

STRATEGIC MANAGEMENT TOOLS AND TECHNIQUES: EVIDENCE FROM JORDANIAN MANUFACTURING COMPANIES LISTED ON AMMAN STOCK EXCHANGE

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ABSTRACT

This paper explores the knowledge and understanding of utilization level of strategic management tools and methods at Jordanian manufacturing companies listed on Amman Stock Exchange (ASE) and nature of its relationship with some organizational characteristics. Researchers provided literature review on the strategic management processes, tools, and techniques in both developed and developing markets and collected data via a survey form, which was distributed on top management of the (86) manufacturing companies included in this study and obtained (62) of those as valid responses, representing a response rate of (72%). Main results of this research indicate that Jordanian manufacturing companies have inconsistent levels of knowledge about strategic management tools and techniques and engage in strategic management processes using various tools and techniques, where the most knowledgeable tools used by Jordanian manufacturing companies are TQM, SWOT Analysis, 5-forces Porter model, PEST Analysis, and CRM. Results revealed that TQM, CRM, Financial Analysis for Companies Owners (FACO), PEST Analysis, CSF Analysis, Scenario Analysis, and 5-forces Porter model to be mostly used tools and techniques. Results also revealed that company's size has a positive relationship on the use and awareness of strategic management tools and techniques while the company's age shows less relationship. This study provides empirical evidence on the use and understanding of tools and techniques related to management strategies at the manufacturing firms in emerging markets.

Keywords: Strategic Management, Strategic Management Tools, Strategic Management Techniques, Jordanians Manufacturing Companies

INTRODUCTION

In an extremely frustrating and unstable environment, organizations become more future-oriented and pursue success for their activities by creating a unique strategic and competitive position that ensures existence, growth, and competitive advantage which requires organization managers and employees in different activities to have a long-term vision for dealing with changes and forces in the business environments, and to survive and compete by implementing management processes using new philosophies, tools, techniques, and methodologies that help managers to develop and improve their performance and capabilities, as well as using creativity to imagine multiple alternatives for developing unique strategies and action programs. According to (Ibdah, 2018); in order to compete in the future most business firms seek to achieve success in their activities and create distinctive strategies and competitive positions that ensure existence and expansion in the business environment. Consequently, this has increased the need to adapt and use strategic management which could contribute to the Jordanian manufacturing industrial sector and to other organizations that face today's competitive challenges; regardless of their age and size, especially with the existence of Covid-19 Pandemic. The strategic management processes have been investigated by many authors; to some extent and at different views using methods from numerous conceptual models, such as (Bellamy, et al., 2019; Albana, et al., 2017; Ivančić, et al., 2017; Afonina, 2015; Rajasekar & Al Raei, 2014; Porter, 2008; Al-

Shammari and Hussein, 2008; Elbanna, 2008; Aldehayyat & Anchor, 2008; De Wit & Meyer, 1998; Al-Shaikh & Hamami, 1994; Hart, 1992; Bracker & Pearson, 1986). Even though strategy theoreticians supported the use of strategic management tools and techniques as critical elements of strategic management processes, there have been insufficient experimental studies to report strategic management tools and techniques utilization at developing and Arab World countries; mostly in Jordan (Al-Shammari & Hussein, 2008; Elbanna, 2008). The study of Al-Shaikh & Hamami (1994) stated that Jordanian manufacturing companies utilized strategic management and organization managers possess strong positive attitudes toward the implementation of strategic management. In addition, these researches did not measure the use of Strategic Management Tools and Techniques, and did not show if these businesses have good understanding of used tools. A review of literature indicates that most of empirical researches conducted in Developed Countries reported Tool and Technique Utilization as part of more comprehensive research on Strategic Management Processes (Bellamy, et al., 2019; Albana, et al., 2017; Afonina, 2015; Afonina & Chalupsky, 2013; Glaister & Falshaw, 2009; Afonina & Chalupsky, 2012; Stonehouse & Pemberton, 2002; Miller & Cardinal, 1994). Therefore, in concern to the gap given above between the knowledge about strategic management tools and techniques and their usage by Jordanian firms, the current study aims to (a) explore the knowledge level of strategic management tools and techniques (b) explore the awareness and utilization level of strategic management tools and techniques (c) determine the correlation between company's characteristics, such as size and age, and the utilization of strategic management tools and techniques in the context of Jordanian manufacturing companies and essential tools and techniques for their companies.

