant values at 99% confidence interval. These high significance values could suggest the existence of multicollinearity that needs to be checked with a test of the variance inflation factor (VIF).

# **Multiple Regression Analysis**

Having established the existence of correlations between the perspectives, multiple regression analysis was then carried out to determine the interdependency between them. The purpose of this was to define how each independent perspective contributes to the overall prediction of the model. Table 2 illustrates the results obtained from this process, reported together

	n Correlation Coefficients of P	RCS	SS	PPS	ICS	VCS	CCS
RCS	Pearson correlation	1					
	Sig. (two-tailed)						
	N	42					
SS	Pearson correlation	.133	1				
	Sig. (two-tailed)	.400					
	N	62	62				
PPS	Pearson correlation	.161	.160	1			
	Sig. (two-tailed)	.309	.312				
	N	62	62	62			
ICS	Pearson correlation	.396**	.350*	.490**	1		
	Sig. (two-tailed)	.009	.023	.001			
	N	62	62	62	62		
VCS	Pearson correlation	.075	.499**	.181	.205	1	
	Sig. (two-tailed)	.636	.001	.252	.194		
	N	62	62	62	62	62	
CCS	Pearson correlation	.259	.454**	.463**	.598**	.325*	1
	Sig. (two-tailed)	.098	.003	.002	.000	.036	
	N	62	62	62	62	62	62

Note: CCS = Corporate-conscience strategy; ICS = Intellectual-capital strategy; PPS = Processes and practices strategy; RCS = Relationships and culture strategy; SS = Stakeholder's strategy; VCS = Value-creation strategy.

<sup>\*</sup>Correlation is significant at the 0.05 level (two-tailed).

<sup>\*\*</sup>Correlation is significant at the 0.01 level (two-tailed).

Model	Unstandardized Coefficients		Standardized	t	Sig. p	Collinearity Statistics	
	В	Standard Error	Coefficients Beta			Tolerance	VIF
Constant	-23.076	3.521		-7.611	.000		
RCS	.531	.157	.396	3.391	.002	.264	3.788
SS	.406	.135	.304	3.052	.024	.373	2.681
PPS	1.296	.247	.404	5.153	.000	.566	1.767
ICS	1.073	.232	.338	4.666	.010	.632	1.582
VCS	1.255	.165	.778	7.581	.000	.325	3.076
CCS	.162	.123	.136	2.472	.041	.366	2.732

Note: CCS = Corporate-conscience strategy; ICS = Intellectual-capital strategy; PPS = Processes and practices strategy; RCS = Relationships and culture strategy; SS = Stakeholder's strategy; VCS = Value-creation strategy; VIF = Variance inflation factor.

with the VIF, whose intention was to report on the multi-collinearity diagnostics.

From the beta values of the analysis, results show that the VCS had the highest predicting power (77.8%) of realization of strategic objectives, significant at .000 and <.05. All perspectives showed a high predicting power and a good level of significance. Exceptions were the SS and CCS, with prediction of 30.4% and 13.6% at significant levels of .024 and .041, respectively. Much as these two values were above the threshold, .024, .041 < .05, their significance was very slight. Nevertheless, results further indicate that all values of the VIFs are within the acceptable range of VIF < 5.

## **Testing the Hypotheses**

Hypothesis testing helps in making decisions on whether the suggested effects or relationships have occurred. Such testing determines whether any given treatments have effects, whether the conceptual framework perspectives (constructs) differ from one another, and whether one predicts the other. This study suggested six hypotheses. Table 3 demonstrates the extracts of the results of the tested hypotheses showing their significance at p < .05. According to Hair et al. (2017), for significance at 95% confidence interval, the t-value must be >1.96 at .05 level.

Results demonstrated in Table 3 indicated that all the suggested hypotheses were supported. From the three analyses carried out, correlation, multiple regression, and hypotheses testing, the results reflect that the suggested perspectives in the use of BSC to modernize DCs of an organization thus achieving competitiveness meet the acceptable range. The implication of this is that these perspectives can be relied upon for the modernization of DCs in achieving a competitive advantage, as well as the mission and vision of an organization.

