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THE INFLUENCE OF DISRUPTIVE INNOVATION, ORGANISATIONAL CAPABILITIES AND PEOPLE ON ORGANISATIONAL PERFORMANCE AMONG MANUFACTURING BASED COMPANIES IN MALAYSIA

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Abstract
Organisational performance has become the main issue as organisations are struggling for business sustainability. Organisations have not achieved the expected organisational performance in the dynamic environment. This research aims to examine the influence of disruptive innovation, organisational capabilities, and people on organisational performance. A quantitative study was designed, and one hundred and twenty-one (121) data among organisations involved in the manufacturing of electrical and electronics (E&E) products in Malaysia were gathered through a structured questionnaire using stratified sampling techniques. Data gathered were analysed with SPSS software version 24 and Smart Partial Least Squares-Structural Equation Modeling (PLS-SEM) version 3.2.7. The result demonstrated that disruptive innovation, organisational capabilities, and people significantly influence organisational performance. From the academic aspect, the conceptual framework articulated based on the research gap, the I-TOP Strategic Agility model and dynamic capabilities theory provides more insights into optimising organisational performance. In addition, this study measured organisational performance from the perspective of happiness that comprises of employee happiness, customer happiness, and shareholder happiness. Practitioners could utilise this study's findings to formulate a more effective strategy to optimise their organisational performance that is critical for business sustainability.

Research paper

Keywords: Organisational Performance; Disruptive Innovation; Organisational Capabilities; People; I-TOP Strategic Agility Model

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Introduction

Organisational performance is vital to ensure a firm is continuously achieving investment and stays competitive in the dynamic market. However, the organisations have not achieved the organisational performance that is expected. An organisation must be agile enough to react to the changes in customers' requirements, market expectation, market competition, technology advancements, and a changing operating environment to stay competitive and remain a sustainable business. It primarily provides customisation and value-added satisfaction to customers to make customers happy, in return, the organisation will have constant support from its customers. Meanwhile, organisations are competing on the low cost but maintain certain quality for products to enhance their performance (Muthuveloo & Teoh, 2013, 2020)

The unpredictable COVID-19 pandemic has increased scholars' attention to organisational performance (Suh & Lee, 2018; Salamzadeh & Dana, 2020; Gerald et al., 2020; Kawamorita et al., 2020). The COVID-19 pandemic has further enforced that organisational performance is vital for business survival. It causes economic hardship for communities and consumers across the globe. Organisations face different challenges in market demand. Many products' demands have dropped drastically. Most of the organisations face drop and losses in sales. Manufacturing experienced sizeable drops in their businesses (de Caro et al., 2020).

Therefore, organisations need exhaustive strategic objectives and plans for business sustainability. According to Muthuveloo & Teoh (2013), the strategy is a concentrated exertion of energy and time in managing money

to achieve organisational performance towards an organisation's vision and mission. An organisation should have the ability to review its internal resources, which would differentiate the level of organisational performance from competitors. Al-Dhaafri et al. (2013) suggested that internal resources improvement is critical. Implementing innovative and excellent strategies and distinction of an organisation's product could give the firm competitive advantages externally and globally.

However, in today's intense, challenging business environment, the organisational performance of the manufacturing industry has yet to meet the advanced technological standard. The manufacturing industry is not agility enough to react to the dynamic business environment (Salamzadeh et al., 2013; Dana et al., 2021). There is still a gap, and improvement is needed to examine the factors of organisational performance. It has not attained the expected level of organisational performance needed for business sustainability (Doshmanli et al., 2018; Hubert Backhaus & Nadarajah, 2019). Observing that the concept of agility has yet been consistently and sufficiently addressed in the literature, agility is essential to ensure the organisation is continuously maintaining the competitive advantage (Baškarada & Koronios, 2018).

Reitz et al. (2018) argue that organisations must stay agile and relevant in the ever-evolving business environment to respond to market needs. It often involves the ability to detect external changes, customers' requirements at the same time, review internal organisational capabilities, capacity, productivity, and resources for decision making. Organisations need the abil-

ity and flexibility to adapt to the changing environment. Hence, an organisation must stay agile and sensitive to internal and external environments in the competitive business landscape. It is the most prominent keystone to transform and renew a business for organisational performance (Doz & Kosonen, 2010). Though there is a comprehensive agreement that organisational performance is becoming critical in attaining a sustained competitive advantage, there is still little acceptability on what exactly constitutes factors to organisational performance (Baškarada & Koronios, 2018).