BACKGROUND

Strategic Management

Although many definitions of the term strategic management are used ambiguously in the literature concerning the strategy field, there is no commonly accepted one, making it impossible to differentiate between the concepts of strategic planning, strategic learning, strategic thinking, and strategic management (Stonehouse & Pemberton, 2002). Authors have been investigating Strategic Management for sometimes but it relatively considers new academic discipline (Nerur, et al., 2008). The origin of strategic management approach can be traced to the beginning of 1960s (Herrmann, 2005) and was developed in the 1980s; in term of its concept (Hussey, 1997; Taylor, 1997). The world rapid changes require real-world methodology to strategy and strategists, where researchers become more interested in the way managers improve their strategies (Whittington, 1996). The term of Strategic Management grew from a simple method that offers solutions to executive issues into a precise pursuit for knowledgeable grounds within extrapolative and descriptive values (Furrer, et al., 2008). According to (Johnson, et al., 2008), the Strategic Management Methodology contains an understanding of things; such as whole strategic state of businesses in the environment, expectations of shareholders, and strategic competencies to generate strategic selections for the future and executing those strategies. (Gluck, et al., 1982) believe that Strategic Management relates to particular processes which link decision-making and strategic planning to day-to-day business operations' management. According to (Wheelen & Hunger, 2008) and (Mason, 1986), Strategic Management Processes are a set of managerial decisions and activities that achieve business lasting performance and involve scanning internal and external environments, formulating strategies, and executing strategy, assessment, and control. In the same context, strategic management is defined as selecting strategies based on the analyses of internal and external environments to achieve a competitive advantage and planning how to approach those strategies and implement the plans (Malan, 2010). For this study, the term strategic management can be conceptualized as a set of frameworks and theories supported by techniques and tools

created to help organization managers plan, think, and behave strategically (Stonehouse & Pemberton, 2002).

Strategic Management was criticized on grounds of its concept and effectiveness based upon theoretical ideals and not on realities of management (Berry, 1998), where main criticisms related to some empirical studies argued persuasively that procedures of formal Strategic Management are mainly unsuitable for small businesses; which have neither management nor financial resources to participate in collaborative Strategic Management Tools & Techniques. Strategic Management also criticized for its inappropriateness for organizations operating in unsettled environment, which contain high technology industries and undergo fast changing conditions that make environmental projection useless and long-range planning value questionable (Berry, 1998; Covin & Slevin, 1989). Recently, there has been a growing interest and new research on using strategic management tools and techniques by small businesses (Bellamy, et al., 2019; Wolf & Floyed, 2017; Devins, et al., 2016). This interest is increasingly motivated by the challenges facing small businesses in turbulent and competitive environments dominated by large organizations (Bellamy et al., 2019; Hodgkinson and Starkey, 2011). Moreover, small business enterprises can play an essential role in the growth of economies and lead countries to increase levels of competitiveness (Bellamy, et al., 2019; Kirby, 2013; Pickernell, et al., 2013; Hotho & Champion, 2011). Nowadays, strategic management is considered a fundamental approach for firms working in highly changing environments to succeed and is highly regarded since it provides firms with an essential direction to anticipate and respond to future changes (Demir & Ugurluoglu, 2019). Therefore, refining the implementation and quality of Strategic Management Education is perceived as a technique that increase management practices (Albana, et al., 2017; Grant, 2008; Jarzabkowski & Whittington, 2008; Whittington, et al., 2003), where the employment of Strategic Management Tools and Techniques in organizations should be seen as a Practice-Based Context (Albana, et al., 2017). Many authors underlined the significance of strategic management tools and techniques; as supported mechanisms for decision-making processes and improvement of Strategic thinking (Bellamy, et al., 2019; Gunn & Williams, 2007; Clark, 1997; Dyson, 1990; Langley, 1988).

The advantages of strategic management are potentially many but cannot be overemphasized, particularly when an organization applies the approach properly. According to (Wheelen, et al., 2014; Dauda, et al., 2010; Thompson & Strickland, 2007; Wilson, 1994) Strategic Management benefits include a clear sense of an organization's strategic vision to keep executives and organizational members more focused on new dynamic changes that happen in the environment, and also more alert to opportunities and threats that undergo in an increasingly changing environment. In addition, Strategic Management concentrates more on strategically significant things, such as stages of planning and implementation processes, helping managers and organizational members in overcoming risks and uncertainties which will contribute to achieving organizational success, and promoting the development of a constantly evolving business model which will create continuous profitability for the firm.

