

THE IMPACT OF E-BUSINESS CAPABILITIES ON THE PERFORMANCE OF HUMAN RESOURCES AND ORGANIZATIONAL PERFORMANCE IN JORDANIAN RETAIL SECTOR

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Abstract

The aim of this study is to investigate the impact of E-Business capabilities on the performance of human resources and organizational performance in Jordanian Retail sector a case study on Sameh Mall Investment Group. To actualize the purpose of this study, data were collected from all managers and heads of departments who are working at 15 branches and account for 145 managers and heads of departments by questionnaire. After confirming validity, reliability and normal distribution, the correlations among variables were tested then simple, multiple, stepwise regressions were used to test the direct impact and path analysis to test indirect impact. The study results show that Sameh Mall Investment Group is highly implementing E-Business capabilities, performance of Human Resources and organizational performance. The results indicated that there are strong relationships among E-Business capabilities sub-variables and organizational performance sub-variables. Also there are strong relationships among the three main variables (E-Business capabilities, performance of Human Resources and organizational performance). The path analysis shows that there is a significant relationship between Efficiency and organizational performance on the light of the mediating effect of Human Resources performance. The study recommends carrying similar studies on same industry and other industries to test its generalizability to same industry and other industries, and to conduct similar studies on the same industry in Arab counties to mitigate its results.

Keywords: Efficiency, Flexibility, Innovation, Cost, HR Performance

1. INTRODUCTION

Over the past two decades, communication and information management technologies have evolved effectively and at a rapid rate in all scientific and practical fields until their implementation has become an integral part of Business Development and Management processes (Sindakis & Aggarwal, 2022). Therefore, this global renaissance was classified as a new era known as the era of globalization, which made the technical capabilities, its dimensions (Al-Omoush, 2021), and values become a key part of Business Management in all business fields, and from which resulted a massive development and information revolution that coincided with the globalization of investment and service sectors and with which they got involved, leading to business companies and firms, of all different types and sizes, becoming required to set foot in the new world of business technology by working not only on automating their businesses but also on providing information and a detailed and proper content to the consumer, accompanied by the emerging role of Human Resources as well as its management



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that is practiced in organizations and companies as the most important resource they have for the support it provides in completing their functions as well as being a helping tool in improving performance and not only judging it (Abbad et al., 2022; Sindakis & Aggarwal, 2022).

He and Harris (2020) said that this era witnessed changes in the different humanitarian aspects with the recent developments, advanced business systems, and information technologies methods having played a prominent role in the occurrence of these developments as the emergence of these changes has transformed the traditional methods of doing business into electronic ones (He & Harris, 2020). Abdullah et al. (2018) explained that employing technology in building companies' systems has added another dimension to it in terms of feeding the business, and being distinguished in online commerce (Abdullah et al., 2018).

On the other hand, Jarrahi (2019) said that a company can perform effectively by managing its internal capacities, enabling it to adapt to the environmental changes surrounding it, with an eye toward innovating and renewing in a way that secures the changing needs of clients and achieves the biggest return for the company (Jarrahi, 2019). In order to have an effective organizational performance and optimized Human Resources Performance, an environmental integration, as explained by Ibrahim and Morales (2020), must be built by optimizing E-Business and the organization's technical environment (Morales, 2020).

The objective of this study lies in answering the main question and realizing the impact of the overall E-Business capabilities as dependent variables, on the performance of Human Resources and the organizational performance in the Jordanian Retail sector and that is to make recommendations to Sameh Mall Investment Group for developing their businesses as well as make recommendations that enlighten decision-makers, researchers, executives, and those interested in the impact of E-Business capabilities on the management of Human Resources and the organizational performance in the Jordanian Retail sector, and other similar sectors in Jordan and other countries.

2. LITERATURE REVIEW

With the advent of technology, Internet, and internal networks, the methods of communicating, obtaining information and performing transactions have dramatically evolved as E-Business, in all its aspects and with its various applications, came into practice (Pan et al., 2022). In addition to this, new areas, where information technology and communication can be applied, appeared like in case of organizational performance management and Human Resources performance that are mainly focused on facilitating, updating and controlling businesses, procedures, and the day-to-day investment transactions as well as automating them to reduce the number of routine operations, and develop the human resource, businesses, and achievements (Easa & El Orra, 2020).

2.1 E-Business

Since using modern electronic technologies and programs inside organizations for the purpose of connecting their activities and services to one another was the main goal of building an ebusiness system, the linking between e-business, HR performance, and the organizational







performance has been since considered a requirement for Information Technology, on which the texts in the research and the views of writers and researches agreed with regards to their conceptualization. Setyowati et al. (2021) explained them by several points under which few areas fall, and of which the most significant are the increased ability of e-computer and its applications, the fast advance in communication network and Internet, the relationship between technology and competiveness, the tendency toward applying E-Business system, and the increase in using technology to overcome complicated procedures and operations (Setyowati et al., 2021). Abushakra and Nikbin (2019) also explains that using modern information technologies does make major and substantial changes to the performance, affecting the structure and composition of the management, and the procedures the organization follows in solving its problems, and scientifically increasing its efficiency to be capable of planning and directing Human Resources, and even more when fulfilling tasks and their specific terms of reference (Abushakra & Nikbin, 2019).

2.2 E-Business Capabilities

With the emergence of E-Business and its overall impact on the Business sector as well as the International & Environment Trade sector considering the globalization of information and economy, the rise in E-Business values, by which the overall performance of the organizations is affected, was bound to happen since E-Business capabilities has been the sought-after result for researchers. Halkiopoulos et al. (2020) developed a model based on the theory of resources to evaluate the mechanism of creating an E-Business value (Halkiopoulos et al., 2020). Also, as explained by Benitez et al. (2018), researchers have analysed the capabilities of E-Business from the perspective of E-Business values and the company's resources, which both represent a significant stage in the practice of E-Business and are important in directing E-Business capabilities (Benitez et al., 2018).