Consequently, in the manufacturing sector, organisational performance measurement is vital to ensure the organisation incessantly attains return on investment and stays competitive in the market (Abushaiba & Zainuddin, 2012; Salamzadeh et al., 2019). Conventionally, organisational performance is measured by financial and non-financial measurements. Yet, one thing that has been abandoned is the happiness for organisational performance. Business competition is getting stiffer and stiffer every day. Thus, concentrating efforts are required at the individual, organisational, and corporate levels to utilise energy, cost, and time to attain business sustainability missions and visions (Muthuveloo & Teoh, 2013).

The business world's uncertainty, dynamic nature and stiffer competition make individuals and organisations stressed. In recent years, worldwide happiness index surveys have been carried out throughout an average of 150 countries to measure the happiness of communities or human being in their countries. It is undoubtedly explained that happiness consciousness has been drawing attention and concern globally. The nations are now concerned about

how happy their citizens instead of only focusing on national gross domestic product. In this study, organisational performance will be measured through employee happiness, customer happiness and shareholder happiness.

Literature Review

Organisational Performance

Based on Rohrbeck et al. (2018), organisational performance enables organisations to outperform in their industry, gain market capitalisation development, and attain superior profitability. According to Muthuveloo & Teoh (2013), organisational performance is meeting an organisation's goals through the right strategies. The organisational performance comprises innovation, product quality, employees' performance, and relations with organisational management (Tanha et al., 2011; Tajpour et al., 2020). Wamuuru & Jamleck (2016) described, organisational performance as a means through which organisations could meet their objectives and accomplish high performance. Organisational performance has become one of the common topics in management research, but today, it still requires further studies as organisations are continuously facing domestic and international business challenges. According to Pohludka et al. (2018), organisations are still focusing on achieving long-term growth and business sustainability by streamlining the processes to enhance productivity, lower cost, increase efficiency, and gain flexibility in today's business environment.

Organisations are finding ways to compete among local and foreign firms, and with the growth of foreign direct investments and global business

trades, the competition is becoming challenging and difficult for business sustainability (Abushaiba & Zainuddin, 2012). To survive in the competitive and unpredictable business environment, organisations should create supportable strategic values and react with flexibility for business sustainability by developing and enhancing current capabilities to cope with the changeable business environment. Besides, the organisation should be flexible and adaptive enough to respond to market uncertainties and make the right decisions by facilitating the change in manufacturing systems and processes in operation management to meet customers' needs (Suh & Lee, 2018; Radović Marković et al., 2012, 2019). Organisations' key shareholders play a critical contribution to drive organisational revolution by implementing strategies guided by organisational values, lead to organisational efficiency and competitiveness in the industry (Schalock et al., 2018).

Dimension #1 Disruptive Innovation

Business intelligence and information technology help organisations to improve decision making for organisational performance. Organisations that understand the market changes and proactively act is critical for business sustainability. The organisation needs to utilise information technology capabilities to react speedily due to business environment changes, which will affect business performance. Information management could provide flexibility and enable adaptive decision making. Hence, organisations could achieve organisational performance (Ali et al., 2018). Technology infinite possibilities

are essential for organisations, specifically for those high cycles of technology products. The organisation can think out of the box to develop noble and novel products to enter new markets instead of outdoing existing competitors. Blue ocean strategy is crucial for organisational performance (Muthuveloo & Teoh, 2013). Technology has become a critical role in enabling and enhancing business agility in the organisation. Technology has embedded in business agility for business to be successful, and there must be a collaborative and strategic relationship to link business and technology for business agility. Technology is playing a critical role in improving organisational performance. The challenges facing by most of the organisation today because of digital economics, digital transformation, customers' requirements, and preference are one of the driving strategies and innovations required by the organisation for cost savings and efficiencies. Technology and business are almost linked for business to successfully react to a dynamic business landscape (Murkerjee, 2014). Hence,

Hypothesis 1 (H1): Disruptive innovation has a significant influence on organisational performance.

Dimension # 2: Organisational Capabilities

Organisational capabilities help the organisation to create necessary organisational processes and structure to provide strategic agility that manages the organisation well. By having the organisational capabilities for scanning internal and external organisation, an organisation could aware and react

to business opportunities and improve organisational performance. Organisational capabilities help the organisation to understand internal and external opportunities and threats by creating business agility to be able to create noble ideas to attract new market penetration for market-leading strategy and to be the first who enter a new market to gain market share for business success (Muthuveloo & Teoh, 2013). The organisation should always stay alert through the involvement of organisational capabilities in business processes, routine environment scanning activities, monitor business process for improvement, obtain regular analytics and trends, monitor customers preferences and market demand to be ready to adapt and adopt based on business needs as a successful organisation and improve organisational performance (Murkerjee, 2014). Organisational capabilities are complex in an organisation. Thus organisations can tackle the challenges by creating and supporting the organisational capabilities for organisational performance (Abdelaziz Elgamal, 2018). Hence,

Hypothesis 2 (H2): Organisational capabilities have a significant influence on organisational performance.