Strategic Management Tools & Techniques

To understand the essence of Strategic Management Tools & Techniques it is crucial to explain its concepts. Even though researchers and practitioners have increasingly paid much interest to Strategic Management Tools & Techniques and used them widely, there is no clear or accepted definition of the concept (Afonina & Chalupsky, 2013). Therefore, for this study and as a strong understanding of Strategic Management Tools & Techniques researchers will use term introduced by (Afonina & Chalupsky, 2013; Afonina & Chalupsky, 2012) who stated that Strategic Management are different tools & techniques that aims to support organization executives; in all phases of Strategic Management beginning with strategic management stage, then strategic choice, and ending with implementation. According to Nakayama (2018), Strategic Management Tools & Techniques are also called by academics and strategists "strategic analysis

tools and techniques”, “business management tools and techniques”, “strategic management tools and techniques”, and “strategic planning tools and techniques”.

In general, implementing Strategic Management Tools & Techniques could bring many advantages to organizations experiencing disorders, where executive managers have a strong understanding of existing tools and techniques (Elbanna, et al., 2020; Albana, et al, 2017; Nouri & Soltani, 2017; Afonina & Chalupsky, 2013; Afonina & Chalupsky, 2012; Spee & Jarzabkowski, 2009; Aldehayyat & Anchor, 2008; Gunn & Williams, 2007; Frost, 2003; Clark, 1997; Hussey, 1997; Webster, 1989). Tools and techniques have advantages such as solving practical problems, delivering diversity by creating various points of view, increasing executive awareness of the business environment and improving communication processes, reducing risks related to essential decisions making and actions, solving a wide range of strategic problems, and increasing efficiency. In addition, strategic tools can help to improve executive managers' analytical and diagnostic skills, help to raise awareness of strategic issues, and help in the presentation of complex problems. Finally, (Afonina, 2015) stated that Strategic Management Tools & Techniques consider powerful devices which support managers in developing anticipated solutions to problems inside the firm.

According to many authors in literature (Demir & Ugurluoglu, 2019; Albana, et al., 2017; Rigby & Bilodeau, 2013; Afonina & Chalupsky, 2012; Aldehayyat & Anchor, 2008; Vaitkevicius, 2007; Frost, 2003; Clark & Scott, 1999; Hussey, 1997; Dyson, 1990), there are many tools, techniques, models, approaches, methods that exist to aid decision making through the process of strategic management, but no precise number of these tools and techniques that emerged from the analysis of these studies. Literature shows that a number of Strategic Management Tools & Techniques have constantly expanded along with new tools, where several authors presented a valuable list of these tools and techniques (Afonina & Chalupsky, 2012). For example, Afonina & Chalupsky (2012) studied thirty-one tools and techniques, Hussey (1997) in his study concentrated on fifty tools, Rigby & Bilodeau (2013) covered twenty-five, and Vaitkevicius (2007) focused on twelve tools while Clark (1997) studied sixty-six strategic management tools and techniques and mainly used thirty-three of them. The current study focused on eighteen tools and techniques that were acknowledged in literatures, which consist of TQM, CRM, FACO, PEST Analysis, Outsourcing, CSF Analysis, Scenario Analysis, 5-Forces Porter Analysis, Core Competence Analysis, Stakeholder Analysis, SWOT Analysis, Balanced Scorecard, Organizational Culture Analysis, Value Chain Analysis, Strategic Planning, HR Analysis, Benchmarking, and the Portfolio Method.

Few researchers fully studied the utilization of tools and techniques related to strategic management, where Aldehayyat (2011) examined the strategy's tools and techniques of Jordanian hotels, and revealed that mostly common employed tools and techniques were 5-Forces Porter Analysis, SWOT Analysis, PEST Analysis, and FACO while it indicated that less regularly used tools were Core Competence Analysis and Value Chain Analysis. Elbanna (2007) conducted a study on Egyptian firms and indicated that most regularly utilized tools and techniques include Cost Benefit Analysis, Benchmarking, Pro Forma Financial Statements, SWOT, Portfolio Analysis, CSF, Competitor Analysis, and Product Life Cycle while it revealed smaller focus on Experience Curve Analysis, PEST Analysis, Value Chain Analysis, 5-Forces Porter Analysis, Balanced Scorecard, and Cognitive Mapping.

