The Relationship between balanced Scorecard and Cost Reduction

An Empirical study on Public sectors in Kurdistan Region

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Abstract— This research discusses and analyzes the relationship between balanced scored card and cost reduction in public sectors in Kurdistan region.The main of this study is to examine the relationship between balanced scorecard and cost reduction in Public sectors in Kurdistan. The quantitative method used in order to analyze the present study. A random sampling was carried out in different locations in the ministry of planning in Erbil. A total of 800 questionnaires were distributed in Kurdistan, however 630 questionnaires were received and being completed properly and the data were collected through in hard copies. The findings revealed that the first research hypothesis was supported which stated that there is a positive relationship between financial perspective and cost reduction in public sectors in Kurdistan. The second research hypothesis was rejected which stated that there is a positive relationship between customer perspective and cost reduction in public sectors in Kurdistan. The third research hypothesis was supported which stated that there is a positive relationship between internal business process perspective and cost reduction in public sectors in Kurdistan, and the fourth research hypothesis was rejected which stated that there is a positive relationship between innovation and learning perspective and cost reduction in public sectors in Kurdistan.

Keywords— Balanced Scorecard, Cost reduction, Public Sectors, Kurdistan.

I. INTRODUCTION

In Kurdistan, public sector organizations play a significant role in assisting and guiding the government to deliver services, formulate policies and improve both flexibility and speed in public management systems. Prior to BSC, organizations had already been evaluating non-financial indicators for instance service quality, cycle times, product quality, customer satisfaction and market shares. The BSC, which was established from a multi-business study, currently presented a multi-dimensional opinion of the organization, connecting financial and non-financial evaluates in a coherent scheme. The new evaluation method has been considered as a very valuable instrument to improve the understanding of organizational dynamics in a cause-effect association within an organization, and to enhance organization's effectiveness. The BSC tactic developed well-known and commonly recognized in the academic as well as in the business world, being extensively accepted in numerous industries and organizations. Furthermore, consideration has concentrated on strategy implementation in reducing cost of the organization, which creates difficulties and issues in many businesses (Singh, et al. 2018). Being that the strategic design remains remote from the organization's day-to-day actions. The challenge of executing performance management systems has expected an advanced profile in public organization sectors in recent years. Public sectors in common with many other organizations have been increasing performance management schemes that not only evaluate the "right" things, but likewise allow active communication to external and internal stakeholders. The Balanced Scorecard is a strategic planning instrument established by Kaplan and Norton (1996) as a reply to the theory that organizations only exist to satisfy stockholders (Kaplan & Norton, 1992). The Balanced Scorecard is based on a four dimensional framework, where each dimension characterizes a various set of stakeholders: customer perspective, internal business process perspective, financial perspective and learning and innovation (growth) perspective (Junior, et al. 2018). The BSC is based on the foundation that capablestaffs will enhance process quality and cycle time, which therefore leads to on-time delivery and customer loyalty. At the end of the sequence of enhancements, the organization is very likely to attain higher returns on investments and, therefore, shareholder satisfaction. In other words, the BSC is a performance management framework whose main

contribution to the literature is to enlarge the number of interested parties and actors within the process (Leksono, et al. 2018).

II. RESEARCH OBJECTIVES

- To find the relationship between financial perspective and cost reduction at Public sectors in Kurdistan.
- To find the relationship between customer perspective and cost reduction at Public sectors in Kurdistan.
- To find the relationship between internal business process perspective and cost reduction at Public sectors in Kurdistan.
- To find the relationship between innovation and learning perspective and cost reduction at Public sectors in Kurdistan.
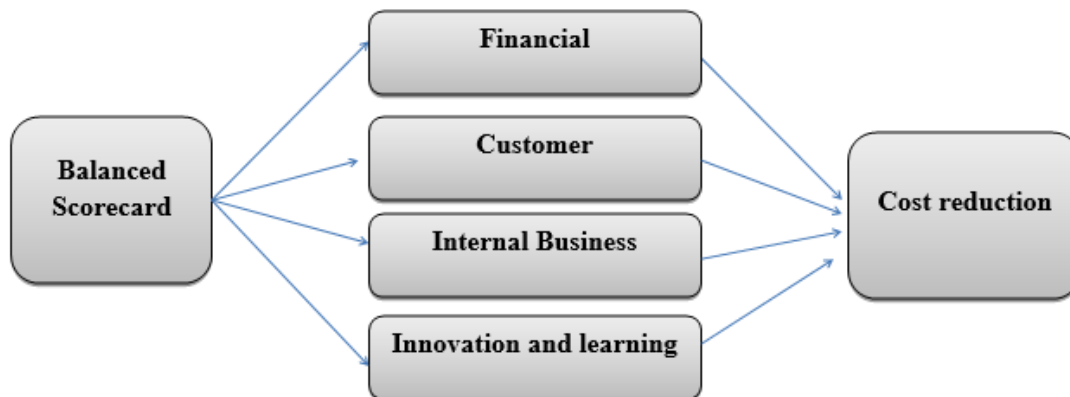
Conceptual framework

Fig.1: Conceptual framework

Research Hypotheses

Research Hyothesis-1- There is a positive and significant relationship between financial perspective and cost reduction at Public sectors in Kurdistan.