Dimension # 3: People

People are important resources of an organisation who contribute to the organisation performance when they have the right mindsets and characteristics. Leadership starts at the strategic level while organisational operating depends on employees. Both contribute to organisational strategically and operationally for organisational performance (Murkerjee, 2014). A study carried

out by Abdelaziz Elgamal (2018) suggested that an organisation should have ways to create and adapt a multidimensional organisational culture that supports people and identifies the right people to perform different tasks for organisational performance. By maintaining this, organisation able to react quickly to the organisational environment and enable people to provide authority within their aspect of responsibilities for rapid responses without delay. Organisations should have the abilities and competencies to react to unexpected environmental changes and disruption to survive and maintain organisation health and success. Commented by Cegarra-Navarro et al. (2016), people could react effectively and efficiently as people possess and learn the knowledge and apply knowledge learned to the organisation so provide the ability to organise and manage internal and external unpredictable scenarios. The organisational performance is likely based on the preliminary implementation of knowledge management. The organisation could well prepare and concentrate their effort on the most important problem. Thus, people play a complementary role in organisational effectiveness and organisational performance. Hosseini et al. (2020) described organisations that develop the technical skills of people helps to increase people's ability to perform job duty and prepare themselves to face competition and challenges that affect their job performance. The characteristics of people affect how they perform for organisational performance. Hence,

Hypothesis 3 (H3): People have a significant influence on organisational performance.

Underpinning Theory

Based on the literature review conducted and consideration of the research gaps, it is rather evident that the underlying model and theory for this study is the I-TOP Strategic Agility model supported by dynamic capability theory. I-TOP Strategic Agility model (Muthuveloo & Teoh, 2013, 2020) is defined as I, return on investment, T, infinite technology possibilities, O, outright environmental scanning and P, people referring to human capital development. I-TOP Strategic Agility model is based on 20 years of working experience in the business industry and research. The I-TOP Strategic Agility model concept is that the organisation needs to maximise return on investment to stay as an industry leader or at the top of the industry. It is a fluid model and depends on three major factors: technology infinite possibilities, outright environmental scanning and people human capital development (Muthuveloo & Teoh, 2013, 2020).

Dynamic capability theory is an extension of the resource-based view, explains the organisation's capabilities to adapt to the uncertain and dynamic environment which is critical for organisational sustainability. Dynamic capability is vital as an organisation can react and adapt to a volatile environment for competitive advantage and organisational performance (Teece et al., 1997; Teoh et al., 2017). As García-Sánchez et al. (2018) described, dynamic capabilities can be assimilated and integrated for the configuration of internal competencies and encourage the organisation to change as a result of environmental requirement.

Research Model

The conceptual framework shown in Figure 1 illustrates the relationship between all variables of this study. Organisational performance is the dependent variable, and the factors derived from the I-TOP Strategic Agility model are disruptive innovation, organisational capabilities, and people are independent variables. This study examines the influence of disruptive innovation (DI), organisational capabilities (OC), and people (P) on organisational performance (OP). The organisation is operating in a dynamic business environment, and the competition is becoming stiffer. Thus, the organisation must have the ability to respond to changes for organisational performance. Disruptive innovation is critical due to the continuous advancement of technology and innovation. Organisational capabilities demonstrate the capability and ability to analyse and scan the internal and external scenarios to utilize and restructure organisational resources for organisational performance. People provide knowledge and skills to the organisation based on types of people and characteristics. This study applies dynamic capability as a theory because the organisation needs to equip with the dynamic capability to react quickly to market changes with the existence of the organisational resources for business sustainability.

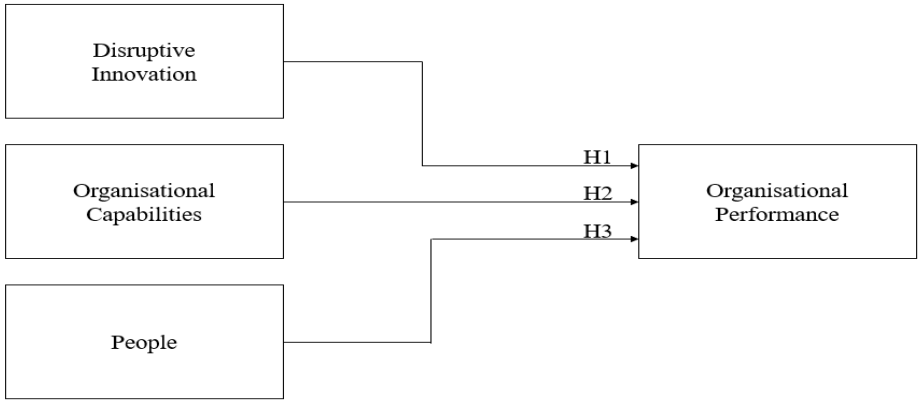

Figure 1. Conceptual Framework

Research Methodology

The research methodology used in this study is detailed in the sections below.