Al Ghamdi (2005) conducted a study on the importance of strategy tools and techniques in Saudi Arabian companies, and reported that most frequently utilized tools and techniques were CSF, Benchmarking, and What-If Analysis while it shows moderate use of SWOT, Product Life Cycle, and Stakeholder Analysis but it revealed a low use of the Value Chain Analysis, Experience Curve, Portfolio Analysis, and 5-Forces Porter Analysis.

STUDY POPULATION & SAMPLE

Population & Sample

The study society and sample both consists of all (86) manufacturing companies listed on ASE (Ghauri & Gronhaug, 2010), where the rational reason for selecting all (86) industrial companies listed on ASE was that Jordanian manufacturing companies are critical drivers of the Jordanian economy and one of the largest employers. Information about targeted companies were obtained according to the Jordanian shareholding companies via an official visit to ASE, where the primary method of data collection represented in a self-administered questionnaire sent to the top management of each company, such as chief executive manager, deputy manager, or general manager due to believes that top management would be the most knowledgeable and proper level that offer an effective reaction to strategic management tools and techniques (Shahul Hameed, et al., 2021; Aldehayyat, et al., 2011; Gunn & Williams, 2007; Bart, et al., 2001). (62) responses from the (86) distributed questionnaires were valid and proper for the study purposes with an active response rate of (72%), which considers reasonable compared to similar studies and according to (Saunders, et al., 2009) response rate between (30%-50%) is a typical rate for hand-delivered and hand-collected questionnaires.

Respondents Profile

(51.6%) of the (62%) participants were over 40 years of age and (100) of those were male, (93.5%) had greater than 10 yrs. of working experience at their present jobs, and (93.6%) of them had bachelor degrees or higher. (32.3%) of the (62) participants were chief executive managers, (30.6%) were general managers, and (37.1%) were deputy managers. Researchers categorized the participating companies into two groups; one according to company size and the other according to company age where (46.8%) of respondents represent big companies which contain more than (100) employees, (37.8%) represent medium-sized companies with (61-100) employees, and (14.5%) represent small companies with less than (60) employees. Finally, statistics showed that (77.4%) of responding companies were established after 1974, and (22.6%) were established before 1947. In the current study, researchers used number of employees as a measurement for company size, which comes in agreement with some studies in the field of strategy (Al-Marshad, 2019; Aldehayyat & Anchor, 2010; Stonehouse & Pemberton, 2002).

RESULTS

Table (1) shows findings of responding companies about Strategic Management Tools and Techniques, where highest knowledgeable tool is TQM with a mean of (4.29), followed by SWOT Analysis with (3.90), 5-Forces Porter Analysis with (3.76), PEST analysis with (3.74), CRM with (3.69), Strategic Planning with (3.63), and Value Chain Analysis with (3.61), respectively. Study results showed a moderate knowledge of tools, such as Core Competence Analysis with a mean of (3.37), Outsourcing at (3.34), Benchmarking at (3.27), CSF at (3.18), HR at (3.16), Stakeholder Analysis at (3.10), and Financial Analysis for Companies' Owners with (3.08) while findings indicated that respondents had less knowledge about other tools, such as Scenario Analysis with a mean of (2.92), Organizational Culture Analysis with (2.71), Balanced Scorecards with (2.71), and Portfolio Method with (2.61), respectively by these companies.