Subsequently, Setyowati et al. (2021) said that there was a need for a theoretically rigid and empirically relevant framework to examine the use of E-Business capabilities in organizations (Setyowati et al., 2021). Following that, Esmaeilpour Ghouchani et al. (2020) mentioned that the actual usage of E-Business might be an important link between Information Technology value and E-Business capabilities. Hence, the core value added to E-Business is what will defy the traditional business by denying results with the least possible amount of time, and effort and maximum flexibility (Esmaeilpour Ghouchani et al., 2020).

2.2.1 Innovation

One of the basic necessities to business management and organizations is the innovative behaviour. While the economic and cognitive development is accelerating in all fields, and the needs and aspirations are growing, it is no longer sufficient to do business using old-fashioned ways in organizations, of all types and forms. Hardilawati et al. (2019) said that successful firms shouldn't settle for what is sufficient in order to secure their survival and remain as strong and influential they are, which means to be convinced with doing their business properly or doing their job that is to become creative and innovative organizations, and to have innovation and renovation as the distinctive qualities of their performance (Hardilawati et al., 2019).





Al-Omoush et al. (2020) mentioned that creating knowledge is one of the most important operations in Knowledge Management System in terms of having the knowledge necessary for achieving its goals, and increasing its innovation since knowledge and innovation serve as a starting point (Al-Omoush et al., 2020). Sharma et al. (2021) mentioned that technological innovation plays a key role in successfully achieving social responsibility in the economic firm based on economic, social and environmental aspects. So, accordingly, an innovative behaviour is a behaviour which creates and generates useful ways and techniques of finishing work, and a creative decision can be defined as a decision that provides solutions to a current problem, in its new and unique form (Sharma et al., 2021). Therefore, one could hypothesize the following:

H1: There is a significant relationship between Innovation and organizational performance in Sameh Mall Investment Group.

2.2.2 Flexibility

In the extremely competitive environment in business fields, and with the role flexibility has been playing in seizing opportunities and responding to business requirements, there has had to be a room where the employee and the organization are allowed to facilitate and streamline some of the job tasks and transactions, without overstepping procedures and instructions or failing to keep with job duties and regulations (Anser et al., 2020).

Tiwari and Suresha (2021) mentioned that flexibility is still an abstract concept to a great extent in the field of E-Business and is like a definition which means something different for different people. Flexibility in E-Business identifies the firm's ability to adapt to changes, and determine the level of uncertainty in its working environment, internal and external alike (Tiwari & Suresha, 2021). Nwachukwu and Vu (2020) also stated that flexibility is adapting to all changes happening in the surrounding environment by allocating resources through the identification of variables in the internal and external environment, and quickly responding to these changes in order to meet the needs of the client (Nwachukwu & Vu, 2020).

Nowak (2021) implied that flexibility of E-Business reflects the organization's ability to respond to the environmental variables specifically related to Information Technology and the new methods of facilitating businesses, which these technologies brought. So, flexibility is an effective means through which E-Business can be accurately done in a fast-changing environment. Decision-makers, therefore, have a growing need to build knowledge about the flexibility of E-Business (Nowak, 2021). Therefore, one could hypothesize the following:

H2: There is a significant relationship between Flexibility and organizational performance in Sameh Mall Investment Group.

2.2.3 Efficiency

Efficiency refers to the relationship between resources and results and is related to how much input, information, money and resources are needed to achieve the highest level of output or achieve certain goals at a specific time. Efficiency means to achieve the highest-level profit versus costs and for the organization to be strong, i.e. getting the most out of the sought-after goal (Kim et al., 2022).





Writers have defined efficiency as performing works appropriately (Gregory et al., 2019; Negi, 2020). So, it is performing the right work in the right way, and is related to management. Therefore, efficiency is realized when a clear vision, specified goals, strategies, principles, values and development take place accompanied with other traits of leadership. It is also realized when there is planning, time management, observation and follow-up. When efficiency is absent, goals and visions do not seem to find their way of being appropriately attained (Wang et al., 2020).

The researcher defined efficiency as optimizing the use of input, materials, employment, and technical tools to get the best output incorporating the scientific methods of management manifested in planning, organizing, coaching, and monitoring. Furthermore, efficiency is perceived as a main objective for the recent enterprises aimed at organizational longevity (Ko & Kim, 2019). Therefore, one could hypothesize the following:

H3: There is a significant relationship between Efficiency and organizational performance in Sameh Mall Investment Group.

2.2.4 Cost

E-Business technology has helped in introducing the electronic approach to administrative work, indicating that all administrative activities related to Human Resources nowadays are being performed online without the need to use papers and go through printing and preservation costs, and that would contribute directly to controlling costs, reducing the consumption of paper, ink, and other materials related to information dissemination costs (Zebari et al., 2019).

Low cost factor is considered to be the top priority pursued by business organizations when building a competitive position in the market as organizations seek to produce and sell products at a cost lower than that of competitors and subsequently gaining a larger market share. Some researchers suggest that the priority of cost is the ability to produce and distribute products and services at the lowest possible cost and it can also be defined as the organization's ability to produce and distribute a product or service at the lowest expenses, allowing the organization to excel in terms of costs compared to its competitors (Mkansi, 2021).

On the other hand, Putra and Santoso (2020) defined it as providing products or services at prices lower than that of competitors, leading to an increase in organization's market share. Competing based on cost requires a focus and attention pointed toward reducing all cost elements of materials, salaries, operational expenses, and other elements for the purpose of lowering the cost of one unit for each product or service (Putra & Santoso, 2020). Therefore, one could hypothesize the following:

H4: There is a significant relationship between Cost and organizational performance in Sameh Mall Investment Group.

