

Impact of Dynamic Capabilities on Perceived Performance Quality in University Libraries of Sri Lanka

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Abstract

User's information-seeking behavior and needs are changing with the innovative socio-economic and technological environments. Users' satisfaction depends on how the services are delivered despite these turbulences in the environments and libraries should develop dynamic capabilities to overcome interruptions due to expected as well as unexpected environmental changes. The purpose of this study is to investigate the dynamic capabilities of the university library environment in Sri Lanka and their impact on the perceived performance quality. A dynamic capability model and a measuring tool for dynamic capabilities (DC) and perceived performance quality (PPQ) of university libraries were formulated with the vigorous process with literature review and tested with a random sample of 93 respondents from state universities of Sri Lanka. The DC was measured with 14 items while PPQ was measured with 12 items formatted according to the 7 points Likert scale. Results of the Pearson correlation indicated that there was a significant positive relationship between perceived dynamic capabilities and perceived performance Quality of the library $r(91) = .27, p = .10$, (2-tailed) significant at 0.01 level. The Spearman correlation also showed the same relationship, $r_s(91) = .23, p = .024$, (2-tailed) significant at 0.05 level. Regression results indicated that DC significantly predicted PSQ scores, $B=.19, t(91) = 2.63, p < .010$. DC also explained a significant proportion of variance in PPQ scores, $R^2 = .07, F(1, 91) = 06.96, p < .01$. The residuals (47.81) indicated that more latent factors are associated with PPQ other than the DC. In conclusion, the university library as a dynamic organization needs to sense the market changes, seize the opportunities and rearrange the operations by leveraging resources and capabilities to serve the changing needs of the community. Identifying and developing dynamic capabilities may lead to uplift the performance quality and thereby the service quality. More research is essential to apply the results in the global context.

Keywords: Dynamic Capabilities, Perceived Service Performance, University libraries, Sri Lanka, DC scale

Introduction

Organizations need to keep track of their performance, customer satisfaction, and even their competitors (Pakurár et al, 2019). Performances are based on resources and capabilities. University library is an organization that operates in changing environments with innovative technology, changing user behavior and social and economic conditions. Some of these changes such as pandemic situations are unpredictable. In spite of unexpected turbulences, university libraries should face these changes with their resources and capabilities.

Dynamic Capabilities (DC) which are associated with organization's competencies emanated from resources, support to undertake necessary changes in response to the changes in the environment. They facilitate the adaptation, integration, and configuration of internal and external resources

(Teece et al. 199; Alejandro, et al. 2020, Kump et al. 2018). As dynamic organizations, university libraries need to respond to the changing needs of users by innovating their service models to fit to the user expectations. They need to value their working environment to retain the existing users (Julie et al 1998).

Dynamic capability perspective refers to the firm's ability to adapt to the changing environment, its capacity to change, innovate, renew or introduce new services to the market. It is a mechanism by which a firm leverage and accumulate new skills and forces that handle the directions of the organization (Teece et al. 1991; Newbert, 2007; Teece et al. 1997).

In this scenario, university libraries need to develop their dynamic capabilities to ensure their performance quality as expected. Performance measurement is essential for the library to evaluate whether the objectives of the library are achieved as expected. Various authors have focused differently of the evaluation of performances and as a result many measuring tools have been developed. However many studies show that the performance measures have been used interchangeably with service quality (Kant, & Jaiswal, 2017). In general library performance is initially based on the human dimensions (such as responsiveness, assurance, empathy, and reliability), access to information resources and Library as a comfortable place for learning (Blixrud, 2003).

Although this important area is well addressed with empirical studies in other sectors, the measuring of dynamic capabilities is not systematically addressed in the university library sector. In practical scenario university libraries in Sri Lanka are implementing dynamic capabilities in their service models, but empirical or conceptual studies are lacking in the local literature. The purpose of this study is to address this research void.

Objectives

This study attempts to achieve following objectives:

- To measure dynamic capability in university libraries of Sri Lanka
- To measure the perceived performance quality of university libraries of Sri Lanka
- To explore whether there is a significant association between dynamic capabilities and perceived performance quality in university libraries of Sri Lanka

Methodology,

The study followed a quantitative method of sample survey through a self-administered questionnaire and correlational analysis was conducted to explore the relationship between key variables.

Accordingly the key variables associated with dynamic capabilities in academic libraries were identified through the literature review based on the resource-based view and formulated a conceptual model representing sub variables. The model consisted of three sub variables viz. Sensing, Seizing and Transforming capabilities as dimensions. The survey instrument was developed following a vigorous process of scale development (Carpenter, 2017; Zamanzadeh et al. 2015). Accordingly, the questionnaire included 14 survey items to measure dynamic capabilities and 12 survey items to measure perceived performance quality of the university library (figure 01).