Research Hyothesis-2- There is a positive and significant relationship between customer perspective and cost reduction at Public sectors in Kurdistan.

Research Hyothesis-3- There is a positive and significant relationship between internal business process perspective and cost reduction at Public sectors in Kurdistan.

Research Hyothesis-4- There is a positive and significant relationship between innovation and learning perspective and cost reduction at Public sectors in Kurdistan.

III. LITERATURE REVIEW

3.1 The Balanced Scorecard

What is a Balanced Scorecard? While in current years a small number of managers will have achieved to avoid a debate of the Balanced Scorecard, numerous will not have a full understanding of the Balanced Scorecard procedure, how it works, what resources are needed and whether it really is a new method to performance evaluation. Possibly the most clear role of the Balanced Scorecard is the 'Scorecard' component for instance to record and evidently clarify the minor number of key evaluation (20-25) that permit busy managers to quickly assess what is going on in significant field of their organization (Malagueño, et al. 2018).

Nevertheless, if the Balanced Scorecard is to value its explanation as an innovative method to performance evaluation, it has to be much more than a scoring or consequences recording instrument. The use of the word 'Balanced' reproduces the origins of the Balanced Scorecard in deals that organizations were presenting too much importance to short term financial and budgetary subjects. Many managers, researchers and experts familiar that a short term financial or budgetary concentrate can lead to other significant, nevertheless possibly longer term issues, for instance customer growth, shifting markets, standards of service and organizational learning, being provided inadequate consideration or perhaps neglected overall. In reply to those matters, Kaplan and Norton (1991) formulated an organization model including of four dimensions to represent and concentrate consideration on what they saw as the key mechanisms, timescales and viewpoints of an organization's strategy. As the name suggests, the balanced scorecard is appealed to examine the performance procedures within four balanced groups; internal business processes, customer, learning and growth and financial (Nurcahyo, et al. 2018). This purpose to present an integrated, easy-to-asses overview of business performances, each perspective is divided into its respective purposes, KPIs, goals and creativities. Many variations of balanced scorecards exist; design below is the original model by Kaplan and Norton.
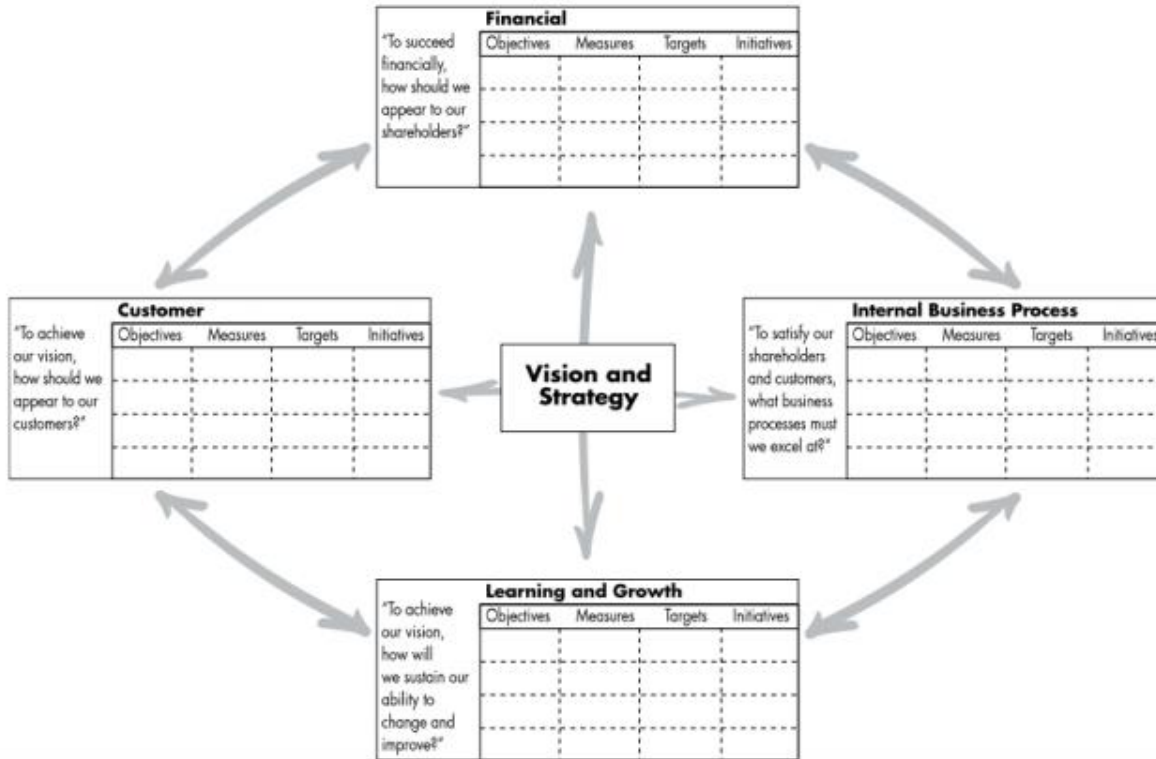
Fig.2: Balanced Scorecard, perspectives and components (Kaplan and Norton, 1996)

