

Impact of Intellectual Capital on Carrefour Internal Growth Strategies (Ansoff's Model) in Irbid

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Abstract

In order to grow, develop, and sustain at highly competition, business organizations require not only possessing new talent employees and Intellectual Capital but also engaging them to achieve strategic goals. Therefore, this study aims at exploring the effect of Intellectual Capital (Human, Structural, and Relational Capitals) on Carrefour Internal Growth Strategies using Ansoff's Model. The target population was Carrefour employees and a sample of 83.7% of population was drawn. Results of statistical analysis revealed that there was a significant relationship between Intellectual Capital and its dimensions (human capital, structural capital, and relational capital) and Carrefour internal growth strategies. The regression analysis revealed that Intellectual Capital has significant effect on Carrefour internal growth strategies in general. Moreover, Intellectual Capital and its dimensions (human capital, structural capital, and relational capital) have a direct, positive, and significant effect on Market Penetration Strategy, Product development strategy, market development strategy, and diversification strategy as they represent Ansoff matrix of growth strategies. Future implications of these results would highlight the important role strategic leadership play and introduce a mediating role of knowledge management in this relationship at all.

Keywords: Intellectual assets; Intellectual capital; Strategic management; Growth strategies

Introduction

The global economy has been shifted to knowledge-based economy that mainly concentrates on knowledge as pre-eminent resource. Most of organizations, if not all, realized that they must have the best talent ever had in order to drive and sustain optimal levels of success in a hypercompetitive and complicated economic markets through business leaders sagacity who must retain and align business organization strategy with its internal resources and capabilities mainly concentrating on engaging high-potential and high-performing employees in its processes will lead to more competitive advantages. Furthermore, when knowledge resides in individuals and organizations, it will form what so-called Intellectual Capitals, that is, a sum of skills, experiences, knowledge, capabilities, and abilities considered critical for competitiveness and enabling growth achievements. Therefore, strategic managers must identify the core and distinctive competencies needed and understand that the collective knowledge in the minds of Intellectual Capitals is considered a real value that would qualify them to cultivate for ongoing growth and generate wealth despite of too many organizations nowadays encounter socio-economic and cultural challenges because of skills shortages and they can move easily and swiftly over borders. Hence then, in order to grow, develop, and sustain at highly competitive markets in promising future, it is primitively taking sincere dedication to identifying high-potential and high-performing capitals, assessing their competencies and attributes, continually invest in its Intellectual Capitals, and putting them on the right path to success.

Prior to using any other business technique, organizations must clearly conduct environment scan in-depth and SWOT analysis to identify internal strengths and weaknesses, as well as external opportunities and threats. Once the SWOT has been identified, other techniques (such as Ansoff matrix, BCG, GE, and so on) can be used to investigate the success of current organization strategy, the usefulness of these techniques heavily relies on effective business intelligence where accurate and up-to-date information from customer feedback are best

available in hands of managers. Consequently, business organizations will certainly focus on their Intellectual Capitals to harness these opportunities and strengths while avoiding threats and strengthening their weaknesses. By doing so, business organization always review its strategic map whether to concentrate or diversify based on their capabilities, availability of resources, and highly talented employees or Intellectual Capitals to achieve its strategic vision, mission, and objectives. Generally speaking, most organizations don't understand the nature and value of Intellectual Capital although it is considered the main source of competitive advantage, even though too many explanatory, experimental, and comparative studies on Intellectual Capitals and economic growth had been conducted all over the world, none of these studies examine the impact of Intellectual Capitals on business organizations strategic internal growth using Ansoff matrix, noteworthy that the wealth and growth of any business in today's knowledge-based economy are directed by intellectual assets.

The retail industry sector of Jordan has evolved (and still evolving) creating strong demand despite the ongoing turbulence that surrounds it; economists maintain that opportunities exist for international retail brands to enter Jordan markets with the arrival of global-quality shopping malls such as Carrefour, Westlake, and Costco in addition to local shopping malls such as Safeway, C-town, and Sameh group. As a result of large-scale investments, the retail industry in Jordan is shifting its focus geographically away from Amman. Carrefour™ is very popular in Jordan so that its administration decided to open branches in Jordan

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and small-size stores called Carrefour Express which operates inside smaller locations in different areas of Jordan. Gradually, Carrefour™ dominating the Jordan market using growth strategies that would increase its market shares above 70% exploiting its highly skilled workers and employees.

Background of the problem

The economy has transitioned into knowledge-based economy instead of industry-based economy due to vastly evolution of business environment such as rapid technological advancements, increasing pace of globalization and hyper-competition, the shorter product life cycle, and changing customers' preferences, expectations, and awareness. These factors excrete the essence of Intellectual Capital existence as a strategic weapon for increasing organization's competitiveness to enhance innovation and creativity of supporting its internal capabilities for applying one or more of internal growth strategies of Ansoff; market penetration, market development, product development, diversification.

Based on aforementioned variables and factors came the problem of this study to answer the following questions:

- 1) Does management of Carrefour (as retailer) realizes the importance of investing in Intellectual Capital to proliferate growth strategies in the retail industry of Jordan?
- 2) What is the real essence of Ansoff internal growth strategies application in retail industry of Jordan?
- 3) What is the association between Intellectual Capital and growth strategies in retail industry of Jordan?

Study importance and objective

Several studies in the extant of literatures focused on the importance of Intellectual Capital in every stage of organization lifecycle. Notwithstanding that the Intellectual Capital nowadays is the product of a lot of theories that focus on the exploitation all organizational resources and capabilities to create value added and to improve its performance in order to grow in a turbulent market characterized by sharp fluctuations that affect positively or negatively on organization lifecycle and thus its strategic plan in respect to development and growth.