Table 1

KNOWLEDGE ABOUT STRATEGICMANAGEMENT TOOLS AND TECHNIQUES		
Tools/Techniques	Mean	SD
Total Quality Management (TQM)	4.29	0.710
Customer Relationships Management (CRM)	3.69	0.759
Financial Analysisfor Companies Owners (FACO)	3.08	0.775
PEST Analysis	3.74	1.436
Outsourcing	3.34	1.437
Critical Success Factors (CSF)Analysis	3.18	1.287
Scenario Analysis	2.92	1.149
5-Forces Porter Analysis	3.76	1.019
Core Competence Analysis	3.37	0.891
Stakeholder Analysis	3.10	1.097
SWOT Analysis	3.90	1.051
Balanced Scorecard	2.71	0.857
Organizational Culture Analysis	2.71	1.092
Value Chain Analysis	3.61	0.912
Strategic Planning	3.63	0.752
Human Resource (HR)Analysis	3.16	0.944
Benchmarking	3.27	0.772
Portfolio Method	2.61	0.894

Table (2) presents the employment of Strategic Management Tools and Techniques, where TQM is the most commonly used tool, followed by CRM, FACO, PEST Analysis, Outsourcing, CSF Analysis, Scenario Analysis, 5-Forces Porter, and lastly the Core Competence Analysiswhich reveals the interest of these companies in external environmental analysis. Finally, findings showed less focus on tools such as Stakeholder Analysis, SWOT Analysis, Balanced Scorecard, Organizational Culture Analysis, and Value Chain Analysis.

Table 2 STRATEGIC MANAGEMENT TOOLS AND TECHNIQUES UTILIZED BY RESPONDING COMPANIES		
Tools/Techniques	Frequency	Rank
TQM	32	1
CRM	31	2
FACO	29	3
PEST	27	4
Outsourcing	26	5
CSFAnalysis	25	6
Scenario Analysis	25	6
5-Forces Porter Analysis	24	8
Core Competence Analysis	23	9
Stakeholder Analysis	22	10
SWOT	21	11
Balanced Scorecard	17	12
Organizational Culture	17	12
Value Chain	15	14
Strategic Planning	14	15
HR Analysis	13	15
Benchmarking	13	17
Portfolio Method	13	18

Table (3) presents Strategic Management Tools and Techniques that participantshad knowledgeabout but it werenot utilized by companies. The most common tools and techniques that Jordanian manufacturing companies were knowledgeableabout but did not use werethePortfolio Method, Organizational Culture Analysis, Strategic Planning, Stakeholder Analysis,5-Forces Porter Analysis, FACO, Benchmarking, andPEST Analysis.

Tools/Techniques	Frequency	Rank
Portfolio method	32	1
Organizational culture analysis	31	2
Strategic planning	31	2
Stakeholder analysis	28	4
5-Forces Porter	27	5
FACO	26	6
PEST	26	6
Benchmarking	26	6
TQM	25	9
CSF Analysis	25	9
Scenario analysis	25	9
CRM	24	12
Outsourcing	22	13
HR analysis	22	13
Core competence analysis	22	13
Balanced scorecard	18	16
SWOT	17	17
Value chain analysis	16	18

For further analysis, researchers used Pearson Correlation Coefficient to investigate relationship between utilization of Strategic Management Tools; from one side and age and size of Manufacturing Companies; on the other side where researchers investigated all (18) tools. Table (4) reveals a significant correlation between Strategic Management Tools and Techniques use and company's size; for all except for three tools which are Benchmarking, Organizational Culture Analysis, and Stakeholder Analysis. In addition, table (4) indicates a significant relationship between Strategic Management Tools and techniques' utilization and company's age; for seven tools namely TQM, CRM, FACO, 5-Forces Porter Analysis, HR Analysis, Benchmarking, and Scenario Analysis.

No.	Tools	Pearson p (1-tailed) r (p)	
		Company Size	Company Age
1	TQM	0.236*(0.032)	0.217*(0.045)
2	CRM	0.271*(0.017)	0.283*(0.013)
3	FACO	0.255*(0.023)	0.247*(0.020)
4	PEST Analysis	0.356**(0.002)	0.152(0.119)
5	5-Forces Porter Analysis	0.219*(0.044)	0.293*(0.011)
6	CSF Analysis	0.227*(0.038)	0.063(0.314)
7	Core Competence Analysis	0.408**(0.000)	0.148(0.126)
8	SWOT Analysis	0.217*(0.045)	0.033(0.399)
9	Balanced Scorecard	0.241*(0.030)	0.122(0.173)
10	Value Chain Analysis	0.418**(0.000)	0.160(0.047)
11	HR Analysis	0.228*(0.037)	0.233*(0.034)
12	Benchmarking	0.108(0.203)	0.219*(0.044)
13	Strategic Planning	0.273*(0.016)	0.040(0.379)
14	Portfolio Method	0.364**(0.002)	0.054(0.337)
15	Organizational Culture Analysis	0.018(0.444)	0.018(0.444)
16	Stakeholder Analysis	0.076(0.246)	0.026(0.422)
17	Scenario Analysis	0.317**(0.006)	0.256*(0.022)
18	Outsourcing	0.265*(0.019)	0.014(0.458)