3.1.1 Financial perspective

The financial perspective exposes how the organization seems to its shareholders. Old-style financial accounting shares for instance returns on numerous capital show whether the organization is financially effective in accomplishing its aims (Quesado, et al. 2018). The aims are set to protect future development and sustainability. Problems in assessing performance may arise when certain ratios become difficult to understand or fail to offer upcoming vision. Performance pointers for instance return on capital employed or return on investment (ROI) reflects the past, not the future (Hudnurkar, et al. 2018).

Table.1: Financial Perspective

Financial Perspective		
Objectives	**Measures**	**Targets**
To ensure library resources are allocated in a cost-effective way	Acquisitions expenditure as a percentage of staff costs	Increase
To improve value for money spent on library resources	Number of active borrowers Percentage of new purchased items used within one year of acquisition Performance of vendors and suppliers	Increase
To increase income from non-University sources	Income from sources other than the University	Increase
To maximize asset utilisation	More efficient and effective use of facilities, space, services, systems and resources as measured by various usage studies and statistics	Increase

Source: Kaplan and Norton, (1996)

This may lead to concentrated investments in short-term return producing resources which would produce positive numbers in annual statement. As a negative response, expenses in investigation and growth risk being suspended. In other words, financial perspective is a big portion of every business's performance measurement, though; it does not essentially reflect the business' scapability to maximize long-term strategy and vision. Other ratios, such as reductions in accounts receivable and bad debts accounts, carefully relate to other means and creativities which are additional explained in the next perspective (Cooper, et al. 2017).

3.1.2 Customer perspective

This perspective deals with traditional marketing matters comprising identification of segments and target groups as well as customer retention, loyalty and satisfaction. In other words, the organization's question of how it seems to its clients is replied here. Key performance indicators in marketing terms essential to be evaluated in order to be measured one method of observing and managing activities is customer satisfaction index (CSI) (Taleghani, 2017).

Table.2: Customer Perspective

Customer Perspective		
Objectives	**Measures**	**Targets**
To support teaching, learning and research needs of customers	Customer satisfaction as measured by the Customer Surveys; suggestion box comments, focus groups and other input from various customer groups	Improve
To enhance communication and collaboration with the academic staff and students	Comments and suggestions received	Maintain
To ensure customers' awareness of the quality, relevance and appropriateness of information resources	Number of irritants or gaps between expectations reported	Monitor and reduce
To enhance the Library's contribution to the University's marketing, recruitment and Alumni activities	Library staff representation on University-wide groups; library staff understanding of university's strategic directions and the University community's awareness of the value the Library adds to their activities	Maintain or increase

Source: Kaplan and Norton, (1996)

As stated above, in extremely competitive business environments, an organization requests to adjust in order to endure and set various performance targets, for example, ratio of products returned by consumers. One connection from this perspective to the financial perspective is diversification of revenue sources. The customer perspective has to be balanced against the financial corporate strategy as promotion and purchaser associations are costly investments (Asgari & Darestani, 2017).

3.1.3 Internal business processes perspective

To obtain competitive advantage, a business assesses its measures of excellence. In order to fulfill the requirements and expectations of their consumers and maximize shareholders returns, businesses construct long-termoperative procedures. Moreover, a business is suggested to classify its internal procedure value-chain, from innovation process to after sales services to its purchaser. In other words, a connection from the documentation of purchasers' desires to satisfaction needs clear procedures associated with the general strategy and vision (Anjomshoae, et al. 2017).