This current study therefore aimed at investigating the real relationship between Intellectual Capital and Ansoff business internal growth with the objective of assessing the impact of Intellectual Capital (Human Capital, Structural capital, and Relational capital) on Ansoff internal growth strategies where the business organizations should concentrate on resource-based view, knowledge-based view, and its internal resources and capabilities to direct its growth strategies toward gaining highest competitive advantages and increasing market share not only in one industry but also in different multi-industries. It sets to find out whether Intellectual Capitals can significantly and positively influence the internal growth strategies of Carrefour in retail industry of Jordan. Figure 1 depicts how we proposed our current study variables relate to each other.

Study hypothesis

Based on the study problem, objectives, and its conceptual framework, this study will mainly assume the following hypothesis:

H₀: The Intellectual Capital doesn't significantly and positively affect the Carrefour internal growth strategies using Ansoff matrix of retail industry of Jordan at $\alpha \leq 0.05$.

H₀1: The Intellectual Capital (human capital, structural capital,

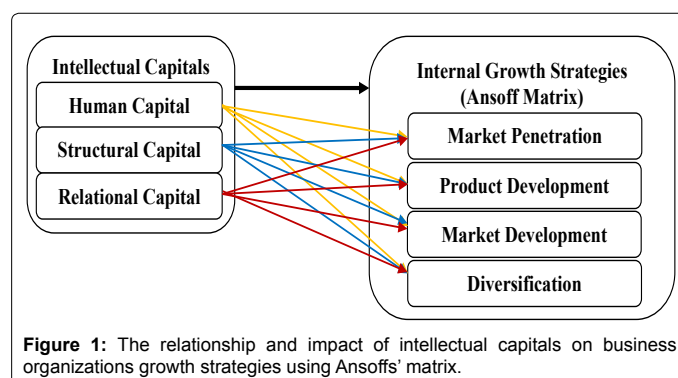


Figure 1: The relationship and impact of intellectual capitals on business organizations growth strategies using Ansoff's matrix.

and relational capital) doesn't significantly and positively affect the Carrefour market penetration strategy of retail industry of Jordan at $\alpha \leq 0.05$.

H₀2: The Intellectual Capital (human capital, structural capital, and relational capital) doesn't significantly and positively affect the Carrefour market development strategy of retail industry of Jordan at $\alpha \leq 0.05$.

H₀3: The Intellectual Capital (human capital, structural capital, and relational capital) doesn't significantly and positively affect the Carrefour product development strategy of retail industry of Jordan at $\alpha \leq 0.05$.

H₀4: The Intellectual Capital (human capital, structural capital, and relational capital) doesn't significantly and positively affect the Carrefour diversification strategy of retail industry of Jordan at $\alpha \leq 0.05$.

Literature Review

Resource-based view (RBV) and knowledge-based view (KBV)

As the world economy relies on knowledge and creativity and innovations, organizations in different sectors starts restructuring its processes of products and services to be aligned with these new technological advancements to enhance its prosperity, growth, and development. Economists and theoreticians considered the knowledge a strategic factor (or source of competitive advantage) that would help organizations to better understand its nature and influence its processes to avoid strategic threats while strengthening its internal weaknesses and compete by catching the opportunities. A unique resources, core competencies, or distinctive capabilities can be categorized into knowledge in people, embedded in processes, specialized assets, and reputation.

The Resource-based view (RBV) was originated in Penrose's studies relies on resources; tangible and intangible. This perspective focuses specifically on inside of organization in terms of resources, competencies, and capabilities (relies on developing unique and distinctive capabilities) that may often be implicit or intangible in nature. This theory postulates that a differences in organizations performance refer to possessing less valuable resources than its competitors where the role of strategic leaders (strategy) is to define organizations' unique resources and capabilities to create value-added and sustain market position, and if all organizations have the same resources then there would be resting on the cost of resources and capabilities that should be utilized for implementing strategies [1]. Therefore, according to RBV, an organization is a set of collection of unique competencies and capabilities influencing its evolution and its

strategic growth options. All above, According to (RBV) perspective, the level of success in achieving higher competitiveness depends on the resources heterogeneity and immobility through the retention of resources without overlooking the VARIO attributes and resources for gaining the highest competitive advantage.

Knowledge-based view (theory) has evolved from the concepts of Alchian and Demsetz that assumes the production inefficiency is merely of heterogeneity of resources and later, it is considered the foundation of the emergence of knowledge based view. The capability of business organization to develop new knowledge-based assets by analyzing its capabilities could create core competencies which lead to increasing its competitiveness. Generally, analyzing business capabilities and resources mean incorporating physical, human, relational, and organizational resources in addition to technological and economic resources [2-4]. These resources form a competitive advantage not only through industry dynamics but also through processes of utilization of resources within the organization and the strategic value of these capabilities, and it can be enhanced when it is so difficult to buy, sell, imitate or substituting them.

According to theory of resource-based view and knowledge-based view, Intellectual Capital is a key strategic asset and critical for organization competitiveness. The primitive question is what is the association between (KBV) and (RBV)? Those views are commonly associated with human asset; Intellectual Capital, as top management realized that the importance of knowledge as a base for competitiveness and they emphasized on Intellectual Capital to achieve firms strategic objectives. The Smart and agile organizations rely extensively on its intangible assets (Intellectual Capital and tacit knowledge) as well as business intelligence (competitors) to enhance its innovative capabilities to increase its continued growth and thus market share or even to dominate industry market as whole, in other words, in order to achieve strategic success in turbulent environment, organizations should be seriously adopt strategic agility as strategic resource [5,6], the critical aim of agility is to develop new models and products categories rather than concentrating on improving current products [7]. It is largely accepted that Knowledge-based view (KBV) and Resource-based view (RVB) are interchangeably used to viewing the potential value added resources and capabilities to achieve superior performance, competitive advantage and implementing value-enhancing strategies.