Research Design

This study's research design was critical because it showed how to obtain accurate data, which provided empirical evidence to answer the research questions raised. Therefore, the research design criteria by Sekaran & Bougie (2013) were used to describe the research design for this study. Firstly, this study was to test the hypotheses formed to answer the research questions and a correlational study to test the relationships of different main variables identified in the context of the manufacturing industry in Malaysia. Secondly, the researcher's slight interference as the study was conducted within a non-contrived study setting as the variables were generally occurring like the work environment. This study was a quantitative research method, and the hypotheses approach were used. Lastly, this study was cross-sectional

as it was on a one-time data collection in which the data were collected once within 2 months only. The research design considered researcher resources, costs, and time which best fit the needs to conduct this study.

Population and Sample Size

The population for this study was the E&E manufacturing industry in Malaysia. This study's total population was 246 organisations registered with the Federation of Malaysian Manufacturers. A sample size of 30 to 500 was recommended for effective data collection (Sekaran and Bougie, 2013). It was aligned with Hair et al. (2013), where the sample size could be between 100 and 400. According to Green (1991) table, the initial sample size required for this study was 84. The initial sample size of 84 was made due to the power requirement of 0.8 and the alpha level of 0.05 with a medium effect size described by Cohen (1998). Thus, this study's most conservative initial sample size was 90 for an acceptable level of power for statistical analysis.

Sampling Technique and Data Collection Method

The sampling technique involved a segregation or stratification process where the respondents were carefully selected during the process (Sekaran & Bougie, 2013; Ulijn, & Salamzadeh, 2021). The stratified sampling was calculated by dividing the total population of the manufacturing organisation, multiplying it with a sample size of 90. Process stratification was to ensure that the sampling design is efficient as this enabled the contri-

bution of more and accurate information on the sample data (Sekaran & Bougie, 2013). Stratified sampling technique applied for this study. The data were gathered through online structured questionnaire. Telephone calls and email communication have been made to the human resources personnel of the companies (Radovic Markovic & Salamzadeh, 2018). Upon agreement, they helped to have the right people to fill up the online structured questionnaire. A cover letter with a brief introduction of the survey objective and survey URL link was sent to their email address.

Measurement Instruments

The questionnaire consisted of 21 questions related to organisational performance in Section A. Section B consisted of 8 questions on disruptive innovation, nine questions on organisational capabilities and 21 questions on people with a 6-point Likert scale ranging from '1' strongly disagree up to '6' strongly agree to prevent respondents having neutral feedback from the measurement scale (Cooper & Schindler, 2011; Salamzadeh et al., 2020). Section C contained nine questions related to potential respondents and their organisations' demographic. Table 1 shows the summary of sources and measurement items.

Table 1. Questionnaire Design

Section	Variable	Coding of Questions	No of Question	Sources
A	Organisational Performance	EH1 - EH8	21	Adapted from Chaiprasit & Santidhiraku (2011)
		CH1 - CH5		Adapted from Gong & Yi (2018)
		SH1 - SH5		Adapted from de Waal (2008)
		SH6 - SH8		Adapted from Anees-ur-Rehman et al. (2018)
B	Disruptive Innovation	DI1 - DI2	8	Adapted from Farooq & Chris (2011)
		DI3 - DI5		Adapted from Ricciardi et al. (2017)
		DI6 - DI8		Adapted from Ravichandran (2018)
	Organisational Capabilities	OC1 - OC9	9	Adapted and adopted from Mikalef et al. (2018)
	People	PP1 - PP7	21	Adopted from Muthuveloo (2018)
		PTS1 - PTS7		
		PTM1 - PTM7		
C	Demographic	D1 - D9	9	
	Total number of questions		68	

The pre-test questionnaire was sent to five of the administrators, human resources managers or directors of different E&E manufacturing to help to have the right personnel to answer the questionnaires and gathered feedback to improve the quality of the questionnaire. A pilot study of 30 manufacturing organisations was also conducted to investigate the reliability of the questionnaire's measurement items. Table 2 reveals the pilot study result. Some items have lower Cronbach's Alpha, which is less than the threshold of 0.708 (Hair et al., 2016) have been removed.