Table.3: Internal Business Process Perspective

Internal Business		
Objectives	**Measures**	**Targets**
To achieve continuous improvement of services, facilities and resources	Shelving turnaround times Response time to customer requests for information Percentage of unfilled document delivery requests Percentage of all staff costs spent on acquisition and processing of library resources	Reduce
To improve new product and service development	Number of new products, new publications and services introduced	Increase
To improve availability of course materials	Percentage of required and recommended readings available on the shelves as measured by Materials Availability survey	Increase
To ensure cost-effective planning and implementation of information skills programs	Number of formal training hours per library staff member Number of attendees per staff member	Reduce Increase

Source: Kaplan and Norton, (1996)

Relying on the nature of the business in question, certain evaluates may comprise targeted production lead time and initiatives to reduce it. For organizations in the public sectors, quality control rejection rates are similarly of vital importance. Other dimensions comprise percentage of sales from new products and time to grow the next generation of products. Furthermore, purchaser retention is carefully connected to this perspective as well (Kato, et al. 2017).

3.1.4 Innovation and learning perspective

High technological growth pace needs constant informs and enhancement if the business goals towards maintainable organizational strategic development. In this case, purposes in the three perspectives mentioned above are presented with the related infrastructure. This perspective purposes to confirm that informational technologies and worker abilities are up to date (Busco & Quattrone, 2015).

Table.4: Innovation and learning Perspective

Innovation and Learning		
Objectives	**Measures**	**Targets**
To recruit, motivate and develop the highest quality library staff	Percentage of library budget spent on staff development Staff satisfaction index in staff perception survey Number of cross-trained or multi-skilled staff	Increase
To provide information skills training for academic staff and students	Quality of student assignments produced as reported by academic staff Number of research publications; Number of successful research grants	Increase
To provide library and information resources and facilities to enhance staff and student achievement	Library budget as a percentage of the University's budget	Maintain or increase

Source: Kaplan and Norton, (1996)

Key performance indicators evaluate the level of knowledge as well as human relations, and the targets are checked through numerous rates. Reduction of employee turnover and sick leaves are certain of them, nonetheless also the level of investment into employee training (Kaplan and Norton, 1996). Relying on operational environment of the business, balanced scorecards not only vary in key performance indicators, nonetheless also in several of viewpoints. When suitable, complete perspectives can be detached or added. Meanwhile its introduction, the balanced scorecard has been stated in many ways. Anorganization's requests and interests shape the scorecard. Country-specific examples and adaptations to surrounding nature of the business are well-covered subjects in scientific publications (Hansen & Schaltegger, 2016).

3. Strategy Maps

It soon became natural to define the fundamental relations between strategic purposes. For instance, a basic fundamental chain of strategic objects would be: staffs better trained in quality management implements reduce process cycle times and process defects; the enhanced procedures lead to shorter purchaser lead times, enhanced on-time delivery, and less faults practiced by consumers; the quality enhancements practiced by consumers lead to higher satisfaction, retention, and spending, which drives, ultimately, higher revenues and margins. All the purposes are related in cause-and-effect relationships, beginning with staffs, continuing through processes and consumers, and culminating in higher financial performance. The impression of fundamental connections among Balanced Scorecard purposes and evaluates led to the formation of a strategy map, articulated in an HBR article and numerous books. Figure 3illustrates the present structure for a strategy map. Today, all BSC projects shape a strategy map of strategic objects first and only subsequently choose metrics for each aim (Agrawal, et al. 2016).
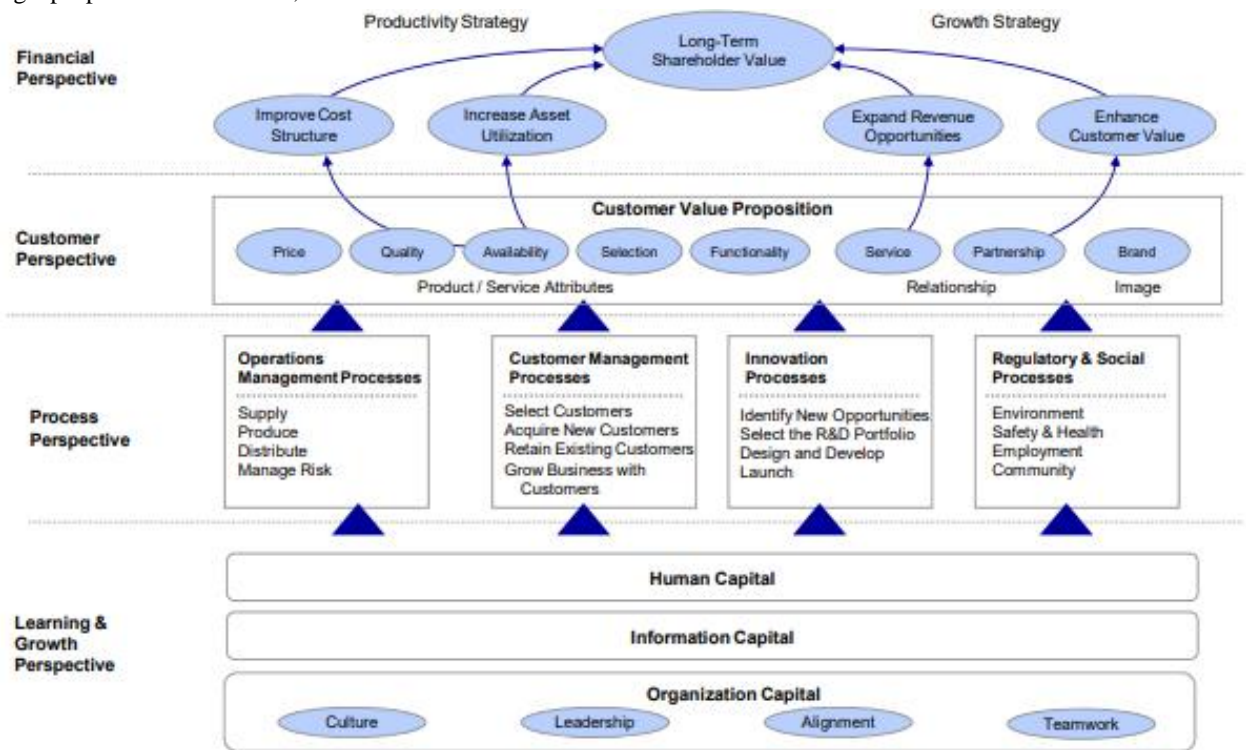