The association between (KBV) and (RBV) can be viewed as RBV includes tangible and intangible assets and core or distinctive competencies which are valuable, unique, hard-imitable, and non-substitutable that all organizations seek to attain as competitive advantage while KBV is also deals with capabilities that could be residing in organization and its employees either explicitly or implicitly which forms a competitive advantage too. Therefore, we believed that the implementation of knowledge management infrastructure support the acquisition, management, transfer, and apply of tacit and explicit knowledge that resides on people, processes and technology which in turn creating innovate techniques of exploiting these assets gaining value-added to those resources and the competitive advantage that is likely to be sustainable.

Intellectual Capital and business organization growth strategies

The term of Intellectual Capital (IC) was firstly proposed by John Kenneth Galbraith in 1969 and later highlighted by Stewart contributions in 1991 as it would become the most valuable asset and a strategic weapon for competitiveness. Then after, literatures

and scholarly actively put it in practice as Lief Edvinsson was the first Intellectual Capital director for Skandia. Intellectual Capital (IC) viewed as a framework for discovering the real value contribution of intangible assets in organization life cycle, in other words, converting knowledge into value [8]. As with most emerging theories, Intellectual Capital has been defined in different perspectives; Edvinsson and Sullivan define Intellectual Capital as "knowledge that can be converted into value". Stewart [9,10] defines IC as "Intellectual material that has been formalized, captured, and leveraged to create wealthy by producing a higher value assets", and Kristandl and Bontis [11] defines Intellectual Capital as "a portfolio of strategic firm resources that enable an organization to create sustainable value". Ulrich suggests that Intellectual Capital is a result of employees' competencies and commitment and that would enhance growth if both conditions exist simultaneously [12].

Intellectual Capital approach would likely to enhance organizational innovation and thus the growth of firms [13].

Generally speaking, several studies introduced different classifications of Intellectual Capital components consist of different capitals that is rooted in people, organization policies and procedures, intellectual property, and relationship with all other stakeholders such as customers, clients, suppliers, and distributors. Most of organizations pursue different strategies supported by its internal capabilities that include Intellectual Capital. Thus far, Intellectual Capital classifications are getting more broadening than ever and it becomes more complicated. To date, organizations require developing distinctive Intellectual Capital management and exploit these capitals to pursue its strategies [14]. So far, there is no a single effective approach of handling Intellectual Capital that enhance organization performance. Scholarly and theoreticians classified IC into three components [15-17]:

- a. Human Capital (HC) is the skill; knowledge, experiences, and abilities stick around individual minds and can be used to generate the utmost value depending on the organization resources. Theorists pointed that HC includes employees' attitudes, innovation, and learning.
- b. Structural Capital (SC) (others called it organizational capital OC) is an organizational database, routine, procedures, processes, policies, structure, patents, and manuals and so on that can be utilized all time for creating value-added to organization. It includes distinguished techniques for collecting, managing, integrating current knowledge and disseminating it overall organization.
- c. Relational Capital (RC) (also called customer capital and/or social capital) refers to the interrelationship with other stakeholders. The knowledge can be resides in these relationships with customers, suppliers, distributors, government, and other partners. The most concerns of organization lagging on its customer's satisfaction, increasing their loyalty, and how to retain them with emphasis on attracting potential customers are most likely available in emerging markets.

Growth is imperative for remnant of the business organizations due to the customers' preferences and tastes changes and the products evolution. Come to the new era, environment is still dynamism and it forces business organizations to adapt new technological techniques to maintain healthy geared position while taking the advantage of opportunities through conducting analyzing firm's internal resources and capabilities mostly focused on Intellectual Capital which considered the most strategic valuable resources. This internal growth is revolving around increasing market share through market investment developed

by Igor Ansoff (Figure 2 illustrates the Ansoff matrix); that is business analysis technique that enabling growth opportunities. This matrix includes two dimensions; products (existing and new), and market (existing and new), the resulting of this matrix is four choices of potential growth strategies. These growth strategies are:

- 1) **Market penetration:** It happened when an organization enters a market with current products, this could be done through gaining competitors' customers. To gain a market share, organizations should targeted non-customers (potential customers), or convinced the current customers to consume more products, or advertising and promoting the current products to generate more revenues while some other theorists pointed out in this strategy organizations don't seek to targeted potential customers as it should concentrate on its brand name with large amounts for the existing market.
- 2) **Product development:** When organization decided to produce new innovative products or develop (add new features) current products and targeted existing customers is called product development.
- 3) **Market development:** This strategy used by organizations through targeting a different customer segment in the market by marketing existing products in new markets. This could be done by exporting or promoting these current products into another region is an example.
- 4) **Diversification:** Entering new markets where no presence before is diversification. In other words, new products to new customers and it could be relatively either in same region or different regions. Also this type of strategy might be related and unrelated diversification, where related diversification means working in same market or industry (e.g. Coca Cola produces mineral water bottles or Juice cans as new products but at same market), while unrelated diversification means organization produce new products for unknown market (e.g. Coca Cola produces wearing clothes as new products to same and new regional markets).

Not with standing that the greater newness of products the greater risk of failure or success, hence; market penetration is the lowest risk involved and it's widely used. Market and product development are related to moderate risk. Finally, the greatest or highest risk rates refer to diversification because both product and market are new and fuzzy.