Table (5) presents the most essential Strategic Management Tools and Techniques for Jordanian Manufacturing Companies, which are CSF with mean of (3.90), 5-Forces Porter Analysis at (3.77), Core Competence Analysis at (3.71), Stakeholder Analysis at (3.71), and CRM at (3.58). On the contrary, results showed that least important techniques for participating companies were HR Analysis with mean of (2.74), Value Chain Analysis at (2.61), SWOT Analysis at (2.55), Portfolio Method at (2.48), and Benchmarking at (2.42).

Tools/Techniques	Mean	SD
CSF Analysis	3.90	1.799
5-Forces Porter Analysis	3.77	1.859
Core Competence Analysis	3.71	1.885
Stakeholders Analysis	3.71	1.885
CRM	3.58	1.929
Scenario Analysis	3.52	1.948
Outsourcing	3.52	1.948
Organizational Culture Analysis	3.52	1.948
TQM	3.45	1.964
FACO	3.45	1.964
Balanced Scorecard	3.32	1.990
PEST Analysis	3.19	2.007
HR Analysis	2.74	1.999
Value Chain Analysis	2.61	1.978
SWOT	2.55	1.964
Portfolio Method	2.48	1.948
Strategic Planning	2.48	1.948
Benchmarking	2.42	1.929

For more analysis, researchers calculated the Pearson Correlation Coefficient to define if any relationships existed for participants between most important Strategic Management Tools and Techniques, and company's size and age. Table (6) shows that relationship between most important tools and the company's size is statistically significant for six Strategic Management Tools; namely FACO with a Correlation of (0.264) at (0.01) level, SWOT Analysis with a Correlation of (0.240) at (0.01) level, Portfolio Method with a Correlation of (0.338) at (0.01) level, Organizational Culture Analysis with a Correlation of (-0.218) at (0.01) level, Stakeholder Analysis with Correlation of (0.238) at (0.01) level, and lastly Scenario Analysis with a Correlation of (-0.391) at (0.01) level. In addition, the relationship between most important Strategic Management Tools for respondents and company's age is statistically significant for TQM with a Correlation of (-0.221) at (0.01) level and Stakeholder Analysis with a Correlation of (-0.248) at (0.01) level.

No.	Tools/Techniques	Pearson p (1-tailed) r (p)	
		Company's Size	Company's Age
1	TQM	0.060(0.313)	-0.221*(0.042)
2	CRM	-0.205(0.055)	0.152 (0.119)
3	FACO	0.264*(0.019)	-0.082(0.416)
4	PEST Analysis	0.160(0.047)	0.089(0.245)
5	5-Forces Porter Analysis	-0.097(0.227)	-0.088 (0.249)
6	CSF Analysis	-0.068(0.300)	0.192(0.068)
7	Core Competence Analysis	0.085 (0.255)	-0.163 (0.103)
8	SWOT Analysis	0.240*(0.030)	0.054(0.338)
9	Balanced Scorecard	0.078(0.273)	0.111(0.196)

10	Value Chain Analysis	0.082(0.263)	0.096(0.230)
11	HR Analysis	-0.089(0.246)	-0.072(0.290)
12	Benchmarking	-0.099(0.222)	0.074(0.284)
13	Strategic Planning	0.070 (0.292)	-0.094(0.234)
14	Portfolio Method	0.338**(0.004)	-0.144(0.132)
15	Organizational Culture Analysis	-0.218*(0.044)	0.206(0.031)
16	Stakeholder Analysis	0.238*(0.031)	-0.248*(0.026)
17	Scenario Analysis	-0.391**(0.001)	-0.171(0.092)
18	Outsourcing	0.094(0.234)	-0.098(0.225)