Fig.3: The strategy map links intangible assets and critical processes to the value proposition and customer and financial outcomes

We acknowledged that the weakest connection in a strategy map and Balanced Scorecard was the learning and growth perspective. For numerous years, as decision-makers demonstrated it, the learning and growth perspective was "the black hole of the Balanced Scorecard." While organizations had particular generic evaluates for staffs, such as worker satisfaction and confidence, turnover, absenteeism and lateness (probably growing out of the stakeholder movement of the previous decade), none had metrics that related their worker competences to the strategy. Only some academics had examined the association between enhancements in human resources and enhanced financial

performance (Lin, et al. 2016), Norton led a research in 2002 and 2003 with senior HR specialists to discover how to better connection the evaluation of human resources to strategic aims. From this work came the ideas of strategic human capital readiness and strategic job families and, by extension, the linkages to information capital and organizational capital. These important extensions to embed the capabilities of an organization's most important intangible assets were described in an HBR article and a book (Hoque, 2014).

Balanced scored card and cost reduction

With a move from the mechanical economy towards an economy that is presently prevalently described by immaterial resources, for example, learning and inventive ability, associations need to oversee expanding levels of intricacy, versatility and vulnerability. The frequently problematic changes that have been happening since about the most recent decade of the twentieth century, have obscured conventional industry and authoritative limits and have revealed another insight into customary business skills, procedures and practices. The capacity to oversee learning based acumen is of basic significance in this new condition (Galankashi, et al. 2016). The developing of the all-inclusive organized society has changed our reality into a worldwide town that continually experiences dynamic and erratic socio-social changes (Kang, et al. 2015). At the foundation of these improvements are the progressing mechanical potential outcomes that upgrade the pace of correspondence, causing an expansion in hierarchical network and development. (Valmohammadi & Ahmadi, 2015), demonstrate that the speed of innovative progression and availability is developing exponentially and with an apparently incredible speed. This is bringing about a remarkable increment in the rate of significant worth development, and new courses by the way it is produced, with a few spectators presently battling that we have entered the period of the advancement economy (Bhattacharya, et al. 2014). The center rules that support the advanced undertaking are for the most part being tested today – replication, specialization, progressive system, extraneous prizes, practical coordination, rebuilding, business process reengineering, venture asset arranging, production network synchronization, client relationship administration – if not in their crucial nature, at that point in their application. In numerous cases key interior capacities and conventional 'center capabilities' are moving outside the firm, being outsourced to organize accomplices in coordinated free market activity chains. While most conventional business administration standards of the mechanical economy are as yet substantial in a constrained sense (for existing, demonstrated plans of action that are as yet effective in a few conditions), they currently appear to be deficient in adapting to troublesome change, either in a versatile or imaginative way (Shen, et al. 2016).