Carrefour™ and Ansoff internal growth strategies

Carrefour was originated in France in 1957 by Fournier Badin and Defforey families opening their first supermarket on Annecy. The company was formed through a merger of two wholesaler families from Normandy, managed by Paul Auguste Halley and Leonor Duval Lemonnier. In 1963, Carrefour invented the hypermarket concept and launched its first hyper market in Sainte-Genevieve-des-Bois, few years later; the Promodes supermarkets adopted the Champion retail brand name. Then after, Carrefour opened its first hypermarket outside France in Belgium and the first outside Europe, in Brazil.

In 1980s, Carrefour store brand products were introduced. In the 1990s, the internationalization of the company started to increase and new store were opened all over the world. With a presence in about 30 countries more than half of its sales are generated outside France. This makes it one of the most international of all food retailers. The group concentrated mainly in three continents: Europe, Latin America and Asia.

Carrefour continued to expand and reach out to new customers in all over the world. One of the greatest strengths of Carrefour is the ability to offer its customers a variety of formats adapted to their needs from hypermarket for major shopping trips to convenience stores for day-to-day shopping. In Carrefour 2014 report, they mainly concentrated on customers as their target to find them everywhere are they, the report said: "Offering solutions for every customer's budget, taste and needs throughout the store while ensuring top quality are daily demands which require the skills of Carrefour's teams. Our commitment is simple: enable customers to find the products they are looking for in the Group's various stores".

In this regard, 46 new hypermarkets opened, notably in France, Spain, Romania, along with China. In line with high urban population growth, Carrefour administration has its own strategic objectives to launch new hypermarkets or even one-stop-shop markets in China by year 2017. Moreover, despite of Carrefour failure to run its hypermarkets in USA, it has seen significant growth both in Europe and in other emergent markets. By continuing its targeted expansion to meet their customers' expectations, Carrefour is extensively backed on the road to profits and growth.

After the aforementioned Carrefour history, strategic objectives, and thoughts presented, we could simply apply Carrefour growth strategies to follow Ansoff internal growth strategies as depicted in the Figure 3.

- **Market penetration:** Under this strategy, Carrefour chronically increases it sales and generates higher profits, this could be done by luring competitors' customers and drive them to be loyal for Carrefour. The effective strategy used by Carrefour is establishing itself as lower-prices to attract more customers than their rivals. Also it targeted customers by increasing their numbers through using its branding image better than its competitors.
- **Market development:** Carrefour has realized the importance of new technologies are acquainted by most of people around the world in general and particularly in Jordan, therefore, it starts to provide another techniques of promoting its products and services such as free delivery products purchased from its markets. Also it offers online availability of products that mostly likely reaches bigger markets. To monitor the sales process, it keeps a record for every single product sold to its customer as well as other competitors' sales in order to attract

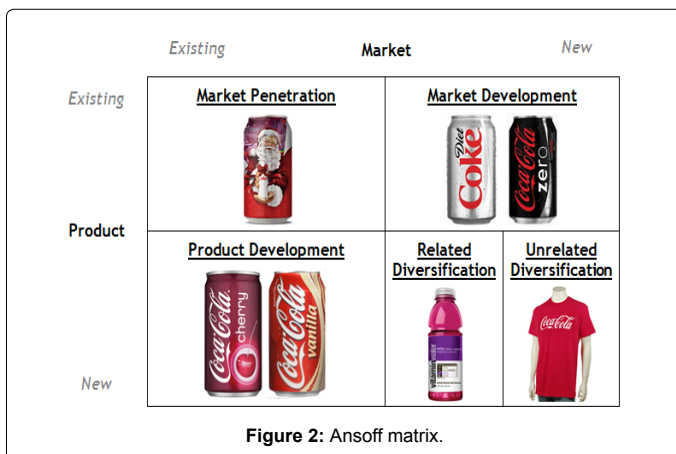


Figure 2: Ansoff matrix.

	<i>Existent</i>	<i>Market</i>	<i>New</i>
<i>Product</i>	<u>Market Penetration</u>		<u>Market Development</u>
	<ul style="list-style-type: none"> • Low-price hypermarket • One-stop place for commodities • Use of Brand Image • Bundled pricing • Word-to-mouth marketing • Viral marketing 		<ul style="list-style-type: none"> • Online product availability • Free delivery products • Consistent research to depict current market conditions
<i>New</i>	<u>Product Development</u>		<u>Diversification</u>
	<ul style="list-style-type: none"> • Introduction of new products • Modification or adding features to existing products • Customization at regular intervals • Increasing diversities of products 		<ul style="list-style-type: none"> • Introduction of customized products in the rural market • Increased reach of the stores • Targeting tourists as per needs • Provide

Figure 3: Carrefour Ansoff internal growth strategies.

non-buyers segment. Finally, Carrefour conducts market research from time to time to inspect its progress in the market and do improvements when there is a cutback.

- **Product development:** To increase its revenues, Carrefour undergo the process of market inspection to come up with new products and /or made an improvement (modifying) the current products. Fatherly, Carrefour looks to increasing diversity of products that fit all community segments and their power of purchasing.
- **Diversification:** Although lately Carrefour following this strategy which considered the most risky than other strategies because of market saturation, it has opened many other hypermarkets in different places in the world and particularly in Jordan. New products to new markets has been deployed by Carrefour that meet the customers’ preferences and reaches new potential markets that would increase its market share. Eventually, Carrefour in process of looking for new industry such as Petroleum transportation.

Related Studies

We proposed to discuss some related previous studies to correlate between the study variable but unfortunately we didn’t find much studies that exactly examine the impact of Intellectual Capital on Ansoff internal growth strategies. Therefore, the researchers will introduce the following studies:

Hormiga, Batista-Canino, and Sánchez-Medina [18] proposed that there is a clear cut-edge of influence of intangible assets (mainly Intellectual Capital) on the success of newly-created organizations (joint-ventures). The study included newly 130 companies as a sample. The results show that the Intellectual Capital of new companies is positively associated with the success perceived by the entrepreneur. Also it shows that the human and relational capitals play a crucial role in the development of the new companies while structural capital is relatively important.