Table 2. Pilot Study Findings

Variables	Number of Items	Number of Items Removed	Number of Final Items	Cronbach's Alpha
Organisational Performance	21	3	18	0.929
Disruptive Innovation	8	3	5	0.897
Organisational Capabilities	9	2	7	0.945
People	21	10	11	0.886

Data Analysis Techniques

IBM-SPSS version 24 was used to screen and prepare data and analysed descriptive statistics. SmartPLS software version 3.2.7 was used to examine hypotheses by using the partial least squares-structural equation modelling (PLS-SEM) technique uses a prediction-oriented variance-based approach that emphasises endogenous target constructs and maximises their explained variance. PLS-SEM involves two steps processes, measurement model and structural model were examined (Hair et al., 2016).

Findings

An online structured questionnaire link with detailed research purposes letterhead was emailed to 246 organisations. At the end of the two months of the survey period (from Nov 2020 to Jan 2021), 123 responses were gathered after the third follow up. However, only 121 responses were valid to be processed for data analysis as two responses were answered all the questions as "strongly agreed", which showed a straight-lining of questionnaire Likert Scale responses. Hence, these two responses were rejected for data analysis. Therefore, 121 responses were valid and accepted for further

processing. There was no missing data in this questionnaire as the respondents were directed appropriately on the online survey. The response rate demonstrated as 49.2% in this study. Table 3 shows a summary of the response rates of this study.

Table 3. Summary of response rates

Location	Count of Organisation	Stratified Sampling for Sample Size	No. of Questionnaires Sent Out	No. of Responses Received	No. of Responses for Data Analysis
Johor	45	16	45	11	11
Kedah	8	3	8	7	7
Kuala Lumpur	10	4	10	6	4
Melaka	18	6	18	5	5
Negeri Sembilan	6	2	6	5	5
Pahang	2	2	2	0	0
Pulau Pinang	52	19	52	49	49
Perak	11	4	11	6	6
Sabah	1	0	1	0	0
Selangor	90	33	90	33	33
Sembilan	1	0	1	0	0
Terengganu	2	1	2	1	1
Total	246	90	246	123	121

Descriptive Analysis

The majority of the organisations that responded to the questionnaire were private limited companies, 96.7%. 52.9% of the organisations were established for more than 20 years. 66.9% of the organisations were foreign-based companies. Table 4 below demonstrates a summary of the profile of participating organisations.

Table 4. Profile of Participating Organisations

Variable	Category	Frequency	Percent
Type of organisation	Partnership	2	1.65
	Private Limited Company (Sdn. Bhd.)	117	96.69
	Public Listed	2	1.65
Years of establishment of organisation	> 20 years	64	52.9
	1-5 years	13	10.7
	11-15 years	15	12.4
	16-20 years	17	14
	6-10 years	12	9.9
Number of employees in organisation	<=50	8	6.6
	>=1000	48	39.7
	101-500	29	24
	501-1000	19	15.7
	51-100	17	14
Location of organisation	Johor	11	9.1
	Kedah	7	5.8
	Kuala Lumpur	4	3.3
	Melaka	5	4.1
	Negeri Sembilan	5	4.1
	Perak	6	5
	Pulau Pinang	49	40.5
	Selangor	33	27.3
	Terengganu	1	0.8
Majority of staffs in the organisation	Baby boomer (1946-1964)	4	3.3
	Gen X (1965-1980)	55	45.5
	Gen Y (1981-2000)	62	51.2
Organisation which are doing export business	Non export	18	14.9
	Export	103	85.1
Average of annual sales amount (MYR)	<=0.5 million	1	0.8
	>1.5 million	109	90.1
	0.5 <x<= 1million	1	0.8
	1.0<x<=1.5 million	10	8.3
Headquarters of organisation	Australia	1	0.8
	China	1	0.8
	Europe	18	14.9
	Japan	13	10.7
	Malaysia	40	33.1
	Singapore	6	5
	Taiwan	2	1.7
	United States	40	33.1

Measurement Model Analysis

The measurement model analysis was needed to confirm the measurement items' validity and reliability. Based on Hair et al. (2014), the recommendation of the PLS-SEM reflective model should be analysed for internal consistency, an indicator of reliability, convergent validity, and discriminant validity before assessing the structural model. The recommended value for composite reliability is more than 0.708, and the average variance extracted (AVE) should be exceeded 0.50 (Hair et al., 2016). Table 5 shows the measurement model for this study. The items have more than 0.708 composite reliability, and AVE exceeded 0.50.