Table.5: From the Industrial Economy to the Innovation Economy
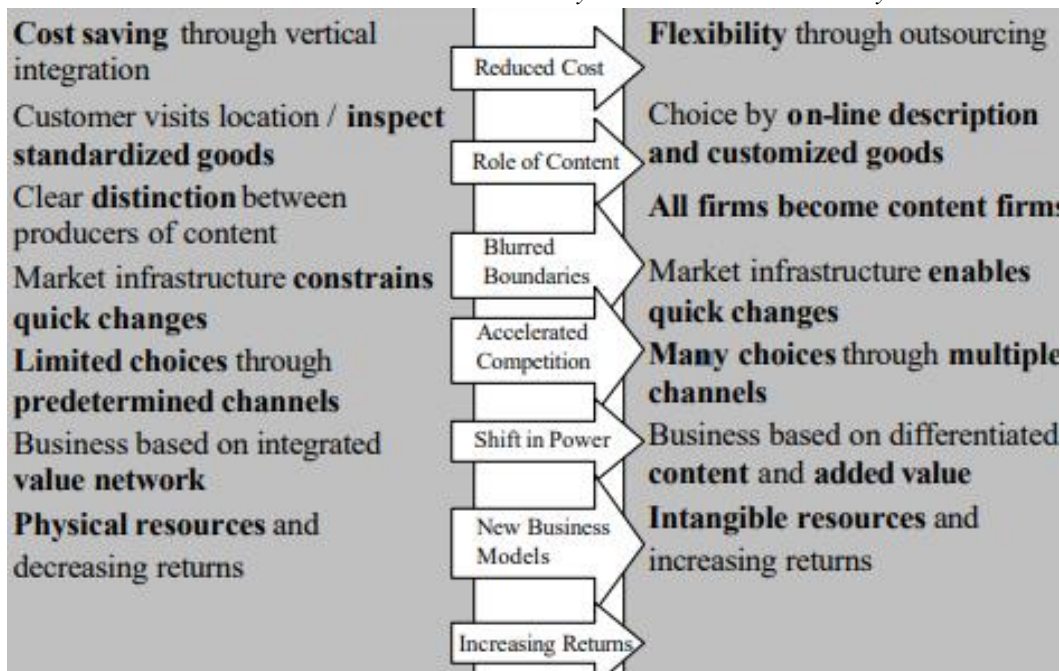
Source: Kaplan and Norton, (1996)

Rivalry in the development economy is presently progressively described by the quick rise of brand-owning

associations that give their energies to authoritative wellness (Beer, 2002), to make and address client issue

encounters, and to drive esteem advancement in business forms crosswise over free market activity chains and inside their specific interior connections. Compelling free market activity chains bolster further levels of client 'achievement' (past consumer loyalty and connections), and additionally use and use client learning and esteem chain accomplice information for proper development (Teklehaimanot, et al. 2016). These new advancements have brought about major better approaches for survey the idea of the firm, center abilities, premises of technique creation and usage, and critically likewise estimating the execution of business exercises. Despite the fact that this article centers around the BSC and its importance for associations in the development economy, the resulting audits and suggestions are additionally (to an equivalent or lesser degree) applicable for different kinds of business execution estimations (or scorecards, for example, investor esteem, piece of the pie, human asset financial, financial esteem included, scholarly capital files, and learning administration scorecards. The greater part of the conventional business execution measures endures to some degree in view of the fundamental and progressively invalid suspicions established in the mechanical economy. After the examination of the method of reasoning, advancement, highlights and utilizations of the BSC, and additionally a basic audit, we propose an option, fundamental approach that is more suitable for managing the present organized corporate world in the development economy (Beard & Humphrey, 2014).

IV. METHODOLOGY

4.1 Research Design

The quantitative method used in order to analyze the present study. The researcher used a survey in order to gather information regarding the relationship between balanced scorecard and cost reduction in public sectors in Kurdistan. In this study the researcher used cost reduction as dependent variable and four balanced scorecard perspective as independent variables. A survey consisted of two different sections; the first section was regarding participants 'demographic questions and the second section was divided into five separate parts. The first part consists of 8 questions related to financial perspective, the second part consists of eight questions related to customer perspective, the third part consists of seven questions related to internal business processes perspective, the fourth part consists of seven questions related to innovation and learning perspective and the last part consists of eleven questions related to cost reduction.