Table 3. Testing the Hypotheses						
Perspective	Suggested Hypothesis	Sig. p-Value	Action			
Relationships and culture strategy	<b>H1:</b> Improving the relationship and culture within an organization will influence the use of the BSC approach to modernizing DCs, thus achieving competitiveness.	.002 < .05	Supported			
Stakeholder strategy	<b>H2:</b> Effective management of stakeholders influences the use of the BSC approach in modernizing DCs to achieve organizational competitiveness.	.024 < .05	Supported			
Processes and practices strategy	<b>H3:</b> Improving the internal business processes and practices influences the use of the BSC approach in modernizing DCs needed for achieving competitiveness.	.000 < .05	Supported			
Intellectual-capital strategy	<b>H4:</b> Managing an organization's intellectual capital influences the use of the BSC approach in modernizing DCs to achieve a competitive advantage.	.010 < .05	Supported			
Value-creation strategy	<b>H5:</b> Maximizing value creation has the positive influence of using the BSC approach in modernizing DCs for competitiveness.	.000 < .05	Supported			
Corporate-conscience strategy	<b>H6:</b> The corporate conscience as a strategy influences the use of the BSC approach in modernizing DCs to achieve a competitive advantage.	.041< .05	Supported			

### Discussion and Conclusion and Recommendations

In this article, we propose a model for modernizing DCs by using a BSC approach. The suggested model seeks to integrate long-term and short-term organizational activities as a means of managing an organization's strategic fit, leading to a competitive edge. This study proposes how top-management goals could effectively be linked to daily management activities, thus improving organizational performance. For people to understand a long-term strategy, they must first comprehend how such can inform their daily management activities and know the ways in which the strategy informs operations. A holistic resource-based view of an organization could be used to illustrate its DCs via a BSC approach. The BSC constitutes synergistic forms of DCs that can be harnessed in managing the strategic fit between strategy and operations at an organization-wide level (Tawse & Tabesh, 2023; Teece, 2023). In their studies, Kaplan and Norton (1996, 2008) recommend that organizations, especially those that are service-based, make modifications of their initial BSC perspectives in order to suit their requirements and objectives. Our paper followed this recommendation by making necessary transformations and modifications, informing of ways in which a BSC could modernize DCs for competitiveness of an organization. From the followed methodology, this BSC is sufficiently generic to be applied to other organizations, whether profit or service-oriented. Based on results demonstrated in Tables 2 and 3, the implication of the findings in relation to theory and practice could be discussed as follows:

The first hypothesis (H1) was due to the RCS and stated that improving the relationship and culture within an organization will influence the use of the BSC approach to modernizing DCs, thus achieving competitiveness. This hypothesis was accepted. The acceptance of this hypothesis implies that an organizational culture can serve as a magnet, attracting highly qualified employees with advanced skills, hence creating a competitive edge over other businesses within the same industry. Good culture is essential for attracting and retaining great talent with modern capabilities. The findings of this study are in agreement with those of other researchers such as Azeem et al. (2021) and Olan et al. (2019) who also indicated that it takes time to find the right people, so once an organization has found them, it would want to keep them on board as long as possible. Retantion of good competent employees is essential as investing in in human resources is key in achieving a competitive advantage.

The second hypothesis (H2) theorized that effective management of stakeholders influences the use of the BSC approach in modernizing DCs to achieve organizational competitiveness. This hypothesis was accepted. The implication of this finding is that in relation to the strategic formation process, stakeholders have varying expectations depending on the groups from which they have been drawn. For competitiveness, during the planning process, management must consider these expectations before proceeding. Additionally, stakeholders needs should be met and all eventualities planned for as this

will help in achieving their loyalty. The findings of this study support those of previous researchers (Bosse & Sutton, 2019; Mikalef et al., 2020; Torres et al., 2018) who also alluded that the ability to manage stakeholders accurately allows the professional to prioritize resources and make strategic decisions, which helps build long-term relationships with the most important groups and enhances the efficiency of the organization. Additionally, by integrating stakeholder theory into a BSC as a business model, an organization builds trust and loyalty, manages risks and opportunities, and enhances its social and environmental impact. Hence, organizations can differentiate themselves from the competition, attract and retain customers, and increase profitability by establishing a competitive advantage.