DISCUSSIONS & CONCLUSIONS

Discussion

Findings of the present study indicate that Jordanian manufacturing companies have varying knowledge about the examined Strategic Management Tools & Techniques, where results indicate most knowledgeable tool to be TQM. For instance, this tool is common in Turkey (Demir & Ugurluoglu, 2019), and in the Slovenian and Croatian companies (Nedelko, et al., 2015), as well as in Ireland (Cullen, et al., 2004), while Aldehayyat & Anchor (2008) did not measure utilization of this technique in their Jordanian study. Study findings showed that SWOT, Porter 5-Forces, PEST Analysis, and CRM are most knowledgeable tools that received a high rank. These outcomes are consistent with (El Shennawy & Ibrahim, 2020; Demir & Ugurluoglu, 2019) studies of Turkish hospitals, which found that hospitals have considerable knowledge of Strategic Management Tools that reflect attention to external environmental factor analysis. Jordanian Manufacturing Companies are least knowledgeable about Scenario Analysis, Balanced Scorecard, Organizational Culture Analysis, and Portfolio Method. These results are in line with (Demir & Ugurluoglu, 2019) study, which presented that Turkish companies have less Strategic Management Techniques knowledge to create a starting point for their Strategic Management Practices.

Findings showed that most regularly utilized Strategic Management Tool is TQM, where the use of TQM is more popular in most Manufacturing Companies in Jordan, Turkey, Slovenia, Croatia, Egypt, and Iran (Demir & Ugurluoglu, 2019; El-Said & ElMakkawy, 2017; Nouri & Soltani, 2017; Nedelko, et al., 2015, Kalkan & Bozkurt, 2013; Şentürk, 2012).

Research results show extensive use and satisfaction of CRM from Jordanian Manufacturing Companies, which agree with (Almarshad, et al., 2020) study results of Jordanian Telecommunications Companies, (Demir & Ugurluoglu, 2019) study of Turkish Companies, and (El-Said & ElMakkawy, 2017) study of Egyptian firms, which reflect that both countries gave more importance to CRM, as well as (Şentürk, 2012) study of hotel industry in Turkey. However, the current study differs from (Nedelko, et al., 2015) study which found less use and satisfaction of CRM by Slovenian and Croatian Companies.

Research findings point out that tools like FACO, PEST Analysis, CSF Analysis, Scenario Analysis, and Porter 5-Forces received a high ranking on utilization and satisfaction by these companies, which reveals their interest in using external tools analysis to examine the competitive environment of the industry. These outcomes came in consistent with (Aldehayyat, et al., 2011) study of Jordanian Hotels, (Tassabehji & Isherwood, 2014) study of Strategic Management Tools and Techniques in different geographical locations of the world, (Dincer, et al., 2006) study of Turkish firms and (Glaister & Falshaw, 1999) study of UK firms which reflects that all firms from different countries gave more attention to the external environment and are aware of the importance of using these tools in their companies. (Gunn & Williams, 2007) did not investigate utilization of PEST Analysis but they found that SOWT Analysis was most regularly utilized technique in their study on UK firms.

Study findings indicate low awareness and low focus on utilizing internal analysis by these companies to assess the competencies and resources of organizations from a strategic view, such as HR Analysis, Balanced Scorecard, Organizational Culture Analysis, Value Chain

Analysis, Benchmarking, and Portfolio Method, where these findings are in line with earlier studies of Jordanian Hotels (Aldehayyat, 2011), Turkish Companies (Dincer, et al., 2006), Greek Companies (Koufopoulos, et al., 2005), and UK Companies (Glaister & Falshaw, 1999).

Research results showed that executives of Manufacturing Companies had knowledge about most techniques but they did not actually use all of them, which can be explained by the distinct education level of executives who got their education from developed countries, such as USA, UK, and Canada which could be the reason for high awareness level of those companies in Strategic Management Tools and Techniques. Similarly, results came in line with earlier studies of Jordanian Companies (Aldehayyat, 2011; Aldehayyat & Anchor, 2008), and also in line with (Tassabehji & Isherwood, 2014) study which found that (94%) of responding companies from different countries have high education level and most respondents in the sample reported that management theory was helpful for them. A similar study of (Gunn & Williams, 2007) found a correlation between education level of examined Companies and their use of Strategic Management Tools.

Findings showed that Strategic Management Tools and Techniques were most common at the very large Manufacturing Firms, which can be explained by the superior companies' remarkable human and financial capability (Aldehayyat, et al., 2011). Same findings reported in previous studies of (Aldehayyat, et al., 2011), (Aldehayyat, 2011), (Aldehayyat & Anchor, 2008), (Elbanna, 2007). In addition, (Stonehouse & Pemberton, 2002) revealed that tools at Jordanian, Egyptian, and UK firms utilized higher than medium and small-sized one.