4.2 Sample

A sample design is a plan for attaining certain sample from a provided population. Sample design refers to the procedure or method the researcher is willing to accept in choosing items for the sample. Sampling is "the process of selecting a few (a sample) from a bigger group (the sampling population) to become the basis for estimating or predicting the prevalence of an unknown piece of information. The research used random sampling method to find out the relationship between four balanced scorecard's perspective (financial perspective, customer perspective, and internal business process method and learning and innovation perspective). Sampling elements therefore have to be representative for the main population. The mentioned random sampling was carried out in different locations in the ministry of planning in Erbil. A total of 800 questionnaires were distributed in Kurdistan, however 630questionnaires were received and being completed properly and the data were collected through in hard copies.

4.3 Instruments

The researcher used five point Likert scales ranging from strongly disagree to strongly agree. The questionnaire was adapted from different sources.

Analysis

Table.6: Demographic Variables Description

Parameters		Frequency	Percentage
Gender	Male	439	69.6
	Female	192	30.4
Age	20-25	40	6.3
	26-30	52	8.2
	31-35	70	11.1
	36-40	58	9.2
	41-45	144	22.8
	46-50	78	12.4
	51-55	140	22.2
	56 and above	49	7.8

Marital Status	Married	178	28.2
	Separated	2	.3
	Widowed	14	2.2
	Single	432	68.5
	Divorced	5	.8
Education	College	84	13.3
	University	493	78.1
	Graduate School	54	8.6
	Total	631	100.0

Source: by the researcher, 2018

As seen in table (6) participants' gender participated in this study; 439 participants were male and 192 participants were female. In terms of the participants' age participated in this study; 40 participants fall in group of 20-25 years old, 52 participants fall in group of 26-30 years old, 70 participants fall in group of 31-35 years old, 58 participants fall in group of 36-40 years old, 144 participants fall in group of 41-45 years old, 78 participants fall in group of 46-50 years old, 140 participants fall in group of 51-55 years old and 49 participants fall in group of 56 and above years old. In terms of the participants'' marital status participated in this study; 178 participants were married from total of 631 participants, only two participants were separated from total of 631 participants, 14 participants were widowed from total of 631 participants, 432 participants were single from total of 631 participants and only five participants were divorced from total of 631 participants. In terms of the participants' level of education participated in this study; 84 participants obtained college degree from total of 631 participants participated in this research, 493 participants obtained University degree from total of 631 participants participated in this research, 54 participants obtained graduate school degree from total of 631 participants participated in this research.

Table.7: Reliability Analysis

Items	Cronbach's Alpha	N of Items
Financial perspective	.784	8
Customer perspective	.854	8
Internal business processes perspective	.946	7
Innovation and learning perspective	.926	7
Cost reduction	.857	11

Source: by the researcher, 2018

Table (7) shows the reliability statics analysis. The researchers used four independent factors (financial perspective, customer perspective, internal business processes perspective and innovation and learning perspective) on the other hand, one dependent factor (cost reduction). In terms of financial perspective as independent factor, the Cronbach's Alpha =.784 for 8 items, since (.784<.6) therefore 8 financial perspective questions were reliable. In terms of customer perspective as independent factor, the Cronbach's Alpha =.854 for 8 items, since (.854<.6) therefore 8 customer perspective questions were reliable. In terms of internal business process perspective as independent factor, the Cronbach's Alpha =.946 for 7 items, since (.946<.6) therefore 7 internal business process perspective questions were reliable. In terms of innovation and learning perspective as independent factor, the Cronbach's Alpha =.926 for 7 items, since (.926<.6) therefore 7 innovation and learning perspective questions were reliable, and the reliability test for cost reduction as dependent factor, the Cronbach's Alpha =.857 for 11 items, since (.857<.6) therefore, 11 cost reduction questions were reliable.

Table.8: Correlation Analysis

Items	Pearson correlation	Cost reduction
Cost reduction	Pearson Correlation	1
	Sig. (2-tailed)	
	N	614
Financial perspective	Pearson Correlation	.839**
	Sig. (2-tailed)	.000
	N	614
Customer perspective	Pearson Correlation	.872**
	Sig. (2-tailed)	.000
	N	614
Internal business process	Pearson Correlation	.647**
	Sig. (2-tailed)	.000
	N	614
Innovation and learning perspective	Pearson Correlation	.595**
	Sig. (2-tailed)	.000
	N	614