The third hypothesis (H3) suggested that improving the internal business processes and practices influences the use of the BSC approach in modernizing DCs needed for achieving competitiveness. This hypothesis was accepted. The implication of this finding is that internal processes and practices like systemized successful ways of doing things within a business, creation of consistency and operating and efficiency, decreasing time involved in new employee onboarding and decision-making fatigue as well as removing risks from both the business and stakeholders' perspectives are critical in reducing organizational costs and increasing return on investment. The findings of this study concur with those of researchers such as Amer et al. (2022) and Tawse & Tabesh (2023) who also noted that it is imperative that processes are followed within an organization since having well-developed and well-used processes ensures that the right things are done at the right time by the appropriate people. Hence, organizations need to consider the processes and better practices if they are planning to scale or build a business that will have a lifelong existence. This is true since businesses that operate efficiently and deliver quality products and services are not only preferred by customers but also by investors (Krogdahl & Cesaretti, 2023).

The fourth hypothesis (H4) theorized that managing an organization's intellectual capital influences the use of the BSC approach in modernizing DCs to achieve a competitive advantage. This hypothesis was accepted. The implication of this finding is that managing an organization's intellectual property will improve in creation of more value, products, and services, drive sales and growth, increase efficiency, as well as deepening customers and partners relationships (Abdulaali, 2018). These findings support those of Kanaan et al. (2020), Qassas & Areigat (2021), and Zuñiga-Collazos et al. (2019) who also alluded that as the world rapidly changes, knowledge is the most valuable tool for predicting future needs, as well as enabling societies to build a sustainable knowledge economy that will ensure the well-being of its stakeholders. Organizations rely primarily on people with practical minds, expertise, and creative and innovative ideas to survive and grow. As a result of its distinct intellectual capital, it is able to provide opinions and ideas that improve performance, develop products and services, and raise competitiveness.

The fifth hypothesis (H5) suggested that maximizing value creation has the positive influence of using the BSC approach in modernizing DCs for competitiveness. This hypothesis was accepted. The acceptance of this hypothesis implies that organizations realize that their real value increases in the distinct DCs they possess, including the capability of presenting opinions and ideas that improve performance. These findings are in agreement with those of Prasadaa et al. (2021), Qassas & Areigat (2021), and Teece (2023) who indicated that for an organization to gain a competitive advantage, it must be able to perform value-creating activities that generate more overall value than their competitors. They noted that the creation of superior value is accomplished through lower costs or superior benefits for consumers, creating a differentiation. This implies that businesses are profitable if they create more value than they spend on value-creating activities. Modernizing DCs will lead to an organization to either perform these activities at a lower cost or execute them in such a way as to differentiate itself and charge a higher price that brings more value.

Lastly, the sixth hypothesis (H6) postulated that corporate conscience as a strategy influences the use of the BSC approach in modernizing DCs to achieve a competitive advantage. This hypothesis was accepted. Corporate conscience, also known as CSR, offers an organization with unique resources such as reputation, employee capabilities, knowledge, and relationships. It can be strategically utilized from an organizational and resource-based perspective to achieve sustainability within organizations (Qassas & Areigat, 2021). The findings of this study support those of de Melo et al. (2019) and Oliveira et al. (2021) who noted that an organization can achieve competitive advantage through CCSs that go beyond the industry's legal and regulatory requirements. This helps the improvement of the organization's image and reputation in the eyes of citizens, stakeholders, workers, and consumers. This could imply that a strong reputation enables an organization to build trust with its stakeholders, which substitutes for a governance mechanism because it requires fewer protective strategies. This is also important since it enhances an organization's reputation, reduces transaction costs, and improves performance.

## Transformation and Regrouping of the Perspectives

From a reliability perspective, it was suggested that some indicators be deleted, thus improving the reliability of the perspective. Furthermore, from the correlation of indicators, it was revealed that some needed modification and merging. Similarly, some perspectives, such as VCS and ICS constructs, as well as PPS, and CCS constructs, were merged. Figure 1 demonstrates the model for the use of a BSC approach to modernizing DCs for competitiveness.