The study of Ngugi et al. [19] aimed at examining the influence of Intellectual Capital on growth of SMEs in Kenya. Management’s technical skills influenced the growth of small and medium enterprise, mostly followed by managerial experience. Further, the drive/impetus to entrepreneurship influenced the growth of small and medium enterprise mostly followed by risk taking propensity among all the entrepreneurial skills factors.

Ekwe [20] conducted a study that aimed at investigating the association between Intellectual Capital components; human capital efficiency, structural capital efficiency, and capital employed efficiency, and growth revenue of selected banks in Nigeria. The results show that

there is a positive and significant relationship between Intellectual Capital in general and its components in particular and growth revenue of those banks in Nigeria.

Hussain et al., [21] investigated the impact of growth strategies suggested by Ansoff on firms’ growth and moderating effect of market environment in the food sector of Pakistan. Results of this study revealed that all Ansoff growth strategies were significantly contributed in organizations’ growth except diversification strategy. Moreover, the market environment doesn’t moderate relationship between organizations’ growth and all Ansoff strategies except market penetration. The authors recommend that organizations should avoid using diversification strategy due to its growth reduction.

The study of Lak [22] aimed at evaluating the effects of Intellectual Capital on the real growth rate of companies accepted in Tehran stock exchange. The study consisted of 62 participated companies on 2008 and 2009. The findings of this study revealed that there is a significant relationship between physical, structural, and human capital of Intellectual Capital efficiency and the real growth rate of those companies.

Ngwenya [23] conducted his study which entitled “Intellectual Capital’s leverage on shareholder value growth: A Lesson for developing economies”, that aimed at evaluating the relationship between Intellectual Capital of employees; top managers as the agent and the shareholders as the principal value growth among Zimbabwean companies that are listed at Zimbabwe stock exchange. The results show there is a strong correlation between the Intellectual Capital and value added besides an improvement of the Intellectual Capital multiplier will have an extensive effect on the company’s shareholder value growth.

The study of Alkshali [24] aimed at exploring the impact of the power of top management on the selection of growth strategies in banking industry of Jordan. The study has covered 113 top manager was revealed that ownership and expert power had an impact on the selection of growth strategy while other sources of power such as legitimate and status had shown any impact on the selection of growth strategy. Also legitimate, expert, and ownership sources of power had an impact on the selection of diversification strategy in contrast of status which shows no significant impact on the selection of growth strategy. Finally, legitimate, ownership, and status had a significant impact on the selection of growth strategy while no significant impact of expert power on the selection of growth strategy.

Eventually, Rono and Moronge [25] sought to understand and describe the attitudes and opinions on the growth strategies and their effect on organizations’ competitiveness in cement industry of Kenya. The study conducted at cement industry of Kenya where the 150 respondent participated in this study. Results appear logical, it shows that the growth strategies has enhanced increased efficiency and increased the companies’ market shares. Respondents were neutral whether growth strategies drive increasing the product capacity and quality and whether if the companies be able to retain its market share. Market Development and Diversification strategies show a positive effect on the competitiveness of those companies.

Methodology

Research design

The population for this study consists of Carrefour employees in governorate of Irbid that focuses on retail industries. The Carrefour chosen because it has a brand name everlasting with customers and it is implementing accelerated growth strategy in retail industry of Jordan.

Data collection and instrument

The study used a questionnaire for collection data of study. A survey instrument that had a 1-5 Likert scale was designed and developed, and it consisted of two main sections; Section 1 focused on Intellectual Capital, Section 2 on internal growth strategies of Ansoff. The study used a questionnaire developed and modified according to environment of Carrefour; a 120 questionnaire was distributed on Carrefour staff. Only 97 were returned and 86 were valid to statistically analysis. To test the internal consistency and stability, researchers used the most widely measure instrument and it is considered adequate if it is exceed 0.60 according to Churchill [26,27].

However, as show in Table 1, the results of Alpha coefficients of the concerned variables were registered acceptable where the coefficients are above 0.60. Therefore, the instrument were suitable and consistence for implementing the study.

Results

Pearson correlations

Table 2 shows correlations between Intellectual Capital (human capital, structural capital, and relational capital) and Carrefour internal growth strategies (Ansoff model; market penetration, market development, product development, and diversification). The correlation analysis reveals that Intellectual Capital is positively associated with Ansoff internal growth strategies in Carrefour ($r = 0.954$, $p < 0.01$). Moreover, it has a positive and significant relationships with market penetration ($r = 0.883$, $p < 0.01$), product development ($r = 0.811$, $p < 0.01$), market development ($r = 0.889$, $p < 0.01$), and diversification ($r = 0.950$, $p < 0.01$) as shown in Table 2. In detailed, we observed the dimensions of Intellectual Capital have a positive and significant relationship with Carrefour internal growth strategies at ($p < 0.01$) as shown in Table 2.

Regression analysis

In order to exploring the effect of independent variable(s) on dependent variable(s), a regression analysis was used. Table 3 shows results of regression analysis of data collected from the sample. The hypothesis testing results are as follow:

H₀: The Intellectual Capital doesn't significantly and positively affect the Carrefour internal growth strategies using Ansoff matrix of retail industry of Jordan at $P \leq 0.05$.