Table 5. Result of Measurement Model

Model Construct	Measurement Item	Loadings	Cronbach's Alpha	CR	AVE
Organisational Performance	CH2	0.609	0.941	0.947	0.501
	CH3	0.762			
	CH4	0.734			
	EH1	0.679			
	EH2	0.659			
	EH3	0.765			
	EH4	0.594			
	EH5	0.779			
	EH6	0.775			
	EH7	0.723			
	EH8	0.687			
	SH1	0.662			
	SH2	0.743			
	SH3	0.758			
	SH4	0.677			
	SH5	0.760			
	SH6	0.640			

Model Construct	Measurement Item	Loadings	Cronbach's Alpha	CR	AVE
	SH7	0.690			
Disruptive Innovation	DI1	0.882	0.924	0.943	0.768
	DI2	0.860			
	DI3	0.884			
	DI4	0.886			
	DI5	0.870			
Organisational Capabilities	OC1	0.786	0.930	0.944	0.706
	OC2	0.853			
	OC3	0.776			
	OC5	0.872			
	OC6	0.859			
	OC7	0.891			
	OC8	0.838			
People	PP1	0.855	0.946	0.954	0.652
	PP2	0.851			
	PP3	0.844			
	PP5	0.756			
	PTM3	0.837			
	PTM4	0.798			
	PTM5	0.756			
	PTM7	0.796			
	PTS1	0.886			
	PTS2	0.761			
	PTS6	0.725			

Note: CH1, CH5, SH8, DI6, DI7, DI8, OC4, OC9, PP4, PP6, PP7, PTM1, PTM2, PTM6, PTS3, PTS4, PTS5 and PTS7 were removed due to low loadings. CR= Composite Reliability, AVE= Average Variance Extracted.

Discriminant Validity

In this study, the Heterotrait-Monotrait Ratio (HTMT) was done for discriminant validity assessment where the recommended values are less than 0.90 (Henseler et al., 2015). Table 6 below has ascertained the discriminant validity, which is below 0.90.

Table 6. Discriminant Validity in HTMT

	1	2	3	4
1. Organisational Performance				
2. Disruptive Innovation	0.801			
3. Organisational Capabilities	0.872	0.874		
4. People	0.825	0.616	0.704	

Testing Hypothesis

All the hypotheses in this study were supported. Disruptive innovation, organisational capabilities and people significantly influence organisational performance at $\beta=0.211$, $t=2.406$, $p<0.05$; $\beta=0.371$, $t=3.806$, $p<0.01$; and $\beta=0.424$, $t=5.552$, $p<0.01$ respectively. Table 7 shows the details of this study's result.

Table 7. Result of Structural Model (Direct Relationship between DV & IV)

Relationship	Standard Beta (β)	SD	t-value	p-value	Decision
DI -> OP	0.211	0.082	2.406	0.016	Supported
OC -> OP	0.371	0.101	3.806	0.000	Supported
P -> OP	0.424	0.075	5.552	0.000	Supported

Note: DI= disruptive innovation; OP= organisational performance; OC= organisational capabilities; P= people

Predictive Relevance Analysis

PLS-SEM Blindfolding procedure was conducted by omitting every sixth data point in the endogenous construct's indicator using construct cross validated redundancy. The presence of Q^2 showed that the path model could predict the data points of indicators in the endogenous constructs correctly.

The value of Q^2 higher than zero explains the predictors have predictive relevance for endogenous constructs (Hair et al., 2014). The endogenous construct of this study has predictive relevance because the result of Q^2 is 0.366.

Assessment of Importance-Performance Map Analysis

The importance-performance map analysis (IPMA) was performed to determine the relative importance of constructs in explaining other constructs in this study's structural model. The focus was to improve the performance of the constructs that exhibit large importance regarding their explanation of a specific target construct while having a comparatively low performance (Ringle et al., 2015; Sooreh et al., 2011). Table 8 reveals the IPMA of this study to guide E&E manufacturing on the key factors requiring attention and improvement. People have relatively high positive importance, followed by organisational capabilities and disruptive innovation. Whereas Table 9 shows the IPMA of organisational performance measurement from a happiness perspective in E&E manufacturing. The results showed that employee happiness has relatively high positive importance, followed by shareholder happiness and customer happiness. Table 10 displays the result of IPMA of people. Performers have relatively high importance in E&E manufacturing, followed by transformers and transactors.

Table 8. Result of Importance-Performance Map Analysis for Organisational Performance Factors

Organisational Performance	Importance	Performance
Disruptive Innovation	0.156	71.358
Organisational Capabilities	0.311	68.427
People	0.357	67.549

Table 9. Result of Importance-Performance Map Analysis of Organisational Performance Measurement from Happiness Perspective

Organisational Performance	Importance	Performance
Employee Happiness	0.437	67.920
Customer Happiness	0.181	74.492
Shareholder Happiness	0.382	72.423

Table 10. Result of Importance-Performance Map Analysis for People

People	Importance	Performance
Performers	0.419	70.708
Transactors	0.251	71.580
Transformers	0.330	60.070

Discussion

This study proposed three hypotheses. All the hypotheses were supported. The results showed that disruptive innovation, organisational capabilities and people have a significant relationship to organisational performance in E&E manufacturing. The findings of this study are shown below.