2.3 HR Performance

Human Resources management is deemed as an administrative activity separate from the other managements' functions, and it deals specifically with the human resource, making it important administration-wise and placing it in a privileged position amongst firms. Ceylan and Aktaş





(2020) mentioned that researchers have previously defined Human Resources management as "User Management" or "Personnel Management" due to the nature of limited tasks it has carried out (Ceylan & Aktaş, 2020).

However, in the meantime, it has significantly changed and has elevated to the level of key managements and is even considered a strategic job and one of the aspects of facilitation efficiency aimed at increasing employees' efficiency and improving their performance. It has been described by Berber and Slavić (2020) in 5 main principles focusing on promoting initiatives and individual responsibilities, reflecting the organization's vision in policies and practices of Human Resources Management, making individuals understand the organization's strategy, and developing the learning direction in order to maintain competiveness, and building a sense of trust, belonging and loyalty in the organization (Berber & Slavić, 2020).

Setyowati et al. (2021) brought up the subject that Human Resources Management supported with E-business is considered to be the practical implementation of the organization's strategies, policies and practices in Human Resources, conducted through support and by fully making use of internal, external, and international information networks for performing jobs that have its elements embedded in their definitions (Setyowati et al., 2021). Yan et al. (2019) implies that the continuous development in modern technologies and the evolvement of labour force analysis have made the function of Human Resources a vital area for decision making, and its impact can be measured through the results of the foundation's work. Moreover, not only does it serve the big firms but also the small ones (Yan et al., 2019). Therefore, one could hypothesize the following:

H5: There is a significant relationship between HR Performance and organizational performance in Sameh Mall Investment Group.

Branched from this hypothesis, another 4 indirect hypotheses have been developed:

H5a: There is a mediating effect of HR Performance on the relationship between Innovation and organizational performance in Sameh Mall Investment Group.

H5b: There is a mediating effect of HR Performance on the relationship between Flexibility and organizational performance in Sameh Mall Investment Group.

H5c: There is a mediating effect of HR Performance on the relationship between Efficiency and organizational performance in Sameh Mall Investment Group.

H5d: There is a mediating effect of HR Performance on the relationship between Cost and organizational performance in Sameh Mall Investment Group.

2.4 Organizational Performance

All organizations have endeavoured to create internal policies and mechanisms for increasing their organizational performance through building a vision that is as clear as its management and internal and external systems are. Sindakis and Aggarwal (2022) said that organizational performance, as a concept and as a practice, has received increased attention from researchers,





and organizations, especially in the modern, complex and constantly changing environment (Sindakis & Aggarwal, 2022).

As Haseeb et al. (2019) mentioned, the organizational performance of business organizations generally requires, as a fundamental concept, the organization to develop plans, policies, and programs for determining the wise way the administration should manage its resources in order to achieve its economic or social goals (Haseeb et al., 2019). Ma et al. (2018) have defined the organizational performance as comparing the organization's possible outcomes with the actual ones, checking the deviations shown in results, evaluating the individual performance, and examining the progress made in achieving the targeted goals (Ma et al., 2018). Sharma et al. (2021) further added that measurements used in measuring the organizational performance like, the return on investment, and sales growth, represent the organizational goals and the competitive advantage that strengthen the organization's relationship with its competitors (Sharma et al., 2021).

There are many dimensions as well that represent the organizational performance of an organization, and which are sought after to be achieved, as stated by (Gregory et al., 2019; Kim et al., 2022; Tiwari & Suresha, 2021) on the idea that the organizational performance will be measured through the managers' recognition of profitability, market share, and client satisfaction in addition to using a control system for following up on its work results, and which shows the percentages of work implemented and the difficulties that face the implementation as well as the ways to overcome them by using an integrated system for evaluating the overall performance of the organization. Therefore, the conceptual framework of the current study is shown in Figure 1.

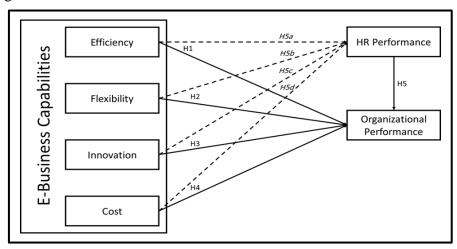


Figure 1: Research Conceptual Framework





3. RESEARCH METHODOLOGY

In this research, the researcher will utilize quantitative research methods. Primary data was collected from the study population includes all the employees working in Sameh Mall Investment Group's Branches accounting for 15 branches located at Amman, Zarqa, Al Azraq, and Irbid. Therefore, the researcher selected 145 managers from the 15 branches.

4. RESEARCH INSTRUMENT

The development of instruments was carefully executed to reflect the nature of this research. As such, the questionnaire was designed to include 42 items, and the variables were measured using the five-point Likert scale, with five standing for 'Strongly Agree' and one standing for 'Strongly Disagree'. Since the participants spoke Arabic, the survey needed to be accurately translated from English to Arabic. As a result, a reverse translation was conducted, which is a common method for determining the accuracy of a translation in a cross-cultural survey (Brislin, 1970).

5. FINDINGS

Data Analysis was carried out using IBM SPSS 26.0. In this section, Respondent profile, Model validity and Reliability, and the regression model will be discussed.