**. Correlation is significant at the 0.01 level (2-tailed)

Table (8) shows the correlation analysis. As mentioned previously four independent factors (financial perspective, customer perspective, internal business process perspective and learning and innovation perspective) were analyzed and one dependent factor (cost reduction). As seen in the above table, the Pearson Correlation between financial perspective and cost reduction = .839** (Correlation is significant at the 0.01 level, 2-tailed), therefore there is a strong positive correlation between financial perspective and cost reduction in public sectors in Kurdistan. The Pearson Correlation between customer perspective and cost reduction = .872** (Correlation is significant at the 0.01 level, 2-tailed), therefore there is a strong positive correlation between customer perspective and cost reduction. The Pearson Correlation between internal business process perspective and cost reduction = .647** (Correlation is significant at the 0.01 level, 2tailed), therefore there is a strong positive correlation between internal business process perspective and cost reduction, and the Pearson Correlation between learning and innovation perspective and cost reduction = .595** (Correlation is significant at the 0.01 level, 2-tailed), therefore there is a strong positive correlation between innovation and learning perspective with cost reduction. .

Table.9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.926a	.858	.853	.28625

Source: by the researcher, 2018

Table (9), shows the value of R square = .858, which indicates that 86% of the variables have been explained.

Table.10: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	55.574	4	13.893	169.553	.000b
Residual	9.177	112	.082		
Total	64.751	116			

a. Dependent Variable: Cost reduction
b. Predictors: (Constant), financial, customer, internal business, innovation and learning

Table (10) shows the value of F for four independent factors and a dependent factor is 169.553>1 which indicates there is a significant association between four independent factors and dependent factor.

Table.11: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.345	.179		1.929	.056
	Financial	.708	.041	.891	17.378	.000
	Customer	-.131	.087	-.128	-1.507	.135
	Internal business	.216	.075	.222	2.878	.005
	Innovation and learning	-.066	.092	-.056	-.723	.471
a. Dependent Variable: cost reduction						

Table (11) shows multiple regression analysis. As seen the results of multiple regression analysis, the value B for financial perspective factor is .708 and P value =.000, therefore first research hypothesis was supported which stated that there is a positive relationship between financial perspective and cost reduction in public sectors in Kurdistan. The value B for customer perspective factor is -.131and P value =.135, therefore second research hypothesis was rejected which stated that there is a positive relationship between customer perspective and cost reduction in public sectors in Kurdistan. The value B for internal business process perspective factor is .216 and P value =.005, therefore third research hypothesis was supported which stated that there is a positive relationship between internal business process perspective and cost reduction in public sectors in Kurdistan, and the value B for innovation and learning perspective factor is -.066 and P value =.471, therefore fourth research hypothesis was rejected which stated that there is a positive relationship between innovation and learning perspective and cost reduction in public sectors in Kurdistan.

V. CONCLUSION

The balanced scorecard is an apparatus which efficiently grows the estimation territories customarily engaged with financial. It in this manner plans to add to diminishing the issues engaged with utilizing just budgetary measures for the motivations behind control. It isn't simply planned as an estimation framework, in any case; it is additionally a control framework. It embeds non-money related estimations in a vital control structure with the goal that they are not simply approximately coupled neighborhood frameworks, but rather connected together in a causal chain which goes through the whole association. It might add to honing correspondence in the association in that it isn't limited to budgetary measures yet additionally incorporates non-money related ones, which gives a more far reaching photo of the association. The findings revealed that the first

research hypothesis was supported which stated that there is a positive relationship between financial perspective and cost reduction in public sectors in Kurdistan. The second research hypothesis was rejected which stated that there is a positive relationship between customer perspective and cost reduction in public sectors in Kurdistan. The third research hypothesis was supported which stated that there is a positive relationship between internal business process perspective and cost reduction in public sectors in Kurdistan, and the fourth research hypothesis was rejected which stated that there is a positive relationship between innovation and learning perspective and cost reduction in public sectors in Kurdistan.

VI. SUGGESTIONS

As has been contended over, the utilization of financial information and a budgetary analytics in some shape is vital however these are not adequate instruments when different acts and exercises in an association must be evaluated. Financial information and a budgetary analytics are vital as long as money related measures are integral to constituting the truth of associations. Money related analytics is in like manner required to assess the monetary results of elements, for example, expanded consumer loyalty or quality enhancements. The math may appear, in addition to other things, which items or clients will be beneficial to the firm and which input factors and procedures bring about the costs identified with the relating items or administrations. Activitybased costing investigations may distinguish the items and kinds of clients which are the most gainful to the firm and the costs, cost drivers and client esteem which result from various approaches. This gives the firm data which it might utilize when settling on cost and arrangement alterations and on changes to, or the rearrangement of, procedures and information factors, which will change the income and cost structure of the firm. This implies the investigations might be utilized as a part of the vital arranging process to define the association's methodology

and arrangements, which may hence be converted into money related and non-budgetary measures on the balanced scorecard.

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