Relationship between Disruptive Innovation and Organisational Performance: This study revealed that disruptive innovation is needed to manage the business and think out of the box to move away from the existing competition by injecting novel and noble ideas through disruptive innovation, Blue

Ocean Strategy. Technologies and innovation can be the critical driver to increase energy, improve the quality of goods and services, and generate new markets (Muthuveloo & Teoh, 2013, 2020). Information technology competence, combined with innovation capacity, is likely to be valuable to E&E manufacturing.

Also, organisations that invest in digital platforms are likely to affect organisational performance significantly. It is supported that the disruptive innovation of E&E manufacturing is the factor of organisational performance. Organisations could exploit information technology and adopt a long-term orientation to develop these competencies (Ravichandran, 2018). Besides, business intelligence has been speedily proliferated in information systems that have significantly contribute to organisational performance. Business intelligence acts as an enabler in E&E manufacturing, especially in the ongoing changes and new emergent environment that cause an array of changes because of market demands, customer's interest, instability pricing and competitive pressures. E&E manufacturing could utilise disruptive innovation to achieve organisational performance (Ali et al., 2018).

Technology has an essential role in organisational performance in E&E. The challenge of digital transformation is leading on the agendas of most E&E manufacturing in today's global and digital economies. Technology is rooted in businesses that help E&E to react fast, strategically, and operationally to be successful in the speedy digital world of throwaway innova-

tions. E&E manufacturing must learn to manage and evolve its ability to respond to changes and to move with the times for organisational performance (Murkerjee, 2014).

Relationship between Organisational Capabilities and Organisational Performance: This hypothesis supported by Abdelaziz Elgamal (2018), organisations have significant interaction between and among the organisational capabilities that contribute to organisational performance. E&E manufacturing should build a multi-dimensional to survive in a surprising and turbulent environment. Organisational capabilities in E&E is essential. As highlighted by Muthuveloo & Teoh (2013, 2020), E&E could utilise outright environmental scanning to elaborate or perform global scenarios planning to understand the possible business opportunities that the organisations could focus on and detect the threats from the business environment to eliminate the impact to an organisation. As a result of global scenarios planning, E&E could form the necessary management and organisational structure to manage the business. Murkerjee (2014) agreed that appropriately structured, managed, and resourced organisations could sustain the business for organisational performance.

Relationship between People and Organisational Performance: The findings of this study confirmed the study of Khavari et al. (2016), employees are the primary resources of productivity that contribute to organisational performance. Also, when people have a high level of training increases the level of

the competitive performance of E&E (Oyedijo, 2012). Furthermore, the findings of this study associated with the previous studies. People apply their knowledge to the organisation to provide the capability and ability to the organisation to manage the internal and external unpredictable situations. People are critical resources of the organisation who contribute to the organisation when people have the right characteristics and mindsets. Both leaders and people contribute to organisational operationally and strategically for organisational performance (Murkerjee, 2014). People react competently to increase efficiency for organisational performance (Cegarra-Navarro et al., 2016). People possess the experience, skills and knowledge that add economic value to organisations. People make decisions and their initiative to day-to-day activities, so organisations should promote people and optimise people for organisational performance. Therefore, people are the fundamental and asset to organisations, and as a result, E&E is achieving organisational performance (Muthuveloo & Teoh, 2013, 2020).

Research Contribution

The research contributes to theoretical and practical as stated below:

Theoretical Contribution

Relevancy of I-TOP Strategic Agility Model: This study's conceptual framework was formed based on research gaps, adopted from the I-TOP Strategic Agility model (Muthuveloo & Teoh, 2013, 2020), and supported by dynamic capability theory. This framework is comprehensive compare to previ-

ous studies of organisational performance as this framework provides a theoretical lens for organisational performance through the internal and external environmental context of E&E manufacturing. This study contributed to the literature that the three I-TOP Strategic Agility model factors: disruptive innovation, organisational capabilities, and people, significantly influence organisational performance. This study theoretically affirmed that the I-TOP Strategic Agility model's factors: disruptive innovation, organisational capabilities, and people are the right resources for organisational performance.