5.1 Respondent Profile

Table 1 shows that the highest percentage (97.2%) of the study sample consists of males, with females accounting for only (2.8%). Most of the study sample participants are aged between 26 and 35 whereas the percentages of the two sample categories of participants: (18-24 years) and (36-45 years) accounted, in a somehow similar way, for 21.4% and 24.1% in row, and only 12.4% of the study sample participants were 46 years and above. The highest percentage of respondents accounting for (35.9%) consisted of Diploma-awarded individuals whereas the percentages of the respondents with degrees lower than Diploma, and respondents with bachelor's degrees, were equal, accounting for (31.0%). Postgraduate degree-awarded individuals accounted for only (2.1%). As seen in table (5), the study sample participants were distributed according to their years of experience in the same sector as follows: (50.3%) of them have less than 5 years of experience, (24.8%) of them have between 6-10 years of experience, (16.6%) have between 11-20 years of experience and only (8.3%) of them have 21 years of experience and above. Most of the study sample participants accounting for (78.6%) are heads of departments and units whereas (11.7%) of the study sample participants are branch and project managers, and only (8.3%) of the study sample consists of administrative managers and general managers.





Table 1: Respondent Profile

Item	N	%				
Gender						
Male	141	97.2%				
Female	4	2.8%				
Age						
18-25	31	21.4%				
26-35	61	42.1%				
36-45	35	24.1%				
46 and above	18	12.4%				
Educational Level						
Lower than Diploma	45	31.0%				
Diploma	52	35.9%				
Bachelor's Degree	45	31.0%				
Postgraduate Degrees (PhD, Master)	3	2.1%				
Years of Experience						
Less than 5	73	50.3%				
6-10	36	24.8%				
11-20	24	16.6%				
21 and more	12	8.3%				
Job Level						
General / Executive Manager	2	1.4%				
Administrative Manager	12	8.3%				
Branch / Project Manager	17	11.7%				
Section / Unit Manager	114	78.6%				

5.2 Model Validity and Reliability

Criterion-related validity reflects the success of measures used for prediction or estimation. To achieve the validity of the research model, the researcher will utilize Pearson Bivariate Correlation using SPSS 26. The Pearson correlation coefficient is a standardized measure of covariance. Table shows the value of Pearson Bivariate Correlation alongside the significance of the association between the variables, which highlight the validity of the research model of the current study. The results showed that the correction between the variables is significant on the level where P-value is below 0.05 which shows strong level of correlation, which puts the researcher on the right track to conduct the full data collection.

In addition, the reliability of the scales are determined through an iterative process: if the elimination of any items increased the reliability of the scale, the item will be eliminated and analysis will be performed again; in contrast, deletions resulting in minimal increases were not made, as recommended by (Nunnally & Bernstein, 1994). The four multi-variable factors used in this study have gone through several successive reliability testing treatments. The statistical information for four variables shows that Cronbach's alpha score are at least 0.824 (Cost) which means the entire construct are deemed to have adequate reliability.





Cronbach HR Variables Number of Items Mean Pearson Correlation Efficiency Flexibility Innovation Cost Performance Alpha Pearson Efficiency 4.22 0.951 761 Pearson Flexibility 7 4.26 0.878 .000 Pearson .692 790 Innovation 7 4.34 .000 .000 .606 Pearson 467 7 4.38 0.824 .000 .000 .000 Pearson 701 .619 595 479 HR Performance 7 4.24 .000 .000 .000 .000 .619 .592 .540 .697 Pearson .668 Organizational Performance .000 .000

Table 2: Cronbach Alpha and Pearson Correlation

5.3. Regression Model

A multiple regression analysis is performed in order to assess the influences between the factors in the proposed research model. All hypotheses' tests indicate some influences between constructs.

In order to assess and validate the independence of error assumption, Durbin-Watson statistics were utilized. According to Coakes and Ong (2011), the independence of error term is not violated if the values of Durbin-Watson statistics fall between 1.50 and 2.50. In Table, the Durbin-Watson value is summarized. It indicates that value fell between the acceptable values implying that no auto-correlation problems existed (Coakes & Ong, 2011).

Independent Variables	VIF	Tolerance	Dubin-Watson	R squared	
Efficiency	3.126	0.316			
Flexibility	3.223	0.284			
Innovation	3.286	0.233	0.773	0.561	
Cost	2.444	0.409			
HR Performance	2.106	0.475			
DV: Organizational Performance					

Table 3: Multiple Linear Regression

Besides other assumptions, multicollinearity is an important assumption to be met in order to make sure that multicollinearity did not exist. Collinearity diagnostics was performed in order to assess and identify the predictors' multicollinearity problems. This can be done by investigating the Tolerance Value and the Variance Inflation Factor (VIF). According to Hair et al. (2014), the tolerance values ranged between 0-1. A value of 1 indicates that the variable is not correlated with other variables and value of 0 indicates a perfect correlation between the two examined variables. Moreover, the VIF has a standard cut-off value of 10 and all predictors must have VIF values less than 10 (Hair et al., 2014). Table provides the results of the multicollinearity test values. The results of the multicollinearity test shows that multicollinearity does not exist amongst all independent variables because the tolerance values are not more than 1.00 and VIF values are less than 10.0. Therefore, the obtained data can be analysed using regression analysis.





In this section, regression analysis was conducted to explore factors that were associated with Organizational Performance and four independent variables. The regression model utilized to predict Organizational Performance resulted in R Square = 56.1 % at a 0.000 significance levels for the overall model. However, the summary of the results from the regressions analysis were shown in Table.