The increasing automation within organizations is driving businesses to collect mountains of customer data; however, the real value lies in optimizing this data for analysis, thereby driving business growth. With the current digital transformation, business intelligence at a higher level can be achieved by gathering the right data and incorporating it fully into the

A Model for BSC Approach to Modernizing DCs for Competitiveness. BSC = Balanced scorecard: DC = Dynamic capabilities. Competitive Advantage Modernized **Dynamic Capabilities** Value creation & intellectual Stakeholders strategic construct capital strategic constructs · Maximization of stakeholders' and Maximization of stakeholders' and shareholders wealth
 Acknowledgment of customers
 Consideration of government contributions
 Recognition of community care
 Debt provisions from financiers innovation Promotion of knowledge about local culture Supporting employees' knowledge Increase inputs from various stakeholders Improve customer oriented activities Management of internal business processes Leveraging on social values of the local communities Practices and process & corporate conscience strategic construct. Interdependence of efforts and rewards among stakeholders Allocation of organizational wealth Stakeholders receive sufficient benefits for continued collaboration Payment of suppliers tarity Financial support to educational projects
Contribution to welfare of the society.
Processes that address concerns of
stakeholders
Resolvestice to progress its business. processes Measuring social impact of operations Using customers' feedback Cornerate performance indicators Relationship and culture strategic construct. Interdependence of relationships of stakeholders keholders keholders concerns and contributions Triple bottom line reporting Generally accepted accounting principles Use of external auditors Treatment of employees

Figure 1.

system. Kalema (2022) indicates that as organizations' desire to automate their services to manage the Fourth Industrial Revolution (4IR) era increases, the need to modernize and equip their employees with advanced skills is also scaled. This is because digital transformation changes the operations of an organization that requires change in various processes and procedures. Among the processes that must change are systems operations, workflow, and culture; all these procedures require a paradigm shift in the use of the DCs within the organization. As a result of this transformation, data will be brought together across departments to make working together more efficient. The ability to connect the dots on the customer journey has never been easier, with workflow automation and advanced processing, such as artificial intelligence and machine learning. Hence, there is a need to modernize the existing DCs (Krogdahl & Cesaretti, 2023). Digital transformation can benefit organizations across industries: digital transformation modernizes legacy processes, enhances workflow efficiency, boosts security, and increases profitability.

Modernizing DCs to extend the resource-based view argument to create business value that is rare, difficult to duplicate. and imperfectly substitutable resources as well as to remain abreast in the rapidly changing business environments is of great benefit to developing countries. Businesses in developing countries have generally been slow in digital transformation and such has negatively impacted their global markets and reduced their competitiveness (Kalema, 2022). The use of BSC approach in modernizing DCs to improve competitiveness could be seen as a blessing for many businesses in developing countries since few organizations are less capable of forming symbioses and other connections with numerous other organizations globally. Additionally, improved DCs can lead to waves of change throughout the entire context, possibly even leading to a critical transformational event, where many organizations in developing countries have been lagging behind.

#### **Limitations and Recommendations**

As a result of the call for the modernization of DCs to improve organizational competitiveness (Mikalef et al., 2020: Krogdahl & Cesaretti, 2023), this study has identified how a BSC approach could be used to achieve this goal. Specifically, this paper provides insights into how DCs could be modernized by using the BSC perspectives. This study therefore serves as a foundation for further research and theory building regarding DCs not only in developing countries' context but also in many other complex organizational settings. However, this study only used one organization in a developing countries' context. Therefore, the results of this study could be generalized with caution that they are novel in the scholarship of DC research. Another aspect to consider is the small sample size that was used during the study. Much as Budiu and Moran (2021) indicated that 40 respondents could make an appropriate number for most quantitative studies, a minimum of 100 would have been far superior. Therefore, this study recommends that future research target larger sample sizes in order to have a good generalization of the results of the study.

This study used a cross-sectional survey in which data were collected at a single time. However, the researchers believe that, due to the dynamic nature of today's business environment and the evolution in technology, people's minds and perceptions change with time. Furthermore, stakeholders' perceptions and demands could also alter concomitantly with the environment in which they operate. This could necessitate a change in business strategies that could not have been envisaged. Therefore, this study recommends that, in order to cater for these changes, a longitudinal survey would be more appropriate for data collection.

This study has also highlighted that there is a major link between modernizing DCs and digital transformation. Dynamic changes have limits as they can apply equally in developed and developing countries to improve competitiveness (Krogdahl & Cesaretti, 2023). This implies that to achieve a resilient business, sound decision-making, and successful digital transformation, organizations should be technologically ready and have their strategies well aligned. Therefore, this study recommends the need for organizations to sensitize and train their employees on business innovations in order to keep up with technological development trends. Furthermore, employees should be equipped with new skills to enable them to cope with the technological changes in the business environment.

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