The results revealed that the Intellectual Capital is significantly and positively affects the internal growth strategies of Carrefour at $P \leq 0.05$. ($R^2 = 0.911$, $t = 35.867$) which implies that the Intellectual Capital explains 91.1% of the variance of internal growth strategies of Carrefour while 8.9% related to other factors not mentioned in this study. In addition, if the Intellectual Capital is remarkably nurtured at Carrefour

Variable	No. of Items	Cronbach Alpha
Human Capital	6	0.654
Structural Capital	7	0.681
Relational Capital	5	0.711
Intellectual Capital	18	0.936
Market Penetration	7	0.756
Product Development	7	0.709
Market Development	5	0.712
Diversification	5	0.775
Internal Growth Strategies	24	0.938

Table 1: Cronbach's alpha.

by 1%, this will lead to effective to follow internal growth strategies by 95.4% this shown at ($\beta = 0.955$, $t = 35.867$, $\text{Sig.} = 0.000$) and this leads to reject the null hypothesis that saying Intellectual Capital doesn't have a significant and positive effect on internal growth strategies using Ansoff matrix at Carrefour in Irbid, and accept the alternative hypothesis of affirming the effect.

H₀1: The Intellectual Capital (human capital, structural capital, and relational capital) doesn't significantly and positively affect the Carrefour market penetration strategy of retail industry of Jordan at $p \leq 0.05$.

As depicted on the Table 4, results revealed that there is a positive correlation between Intellectual Capital and market penetration strategy where the correlation coefficient (R) is equal to 0.88. Additionally, (R^2) is explained 78% of the variance in market penetration and 22% related to other factors not listed in this study. This confirms that Intellectual Capital with its three dimensions have a positive and significant effects on market penetration strategy at Carrefour where the value of ($F = 446.204$, $\text{Sig.} 0.000$), also the value of ($t = 21.124$, $\text{Sig.} 0.000$) are statistically significant. The coefficient of Beta ($\beta = 0.88$) is significantly and positively shows the effect of Intellectual Capital on market penetration strategy at Carrefour as per unit increases in Intellectual Capital ultimately the market penetration increases by 0.088).

Regarding the dimensions of Intellectual Capital, human capital, structural capital, and relational capital, Table 4, shows that there are a significant and positive correlations with market penetration strategy as the correlation coefficients of ($R = 0.865$, 0.812 , 0.817) respectively. Notably, the tree dimensions of Intellectual Capital explains 74.9%, 66%, and 66.8% of market penetration strategy respectfully ($R^2 = 0.749$, 0.660 , 0.668) while other factors related to non-listed in this study. Finally, the F-value and t-value are showing the significant and positive effect of these dimensions on dependent variable (market penetration strategy). Supporting this is the Beta coefficient ($\beta = 0.865$, 0.812 , 0.718) respectfully. By and large, from these results, it can be concluded that Intellectual Capital and its dimensions has a positive and significant relationships and effects on market penetration strategy which are not supported our null hypothesis hence we reject it and accept the alternative hypothesis of affirming the relationships and effects.

H₀2: The Intellectual Capital (human capital, structural capital, and relational capital) doesn't significantly and positively affect the Carrefour product development strategy of retail industry of Jordan at $P \leq 0.05$.

The analysis revealed that the Intellectual Capital is positively and significantly associated and effect of product development strategy where (F-value = 242.239, $P < 0.01$) with a variance of 65.8% ($R = 0.811$). Table 5, shows that he considerably dimensions of Intellectual Capital are positively and significantly affect product development strategy; Human Capital ($\beta = 0.769$, $P < 0.01$), Structural Capital ($\beta = 0.811$, $p < 0.01$), and relational capital ($\beta = 0.707$, $p < 0.01$). Under these results, it can be noticed that human, structural, and relational capitals explain the variance of product development strategy by 59.2% ($R = 0.769$), 65.8% ($R = 0.811$), and 50% ($R = 0.707$) where the F-value are equal to (152.568, 242.109, 125.923) and ($\text{Sig.} = 0.000$). The hypothesis was assumed that there is not a significant and positive effect of Intellectual Capital (human, structural, and relational capitals) on product development strategy. Unfortunately, it is evident from the analysis that the null hypothesis is rejected and we accept the alternative hypothesis.

H₀3: The Intellectual Capital (human capital, structural capital, and

relational capital) doesn't significantly and positively affect the Carrefour market development strategy of retail industry of Jordan at $\alpha \leq 0.05$.

Table 6 revealed that the Intellectual Capital is positively and significantly associated and effect of Market Development Strategy where (F-value = 474.819, $P < 0.01$) and ($\beta = 0.889$, $P < 0.01$) with a variance of 79% ($R = 0.889$). The dimensions of Intellectual Capital are positively and significantly affect Product Development Strategy; Human Capital ($\beta = 0.983$, $P < 0.01$), Structural Capital ($\beta = 0.751$, $P < 0.01$), and Relational Capital ($\beta = 0.771$, $P < 0.01$). Under these results, it can be noticed that Human, Structural, and Relational Capitals explain the variance of Product Development Strategy by 96.7% ($R = 0.983$), 56.4% ($R = 0.751$), and 59.5% ($R = 0.771$) where the F-value are equal to (3689.083, 162.959, 185.262) and (Sig. = 0.000). The hypothesis was assumed that there is not a significant and positive effect of Intellectual Capital (Human, Structural, and Relational Capitals) on Product Development Strategy. Based on above results, null hypothesis is rejected and we accept the alternative hypothesis contends such an affects.

H₀₄: The Intellectual Capital (human capital, structural capital, and relational capital) doesn't significantly and positively affect the Carrefour diversification strategy of retail industry of Jordan at $P \leq 0.05$.