H	Path	В	STD Error	Beta	t-value	P-value	Decision
H1	$EF \rightarrow OP$.451	.307	.442	4.486	.000	Supported
H2	$FL \rightarrow OP$.071	.389	.064	1.495	.142	Rejected
Н3	$IN \rightarrow OP$.212	.471	.033	0.242	.821	Rejected
H4	$CO \rightarrow OP$.805	.295	.244	2.781	.013	Supported
H5	$HRP \rightarrow OP$.497	.261	.524	4.821	.000	Supported

Table 4: Hypotheses Testing Results

Table (20) shows that interpretive and predictive ability of independent variables (efficiency, flexibility, innovation, and cost) in the organizational performance, accounts for 55% based on the Adjusted R2 value. This indicates that there is a statistically significant impact of E-Business capabilities on the organizational performance. So, according to that, we reject the null hypothesis while accepting the alternative one stating that there is an impact of E-Business capabilities, with all of its dimensions (efficiency, flexibility, innovation, and cost) combined, on the organizational performance in Sameh Mall Investment Group at $(0.05 \ge \alpha)$ level as (R2=0.56, F=43.934, Sig.=0.000).

Also, (t) values indicate that efficiency has the greatest impact on the organizational performance as (β =0.44, t=4.84, Sig. =0.000) followed by cost where (β =0.24, t=2.78, Sig. =0.010). On the other hand, flexibility and innovation have no impact on the organizational performance as their values are (β =0.16, t=1.49, Sig. =0.140) and (β =0.03, t=0.24, Sig.-0.82) in a row.

DV = Employee Performance (PER)	Independent variable					
MV = Employee Engagement (EME)	Efficiency (EF)	Flexibility (FL)	Innovation (IN)	Cost (CO)		
	Beta (P-value)	Beta (P-value)	Beta (P-value)	Beta (P-value)		
Total Effect of IV on DV (path a)	.442 (.000)	.064 (.142)	.033 (0.821)	.244 (.013)		
Effect of IV on MV (path b)	.531 (.000)	.091 (.423)	.056 (.674)	.045 (.131)		
Effect of MV on DV (path c)	.524 (.000)	.524 (.000)	.524 (.000)	.524 (.000)		
Mediation Path	$EF \to HRP \to OP$	$FL \rightarrow HRP \rightarrow OP$	$\textbf{IN} \rightarrow \textbf{HRP} \rightarrow \textbf{OP}$	$CO \rightarrow HRP \rightarrow OP$		
Mediation Effect	Yes	No	No	No		
Degree of Mediation	Partial Mediating	No relationship	No relationship	Direct effect only		
Hypothesis Result	H5a Supported	H5b Rejected	H5c Rejected	H5d Rejected		

Table 5: Mediation Analysis Results

The mediation hypothesis was investigated once the direct effect was evaluated. The key feature of a mediating effect is that it involves a third variable that acts as a link between the "independent and dependent variables". The effect of the Y1 (IV) on the Y3 (DV) is technically mediated by a third variable, Y2, which is referred to as the mediating variable or mediator





(see Figure 2). When a researcher develops mediation hypotheses, he or she considers how an "independent variable" (Y1) influences a "dependent variable" (Y3) via one or more potential intervening factors, or mediators (Y2) (Preacher & Hayes, 2008).

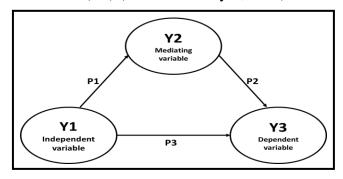


Figure 2: Mediating Paths

As shown in and observed from, the current study presented 4 hypotheses were constructed in order to assess the mediating effect of "Employee Engagement" (EME). In the current study, the mediating effect analysis carried out using SPSS found the following:

In H5a: HR Performance plays a significant mediating role on the relationship between Efficiency and organizational performance in Sameh Mall Investment Group with partial mediation level.

In H5b: HR Performance did not a significant mediating role on the relationship between Flexibility and organizational performance in Sameh Mall Investment Group.

In H5c: HR Performance did not a significant mediating role on the relationship between Innovation and organizational performance in Sameh Mall Investment Group.

In H5d: HR Performance did not a significant mediating role on the relationship between Cost and organizational performance in Sameh Mall Investment Group.

6. DISCUSSION

This study addressed the impact of E-Business capabilities in the organizational performance with HR performance as a medium variant and examined it as an administrative phenomenon that represents Sameh Mall Investment Group's attempt to enhance its competitive capabilities through improving its E-Business capabilities, especially in light of the conditions of uncertainty in the region as well as the unwillingness of many employees to use E-Business technology tools which the group provides only to them. Therefore, if E-Business was not effectively used in developing competitive capabilities, then it will be difficult for competitors to emulate it especially in terms of improving HR performance. Arabic studies, which were carried out in the context of Arab countries, are still shallow and have not yet addressed how to build E-Business capabilities that can improve the performance of Human Resources as well as the organizational performance, creating an obstacle for the researcher to verify the accuracy of results reached by the study and compare them to the previous study results. In addition to







this, the English study that addressed E-Business capabilities has mainly focused on the value which E-Business capabilities can create for companies applying it and has not shown how to create the value that E-Business capabilities can bring to the HR the performance, leading to an improved organizational performance. To answer the study questions, a set of hypotheses was formulated, with an answer a hypothesis provides to each of the questions raised in a negative form (the null hypothesis) to explain the impact of E-Business capabilities in the organizational performance accompanied with performance of Human Resources. The study reached a set of conclusions that contributed to solving the study problem, answering its questions and testing the validity of its hypotheses. Results have concluded that the efficiency of E-Business at Sameh Mall Investment Group has reached a high degree, from the perspective of the study sample participants, and this result has agreed with Al-Kasrawi's study (2015) with regard to achieving the highest level of efficiency in order to obtain the highest percentage of outputs. In addition, results have shown that the flexibility of E-Business at Sameh Mall Investment Group has reached a high degree, from the perspective of the study sample participants, and it has agreed with Sáenz et al. (2018) stating that flexibility is the essential dimension of companies' success, realized through the quick responsiveness to customer needs (Sáenz et al., 2018). Moreover, results have shown that the innovation of E-Business at Sameh Mall Investment Group has reached a high degree, from the perspective of the study sample participants, and it has agreed, in this respect, with Al-Shammari's study in which innovation was at low percentages and Al-Shammari recommended that innovation should be taken as an important objective for Business organizations so they won't fall apart or deteriorate.