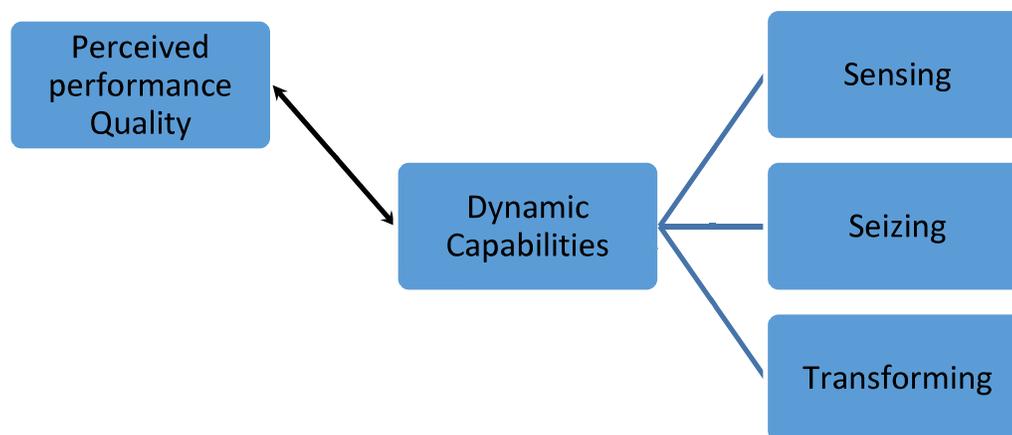


Figure 01- Dynamic Capability and Perceived Performance Quality model

Data collection

A sample of 96 library professionals was selected on random basis from state university libraries in Sri Lanka. The link to the questionnaire designed through Google forms was emailed to the library professionals of selected universities in June 2021 and respondents were asked to fill in the form within two week time. Collected data were analyzed using SPSS 25th version with correlation analysis and linear regression.

Results

Responses from 93 respondents were analyzed with descriptive and inferential techniques. Factor analysis verified the factor structure expected and each item verified the required reliability level (Cronbach's Alpha). Average value of responses was calculated by summing the responded score against each respondent and dividing by the number of items of the variable and considered for analysis.

Results of the Pearson correlation indicated that there was a significant positive relationship between perceived dynamic capabilities and perceived performance quality of the library $r(91) = .27, p = .10$, (2-tailed) significant at 0.01 level. The Spearman correlation showed the same relationship, $r_s(91) = .23, p = .024$, (2-tailed) significant at 0.05 level (table 01).

Table 01 - Correlation between variables DC and PPQ

Correlations			
		DCA VE	PSPAVE
DCAVE	Pearson Correlation	1	.267**
	Sig. (2-tailed)		.010
	Sum of Squares and Cross-products	92.950	18.438
	Covariance	1.010	.200
	N	93	93
PSPAVE	Pearson Correlation	.267**	1
	Sig. (2-tailed)	.010	
	Sum of Squares and Cross-products	18.438	51.471
	Covariance	.200	.559
	N	93	93
**. Correlation is significant at the 0.01 level (2-tailed).			

Correlations				
		DCA VE	PSPAVE	
Spearman's rho	DCAVE	Correlation Coefficient	1.000	.234*
		Sig. (2-tailed)	.	.024
		N	93	93
	PSPAVE	Correlation Coefficient	.234*	1.000
		Sig. (2-tailed)	.024	.
		N	93	93
*. Correlation is significant at the 0.05 level (2-tailed).				

Regression results indicated that DC significantly predicted PSP scores, $B=.19$, $t(91) = 2.63$, $p < .010$. DC also explained a significant proportion of variance in PSP scores, $R^2 = .07$, $F(1, 91) = 06.96$, $p < .01$.

Discussion, Conclusion and Recommendations

The purpose of the study was to develop a dynamic capability measuring scale for university libraries in Sri Lanka, test the model empirically and explore the relationship of the DC with the perceived performance quality of the university library environment.

The results indicated that there is a positive relationship between two variables. However this relationship not strong ($r=.267$). This means that perceived service performance shares 26.7 % of the variance.

The study DC has a significant impact on the service performance of the university library. Therefore decision makers of university libraries should consider the developing of DC in their libraries.

This research has several limitations. First this conclusion was based on the local study in the government sector university libraries. Second performance measures were based on 12 key factors. More research is essential with broader perspective to generalize the findings in global context.

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