Table 7 revealed that the Intellectual Capital is positively and significantly associated and effect of Diversification Strategy where (F-value = 1156.800, $P < 0.01$) and ($\beta = 0.950$, $P < 0.01$) with a variance of 90.2% ($R = 0.950$). The dimensions of Intellectual Capital are positively and significantly affect Diversification Strategy; Human Capital ($\beta = 0.963$, $P < 0.01$), Structural Capital ($\beta = 0.899$, $P < 0.01$), and Relational Capital ($\beta = 0.814$, $P < 0.01$). Under these results, it can be noticed that Human, Structural, and Relational Capitals explain the variance of Product Development Strategy by 92.7% ($R = 0.963$), 80.9% ($R = 0.889$), and 66.2% ($R = 0.814$) where the F-value are equal to (1609.353, 533.642, 246.746) and (Sig. < 0.000) respectively. The hypothesis was assumed that there is not a significant and positive effect of Intellectual

Capital (Human, Structural, and Relational Capitals) on Diversification Strategy. Based on above results, null hypothesis is rejected and we accept the alternative hypothesis contends such an affects.

Discussions

It is clear evident from the results above that Intellectual Capital has positive and significant relationships with Internal Growth Strategies using Ansoff matrix at Carrefour as depicted in Table 2. The reason behind these correlations can be explained in terms of tacit knowledge that resides in the minds of employees is valuable and cannot be imitated by others. Those Intellectual Capitals play a critical and vital role in achieving the organizational strategic orientations.

Tables 3-7 exhibit the results of regression analysis between Intellectual Capital (human, structural, and relational capitals) and Ansoff internal growth strategies (market penetration, product development, market development, and diversification) respectively. As per noticed the results are not consistent with the null hypothesis. Obviously, there are not only positive and significant relationships between Intellectual Capital and Internal Growth Strategies but also effects of Intellectual Capital on market penetration strategy, product development strategy, market development strategy, and diversification. Moreover, Intellectual Capital dimensions (human capital, structural capital, and relational capital) have a strong and significant relationship with market penetration strategy, product development strategy, market development strategy, and diversification strategy. Eventually, those dimensions have an effect on these internal growth strategies used by Carrefour in Irbid.

Future Implications

Intellectual Capital plays a critical role in organizational life-cycle especially at the hypercompetitive market environment. Therefore, organizations whether private or public emphasizes on how to nurture

Variables	Market penetration	Product development	Market development	Diversification	Internal growth strategies
Human Capital	0.865**	0.769**	0.983**	0.963**	0.969**
Structural Capital	0.812**	0.811**	0.751**	0.899**	0.885**
Relational Capital	0.817**	0.707**	0.771**	0.814**	0.838**
Intellectual Capital	0.883**	0.811**	0.889**	0.950**	0.954**

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

Table 2: Pearson correlation.

Model	R	R ²	Beta	t	Sig
1	0.954	0.911	0.9549	35.867	0.000

Dependant variable: Internal growth strategies.

*The effect is statistically significant at the level ($P \leq 0.05$).

Table 3: Regression results of intellectual capital and internal growth strategies.

Variable	R	R ²	F-Calculated	Sig.	B	Beta (β)	t	Sig.
Intellectual Capital	0.883	0.780	446.204	0.000	0.798	0.883	21.124	0.000
Human Capital	0.865	0.749	375.403	0.000	0.708	0.865	19.375	0.000
Structural Capital	0.812	0.660	244.721	0.000	0.669	0.812	15.644	0.000
Relational Capital	0.817	0.668	253.687	0.000	0.753	0.718	15.928	0.000

Dependant variable: Market penetration strategy.

*The effect is statistically significant at the level ($P \leq 0.05$).

Table 4: Intellectual capital dimensions and market penetration strategy.

Variable	R	R ²	F-Calculated	Sig.	B	Beta	t	'Sig.
Intellectual Capital	0.811	0.658	242.239	0.000	0.977	0.811	15.564	0.000
Human Capital	0.769	0.592	182.568	0.000	0.839	0.769	13.512	0.000
Structural Capital	0.811	0.658	242.109	0.000	0.890	0.811	15.560	0.000
Relational Capital	0.707	0.500	125.923	0.000	0.868	0.707	11.222	0.000

Dependant variable: Product development strategy.

*The effect is statistically significant at the level ($P \leq 0.05$).

Table 5: Intellectual capital dimensions and product development strategy.

Variable	R	R ²	F-Calculated	Sig.	B	Beta	t	'Sig.
Intellectual Capital	0.889	0.790	474.817	0.000	1.030	0.889	21.790	0.000
Human Capital	0.983	0.967	3689.083	0.000	1.032	0.983	60.738	0.000
Structural Capital	0.751	0.564	162.959	0.000	0.793	0.751	12.766	0.000
Relational Capital	0.771	0.595	185.262	0.000	0.912	0.771	13.611	0.000

Dependant variable: Market development strategy.

*The effect is statistically significant at the level ($P \leq 0.05$).

Table 6: Intellectual capital dimensions and market development strategy.

Variable	R	R ²	F-Calculated	Sig.	B	Beta	T	'Sig.
Intellectual Capital	0.950	0.902	1156.800	0.000	1.039	0.950	34.012	0.000
Human Capital	0.963	0.927	1609.353	0.000	0.955	0.963	40.117	0.000
Structural Capital	0.899	0.809	533.642	0.000	0.896	0.899	23.101	0.000
Relational Capital	0.814	0.662	246.746	0.000	0.908	0.814	15.708	0.000

Dependant variable: Diversification strategy.

*The effect is statistically significant at the level ($P \leq 0.05$).