Results have shown that the E-Business capability to reduce costs at Sameh Mall Investment Group has reached a high degree, from the perspective of the study sample participants, and, in this respect, it agrees with Setyowati et al. (2021) stating that applying E-Business in the administrative work has reduced costs as all of it is being performed through web pages (Setyowati et al., 2021). Furthermore, Results have concluded that the performance of Human Resources in Sameh Mall Investment Group has reached a high degree, from the perspective of the study sample participants, and, in this respect, it agrees with Setyowati et al. (2021) stating that the performance of Human Resources will increase with the inclusion of E-Business technology into the implementation of HR daily tasks (Setyowati et al., 2021).

Results have shown that the organizational performance has reached a high degree, from the perspective of the study sample participants, in terms of the market share, profitability, and client satisfaction. This result agrees with Horváth and Szabó (2019) stating that organizations nowadays are geared toward equipping departments with technology in order to make a profit that is sufficient for distribution to investors, gain a market share by expanding and spreading at low cost, and achieve client satisfaction by fulfilling clients' wishes, and monitoring them through e-business systems (Horváth & Szabó, 2019). Results have concluded that E-Business capabilities have a statistically significant impact on the organizational performance at $(0.05 \ge \alpha)$ level. The study, in this respect, has agreed with Tzokas et. al. study (2015) which found that the company's absorptive capacity can lead to a better performance, in terms of the development of new products, the performance of market, and profitability when accompanied with the company's ability to add the newest technologies to its programs in order to develop







a new product (technological capability) (Tzokas et al., 2015). Results have shown that E-Business capabilities (efficiency) have a statistically significant impact on HR performance at (0.05≥α) level as they conformed to Alawaqleh (2021) which found that the requirements for operating an Administrative Information System management have a statistically significant impact on the performance of employees in Palestinian Communications companies (Alawaqleh, 2021). HR performance has a statistically significant impact on the organizational performance. These results have agreed with Raymond et al. (2011) suggesting that the optimal features of E-Business vary according to the strategic orientation of companies and that the performance of E-Business was positive in the industry of Manufacturing in terms of growth, productivity, and financial performance (Raymond et al., 2011).

Results have concluded that the performance of Human Resources plays an intermediary role in the impact of E-Business capabilities on the organizational performance at $(0.05 \ge \alpha)$ level as these results agreed with Olivas-Lujan, et. al. study which showed that the applying of employee attraction, recruitment and e-training achieves a competitive advantage for these companies. Results also showed that one of the significant resources of competitive advantage is incorporating the concepts related to IT through explaining the strategies of E-Human Resources management. Results have agreed as well with Chibelushi's study (2008) which indicates that firms managed by managers with practical experience in Information Technology, are more capable of evaluating the effective response to the organizational environment of the work and the operational cycle (Chibelushi, 2008). Results have shown that efficiency and cost reduction are the most effective of E-Business capabilities in the organizational performance at $(0.05 \ge \alpha)$ level, agreeing with Wiengarten et. al. study (2015) which indicated that E-Business has a positive influence on the integration of supply chain, which positively affects the financial performance of host companies in countries that are of a high quality at the organizational levels (Wiengarten et al., 2015).

The performance of Human Resources has a greater intermediary role than other E-Business capabilities in the (relationship) between cost reduction and the organizational performance at $(0.05 \ge \alpha)$ level. Results have agreed with Sun et. al. (2015) suggesting that information has become a main driving force in managing Human Resources inside hotels and that Human Resources management can spread information and participate in decision making, and thus contributing to Human Resources strategy dissemination, information system enhancement and employees training around work (Sun et al., 2015).

7. RESEARCH IMPLICATIONS

The study results indicated that Sameh Mall Investment Group is highly applying E-Business capabilities, and that the cost variable was the highest in application followed by innovation then flexibility and finally efficiency. Results also show that the Group is highly applying the Qs of Human Resources performance as well as the organizational performance where client satisfaction was the highest in application followed by profitability and finally the market share. The study indicated that there is a strong relationship between the elements of independent variable (efficiency, flexibility, innovation and cost) in addition to another strong







relationship between the dimensions of organizational performance (the market share, profitability and client satisfaction) besides the strong one between all the variables of (E-Business capabilities, HR performance, and the organizational performance).

Lastly, the study pointed out that E-Business capabilities combined (efficiency, flexibility, innovation and cost) have an impact on the organizational performance in Sameh Mall Investment Group where cost had the greatest effect followed by efficiency whereas flexibility and innovation had no impact according to the results. In addition to this, the study indicated that E-Business capabilities combined (efficiency, flexibility, innovation and cost) have an impact on the performance of Human Resources as a whole in Sameh Mall Investment Group where efficiency had the one and only greatest impact on HR performance whereas flexibility, innovation and cost had no impact. It also implied that HR performance has an impact on the organizational performance in Sameh Mall Investment Group where cost had the greatest impact followed by efficiency whereas flexibility and innovation had no impact according to the results. Aside from that, the study indicated that capabilities of E-Business combined (efficiency, flexibility, innovation and cost) have an impact on the organizational performance accompanied with HR performance in Sameh Mall Investment Group, indicating that HR performance plays an intermediary role in the impact each E-Business capability has on the organizational performance as well as showing that E-Business capabilities of flexibility and cost are the most influential on the organizational performance in Sameh Mall Investment Group besides the fact E-Business ability to reduce costs is the most influential on the organizational performance accompanied with the performance of Human Resources.