Research results showed relatively few emphases about using Balanced Scorecard, Value Chain Analysis, and Strategic Planning. These findings support previous results of the (Afonina, 2015) study, which indicated that Czech Republic Companies showed little utilization of Balanced Scorecard and Value Chain Analysis. In addition, Aldehayyat (2011) found little focus on internal company analysis tools, such as Strategic Planning, Value Chain Analysis, and Organizational Culture Analysis, where results showed that Jordanian Manufacturing Companies do not use Organizational Culture Analysis. Similar findings have been reported among business organizations in earlier studies (Aldehayyat, et al., 2011; Glaster, et al., 2009; Aldehayyat & Anchor, 2008; Glaster & Falshaw, 1999). On the contrary, findings showed lower use of techniques such as HR Analysis, Benchmarking, and Portfolio Methods. The research investigation also found that responding companies were mostly unaware of their Value Chain Analysis.

Study findings indicated a positive relationship between company's size and use of Strategic Management Tools and Techniques; except for three tools which are Benchmarking, Organizational Culture Analysis, and Stakeholder Analysis which in line with (Aldehayyat, et al., 2011) study about Jordanian Hotels.

Study findings showed that company's age don't significantly impact the use of Strategic Management Tools and Techniques, which is similar to results obtained in earlier studies about Jordanian Hotels (Aldehayyat, et al., 2011) and about small business firms in Bangladesh (Abdul Moyeen, 1997) that showed nonexistence of relationship between Strategic Management Processes and company's age. The possible explanation for this finding could be related to manufacturing companies' ability to examine external environment, which may be linked to company's age where the newest manufacturing companies recruit human resources who have long experiences or it may be related to the knowledge about strategic management field that has been developed worldwide. In addition, results indicated insignificant statistical differences between company's age and most important Strategic tools of Manufacturing Companies, and as an example (Abdul Moyeen, 1997) study showed nonexistence of differences between Strategic Management Processes and small firms' age in Bangladesh.

Conclusions

Despite the fact that strategy scholars have declared that utilization of Strategic Management Tools and Techniques is an essential method for enhancing competitive advantage and performance in manufacturing companies, there are only few studies to date on strategic management at the manufacturing companies in both emerging markets and developed countries. Researchers made effort in the current study to shed light on the topic of Strategic Management Processes and fill the gap in literature by providing a better understanding of relevant information and knowledge about tools and techniques, nature of this process, its use, and its relationships with specific organizational characteristics at the manufacturing companies in Jordan.

The study explored knowledge of Strategic Management Tools and Techniques, and its utilization at Jordanian manufacturing companies and investigates relationship between company's size and company's age; from one side and the use of Strategic Management Tools and Techniques on the other side. Study also examines correlation between company's size and age and most important Strategic Management Tools of participating companies. It's clear from study results the existence of a gap between Strategic Management Tools and Techniques utilization and managers' knowledge of it, where studied companies have an awareness of most Strategic Management Tools and Techniques but they don't constantly implement it. Executives required at these companies to enhance their knowledge about those tools, techniques, and ways to utilize it by offering training programs and courses that may strengthen the strategic changing processes inside these companies.

Even though outputs of this study have some generalizability but it has some limitations, the first one related to the descriptive nature of this study and the cross-sectional survey method implemented which does not provide the opportunity to investigate; in more depth some areas of Strategic Management Tools and Techniques use at Jordanian manufacturing companies, where in-depth studies that concentrate on a smaller portion of these companies should be used in future research. The second limitation is study focus on Jordanian Manufacturing Companies listed on ASE, which can negatively affect the generalizability of findings about other type of organizations operating outside of ASE such as small and medium size firms, where the relationship between Strategic Management Tools and Techniques, and performance of medium and small-size manufacturing businesses in Jordan should be investigated in future research.

Despite limitations, this study provides findings that help the understanding of knowledge level about Strategic Management Tools and Techniques, and its use at Jordanian Manufacturing Companies. In addition, study provides information related to relationship between Strategic Management Tools and specific organizations' characteristics, such as company age and size.

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