Table 7: Intellectual capital dimensions and diversification strategy.

and develop its resources and capabilities in order to avoid strategic surprises, and because Intellectual Capital has a deep tacit rooted knowledge that cannot easily imitate by rivals and competitors, therefore organizations strategically think of its growth and development and see the future as it is happening today, of course, such a strategic orientation required strategic leaderships, who are possessing well capabilities, skills, experiences, and core competencies, that would have a vision identical with organizational visions, missions, and objectives. Many studies have agreed that Intellectual Capital is the most vital and strategic resource could be achieving organizational strategic orientations, but fortunately, in order to accomplish this, organizations must adherently looking for strategic leaderships who would be able to build infrastructure of this orientations by focusing on employees and Intellectual Capital to think strategically and build successful succession planning for achieving organizations strategies. Therefore, studies could be conducted to examine the triangle of knowledge management, Intellectual Capital and growth strategies as whole for multinational corporations, transitional-organizations, and trans-organizations.

References

1. Piotr W (2015) Exploring links between dynamic capabilities perspective and resource-based view: A literature overview. *International Journal of Management and Economics* 45: 83-107.
2. Theriou NG, Aggelidis V, Theriou GN (2009) A theoretical framework contrasting the resource-based perspective and the knowledge-based view. *European Research Studies* 12: 177-190.
3. Ibrahim Y (2011) Intellectual Capital: A competitive asset for driving innovation in engineering design firms. *Engineering Management Journal* 23: 3-16.
4. Savolainen T, Lopez-Fresno P (2013) Trust as intangible asset for enabling intellectual capital development by leadership for vitality and innovativeness. *The Electronic Journal of Knowledge Management* 11: 244-255.
5. Doz Y, Kosonen M (2010) Embedding strategic agility. *Long Range Planning* 43: 370-382.
6. Weber Y, Tarba S (2014) Strategic Agility: A state of the art: Introduction to the special section on strategic agility. *California Management Review* 56: 5-12.
7. Teece D (2012) Dynamic capabilities: Routines versus entrepreneurial action. *Journal of Management Studies* 49: 1395-1401.
8. González-Loureiro M, Dorrego PF (2012) Intellectual capital and system of innovation: What really matters at innovative SMEs. *Intangible Capital* 8: 239-274.
9. Stewart T (1997) *Intellectual capital: The new wealth of organizations*. New York, NY: Doubleday Dell Publishing Group 37: 56-59.
10. Stewart T (2003) *The wealth of knowledge: Intellectual capital and the twenty-first century organization*. New York, NY: Doubleday Dell Publishing Group.
11. Kristandl G, Bontis N (2007) Constructing a definition for intangibles using resourced based view of the firm. *Management Decision* 45: 1510-1524.
12. Survilaitė S, Tamošiūnienė R, Shatreich V (2015) Intellectual capital approach to modern management through the perspective of a company's value added. *Business: Theory and Practice* 16: 31-44.
13. González-Loureiro M, Dorrego PF (2010) Intellectual capital on regional innovation systems: toward the momentum of growth rates of business performance. *International Journal of Transitions and Innovation Systems* 1: 82-99.
14. Hamzah N, Ismail MN (2008) The Importance of intellectual capital management in the knowledge-based economy. *Contemporary Management Research* 4: 237-262.
15. Xiaobo W, Sivalogathan V (2013) Intellectual capital for innovation capability: a conceptual Model for innovation. *International Journal of Trade, Economics and Finance* 4: 139-144.
16. Khalique M, Shaari J, Isa AH, Alkali M (2012) Intellectual capital and banking sector of Pakistan. *International Journal of Research in Commerce, Economics, and Management* 2: 1-4.
17. Sharabathia ADA, Nour AN, Shamari NS (2013) The impact of intellectual capital on Jordanian telecommunication companies' business performance. *American Academic & Scholarly Research Journal* 5: 32-46.

18. Hormiga E, Batista-Canino RM, Sánchez-Medina A (2011) The role of intellectual capital in the success of new ventures. *International Entrepreneurship and Management Journal* 7: 71-92.
19. Ngugi JK, Gakure RW, Susan WM, Ngugi PK, Robinson KC (2012) Influence of intellectual capital on the growth of small and medium enterprises in Kenya. *Journal of Business and Marketing Management* 1: 11-19.
20. Ekwe MC (2013) The Relationship between intellectual capitals and growth in revenue of deposit money banks in Nigeria. *Research Journal of Finance and Accounting* 4: 55-65.
21. Hussain S, Khattak J, Rizwan A, Latif MA (2013) ANSOFF matrix, environment, and growth-an interactive triangle. *Management and Administrative Sciences Review* 2: 196-206.
22. Lak L (2013) Effects of intellectual capital on the real growth rate of companies accepted in Tehran stock exchange. *Journal of Novel Applied Sciences* 2: 1049-1053.
23. Ngwenya B (2013) Intellectual capital's leverage on shareholder value growth: A lesson for developing economies. *American Journal of Educational Research* 1: 149-155.
24. Alkshali SJ (2006) The impact of power sources of top management on the selection of growth strategy: Field study on Jordanian banks. *The Jordan Journal of Business Administration* 2: 96-114.
25. Rono JK, Moronge M (2015) Effect of growth strategies on the competitiveness of firms in Kenyan cement industry: A case study of EAST African Portland Cement Company Limited. *The Strategic Journal of Business Change and Management* 2: 1737-1774.
26. Jordan CMF, González-Loureiro M (2013) Human capital as source for sustained competitive advantages in SMEs: A core competencies approach. *Economia Seria Management* 16: 55-276.
27. Helm-Stevens R, Brown KC, Russell JK (2011) Introducing the intellectual capital interplay model: Advancing knowledge frameworks in the not-for-profit environment of higher education. *International Education Studies* 4: 126-140.

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