8. RECOMMENDATIONS

Based on the above, a set of practical recommendations can be formulated:

- 1. Managers at Sameh Mall Investment Group should focus on and activate all of E-Business capabilities to enhance the performance of Human Resources across it.
- 2. Managers at Sameh Mall Investment Group should focus on efficiency and cost amongst E-Business capabilities to enhance the organizational performance, consisting of the market share, profitability, and client satisfaction.
- 3. Managers at Sameh Mall Investment Group can enhance E-Business capabilities in the organizational performance through focusing on how to promote creativity and innovation toward improving the performance of Human Resources and its productivity.
- 4. Managers at Sameh Mall Investment Group should focus on E-Business capability of reducing costs to enhance the organizational performance through the performance of Human Resources.
- 5. Managers at Sameh Mall Investment Group should enhance the Group's organizational performance that involves increasing the market share, profitability and client satisfaction by focusing on the improvement of HR performance.





6. Managers at Sameh Mall Investment Group could focus on the efficiency E-Business offers to improve the performance of Human Resources.

REFERENCES

- Abbad, M., Magboul, I. H. M., & AlQeisi, K. (2022). Determinants and outcomes of e-business adoption among manufacturing SMEs: Insights from a developing country. Journal of Science and Technology Policy Management, 13(2), 456–484. https://doi.org/10.1108/JSTPM-03-2021-0049
- 2. Abdullah, A., Thomas, B., Murphy, L., & Plant, E. (2018). An investigation of the benefits and barriers of e-business adoption activities in Yemeni SMEs. Strategic Change, 27(3), 195–208.
- Abushakra, A., & Nikbin, D. (2019). Extending the UTAUT2 model to understand the entrepreneur acceptance and adopting internet of things (IoT). International Conference on Knowledge Management in Organizations, 339–347.
- 4. Al-Omoush, K. S. (2021). The role of top management support and organizational capabilities in achieving e-business entrepreneurship. Kybernetes, 50(5), 1163–1179. https://doi.org/10.1108/K-12-2019-0851
- 5. Al-Omoush, K. S., Simón-Moya, V., & Sendra-García, J. (2020). The impact of social capital and collaborative knowledge creation on e-business proactiveness and organizational agility in responding to the COVID-19 crisis. Journal of Innovation & Knowledge, 5(4), 279–288.
- 6. Alawaqleh, Q. A. (2021). The effect of internal control on employee performance of small and medium-sized enterprises in Jordan: The role of accounting information system. The Journal of Asian Finance, Economics and Business, 8(3), 855–863.
- Anser, M. K., Yousaf, Z., Usman, M., Yousaf, S., Fatima, N., Hussain, H., & Waheed, J. (2020). Strategic business performance through network capability and structural flexibility. Management Decision, 59(2), 426–445.
- 8. Benitez, J., Chen, Y., Teo, T. S. H., & Ajamieh, A. (2018). Evolution of the impact of e-business technology on operational competence and firm profitability: A panel data investigation. Information & Management, 55(1), 120–130.
- 9. Berber, N., & Slavić, A. (2020). The Role of Human Resource Management in Agriculture Sector Enterprises. In A. Jean Vasile, J. Subic, A. Grubor, & D. Privitera (Eds.), Handbook of Research on Agricultural Policy, Rural Development, and Entrepreneurship in Contemporary Economies (pp. 378–400). IGI Global. https://doi.org/10.4018/978-1-5225-9837-4.ch019
- 10. Brislin, R. W. (1970). Back-Translation for Cross-Cultural Research. Journal of Cross-Cultural Psychology, 1(3), 185–216. https://doi.org/10.1177/135910457000100301
- 11. Ceylan, C., & Aktaş, B. (2020). Management by Values in Educational Organizations: A Case Study of a Technical University. In Ş. SerdarAsan & E. Işıklı (Eds.), Engineering Education Trends in the Digital Era (pp. 83–123). IGI Global. https://doi.org/10.4018/978-1-7998-2562-3.ch005
- 12. Chibelushi, C. (2008). Learning the hard way? Issues in the adoption of new technology in small technology oriented firms. Education+ Training, 11(1), 1–10.
- 13. Coakes, S. J., & Ong, C. (2011). SPSS version 18.0 for Windows: analysis without anguish. Wiley; John Wiley [distributor].
- 14. Easa, N. F., & El Orra, H. (2020). HRM practices and innovation: an empirical systematic review. International Journal of Disruptive Innovation in Government, 1(1), 15–35.
- 15. Esmaeilpour Ghouchani, B., Jodaki, S., Joudaki, M., Balali, A., & Rajabion, L. (2020). A model for examining the role of the Internet of Things in the development of e-business. VINE Journal of Information





- and Knowledge Management Systems, 50(1), 20-33. https://doi.org/10.1108/VJIKMS-04-2019-0058
- 16. Gregory, G. D., Ngo, L. V., & Karavdic, M. (2019). Developing e-commerce marketing capabilities and efficiencies for enhanced performance in business-to-business export ventures. Industrial Marketing Management, 78(1), 146–157.
- 17. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). Multivariate data analysis.
- 18. Halkiopoulos, C., Antonopoulou, H., Papadopoulos, D., Giannoukou, I., & Gkintoni, E. (2020). Online reservation systems in e-Business: Analyzing decision making in e-Tourism. Journal of Tourism, Heritage & Services Marketing (JTHSM), 6(1), 9–16.
- 19. Hardilawati, W. L., Sandri, S. H., & Binangkit, I. D. (2019). The Role of Innovation and E-Commerce in Small Business. International Conference of CELSciTech 2019-Social Sciences and Humanities Track (ICCELST-SS 2019), 18–22.
- 20. Haseeb, M., Hussain, H. I., Ślusarczyk, B., & Jermsittiparsert, K. (2019). Industry 4.0: A solution towards technology challenges of sustainable business performance. Social Sciences, 8(5), 154–172.
- 21. He, H., & Harris, L. (2020). The impact of Covid-19 pandemic on corporate social responsibility and marketing philosophy. Journal of Business Research, 116, 176–182.
- 22. Horváth, D., & Szabó, R. Z. (2019). Driving forces and barriers of Industry 4.0: Do multinational and small and medium-sized companies have equal opportunities? Technological Forecasting and Social Change, 146(1), 119–132.
- 23. Jarrahi, M. H. (2019). In the age of the smart artificial intelligence: AI's dual capacities for automating and informating work. Business Information Review, 36(4), 178–187.
- 24. Kim, J., Kim, S. I., & Lee, M. (2022). What to sell and how to sell matters: Focusing on luxury hotel properties' business performance and efficiency. Cornell Hospitality Quarterly, 63(1), 78–95.
- 25. Ko, J. H., & Kim, D. (2019). The effects of maturity of project portfolio management and business alignment on PMO efficiency. Sustainability, 11(1), 238.
- 26. Ma, Y., Yin, Q., Pan, Y., Cui, W., Xin, B., & Rao, Z. (2018). Green product innovation and firm performance: Assessing the moderating effect of novelty-centered and efficiency-centered business model design. Sustainability, 10(6), 18–43.
- 27. Mkansi, M. (2021). E-business adoption costs and strategies for retail micro businesses. Electronic Commerce Research, 1(1), 1–41.
- 28. Morales, R. P. (2020). Business Architecture and Technological Innovation: Foundations for the Development of Dynamic Absorption Capacities. TEM Journal, 9(1), 227–232.
- 29. Negi, S. (2020). Supply chain efficiency framework to improve business performance in a competitive era. Management Research Review, 1(1), 1–10.
- 30. Nowak, R. (2021). Strategic flexibility and performance: Effects of potential and realised absorptive capacity. International Journal of Innovation Management, 25(07), 2150077.
- 31. Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.
- 32. Nwachukwu, C., & Vu, H. M. (2020). Strategic flexibility, strategic leadership and business sustainability nexus. International Journal of Business Environment, 11(2), 125–143.
- 33. Pan, M., Huang, R., Chi, M., & Hu, S. (2022). The impact of platform flexibility and controls on platform attractiveness: an empirical study from the seller's perspective. Industrial Management & Data Systems, 122(3), 796–818. https://doi.org/10.1108/IMDS-08-2021-0528







- 34. Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. Behavior Research Methods, 40(3), 879–891.
- 35. Putra, P. O. H., & Santoso, H. B. (2020). Contextual factors and performance impact of e-business use in Indonesian small and medium enterprises (SMEs). Heliyon, 6(3), 1–10.
- 36. Raymond, L., Croteau, A.-M., & Bergeron, F. (2011). The strategic role of IT: An empirical study of its impact on IT performance in manufacturing SMEs. TÉLUQ University.
- 37. Sáenz, M. J., Knoppen, D., & Tachizawa, E. M. (2018). Building manufacturing flexibility with strategic suppliers and contingent effect of product dynamism on customer satisfaction. Journal of Purchasing and Supply Management, 24(3), 238–246.
- 38. Setyowati, W., Widayanti, R., & Supriyanti, D. (2021). Implementation Of E-Business Information System In Indonesia: Prospects And Challenges. International Journal of Cyber and IT Service Management, 1(2), 180–188.
- 39. Sharma, M., Luthra, S., Joshi, S., & Kumar, A. (2021). Accelerating retail supply chain performance against pandemic disruption: adopting resilient strategies to mitigate the long-term effects. Journal of Enterprise Information Management.
- 40. Sindakis, S., & Aggarwal, S. (2022). E-business Adoption by Small Businesses: Benefits and Drawbacks. In K. Biginas, S. Sindakis, A. Koumproglou, V. Sarantinos, & P. Wyer (Eds.), Small Business Management and Control of the Uncertain External Environment (pp. 211–227). Emerald Publishing Limited. https://doi.org/10.1108/978-1-83909-624-220211013
- 41. Sun, H., Han, B., & Yu, C. (2015). Research and application on human resource management information system in China First-class hotels. 2015 International Conference on Education Technology, Management and Humanities Science (ETMHS 2015), 308–311.
- 42. Tiwari, P., & Suresha, B. (2021). Moderating role of project innovativeness on project flexibility, project risk, project performance, and business success in financial services. Global Journal of Flexible Systems Management, 22(3), 179–196.
- 43. Tzokas, N., Kim, Y. A., Akbar, H., & Al-Dajani, H. (2015). Absorptive capacity and performance: The role of customer relationship and technological capabilities in high-tech SMEs. Industrial Marketing Management, 47(1), 134–142.
- 44. Wang, Z., Rafait Mahmood, M., Ullah, H., Hanif, I., Abbas, Q., & Mohsin, M. (2020). Multidimensional perspective of firms' IT capability between digital business strategy and firms' efficiency: A case of Chinese SMEs. SAGE Open, 10(4), 1–10.
- 45. Wiengarten, F., Bhakoo, V., & Gimenez, C. (2015). The impact of host country regulatory quality on the value creation process in e-business supply chains. International Journal of Production Research, 53(16), 4963–4978.
- 46. Yan, M.-R., Tran-Danh, N., & Hong, L.-Y. (2019). Knowledge-based decision support system for improving e-business innovations and dynamic capability of IT project management. Knowledge Management Research & Practice, 17(2), 125–136.
- 47. Zebari, R. R., Zeebaree, S. R., Jacksi, K., & Shukur, H. M. (2019). E-business requirements for flexibility and implementation enterprise system: A review. International Journal of Scientific and Technology Research, 8(11), 655–660.