Relevancy of Dynamic Capability Theory: The theoretical lens of dynamic capability theory enabled the organisations to react against the uncertainty and dynamic business environment for the organisational performance through disruptive innovation, organisational capabilities and people. Dynamic capability theory is essential for organisations to respond to the disruptive and rapid changes in the business environment and sustain their competitiveness (Teece et al., 1997; Tuzovic et al., 2018). Organisations need to have the capability to react strategically to dynamic changes through efficient and effective ways with identified factors and resources for organisational performance. Dynamic capabilities are important organisational competencies to adapt to changing environment speedily for organisational performance (Teoh et al., 2017).

Measurement of Organisational Performance from the Perspective of Happiness: This study revealed the novel and noble way to measure E&E

manufacturing organisational performance through three happiness perspectives: employee happiness, customer happiness and shareholder happiness. Nowadays, countries are utilising happiness as the measurement of economic growth instead of merely depends on GDP (Diener et al., 2004). This study provided theoretical evidence that employee happiness, customer happiness and shareholder happiness are the proxies of organisational performance. The happiness perspective should not be neglected; instead, it should be focused on and strengthen organisations' happiness. When employees are happy and contented, they could increase creative thinking, competency, and freedom for new work ideas and create value for organisations (Chaiprasit & Santidhiraku, 2011). This study confirmed that non-financial performance could be measured through employees and customer contentment and happiness, whereas financial performance can be measured through shareholder's contentment and satisfaction. Simultaneously, this study contributed to literature for measuring happiness perspectives in organisational performance and further strengthening the importance of measuring happiness for organisational performance.

Practical Contributions

Influence of I-TOP Strategic Agility Model on Organisational Performance: This study helps practitioners focus and manage disruptive innovation, organisational capabilities and people as their valuable resources that help the organisations create the abilities to react to the dynamic business en-

vironment. It is important for practitioners to effectively and efficiently synergize the I-TOP Strategic Agility model's factors to achieve organisational performance to attain their mission and vision. These factors are very fluid that help practitioners to react and adapt to dynamic business situations for organisational performance (Muthuveloo & Teoh, 2013, 2020). Practitioners could involve proper planning, budget allocation, a thorough overview of the internal and external environment before they adjudicate their organisations' resources (Gupta et al., 2018). Every organisation should clearly understand their needs and the market's current situation to take prompt action to enhance organisational performance (Agarwal et al., 2018).

Measurement of Organisational Performance: This study proved the new way of organisational performance measurement through three happiness perspectives: employee happiness, customer happiness, and shareholder happiness. In this study, the non-financial performance was measured by employees' and customers' contentment and happiness. At the same time, financial performance was measured by shareholders' satisfaction and contentment. This study demonstrated that employee happiness has relatively high positive indicators of organisational performance, followed by shareholder happiness and customer happiness. This study informed the practitioners that employees happiness is essential as employees are motivated to perform when they are contented in work (Chaiprasit & Santidhiraku, 2011). Simultaneously, shareholders happiness when organisations achieve financial performance and return on their investment for business sustainability (Anees-ur-Rehman et al.,

2018; de Waal, 2008). Organisational performance could be measured through happiness perspective instead of merely depends on economic GDP measurement. Practitioners can formulate their strategies to create a happy organisation to achieve the desired organisational performance vital for business sustainability (Gavin & Mason, 2004; Fisher, 2010; Sulakhe & Bakre, 2019).

The results explained that employee happiness indicators are relatively higher important to organisational performance. Thus, practitioners should ensure employees' well-being are taking care of and assigning appropriate work scopes according to their characteristics to ensure competence and job satisfaction. Practitioners need to equip the people with the latest technological knowledge, appropriate skillsets, knowledge, and tools know-how that help people to contribute to organisational performance. When people can perform well, they could have job satisfaction in the organisation and feeling contented. Happiness leads to goal achievement in the organisation and improves organisational performance. Hence, happiness is a proxy of organisational performance. Happiness in the organisation should be given more attention to business sustainability (Chaiprasit & Santidhiraku, 2011; Fisher, 2010; Oswald, 1997).

Limitation

The scenario created by COVID-19 made the data collection process difficult. Data were collected fully online. The respondents' feedback that they were busy with their work, and some were challenging with remote work

condition due to COVID-19. Most of the respondents were multitasking to attend more meetings as their organisations are facing a tough time during the COVID-19 pandemic. They faced many challenges while working at home (Salamzadeh, 2020; Meenakshi & Neha, 2020). They had too much distraction, and no time could be allocated to answer the questionnaire. Therefore, some of them refused to participate in this research questionnaire which is part of the difficulties in data collection.

Conclusion

The manufacturing industry faces significant changes, with markets demanding customised and higher quality at a lower cost and moving from a local-based economy towards a competitive and global economy. In this environment, manufacturing organisations must respond rapidly to customer demands by improving their flexibility with strategic agility while maintaining their quality and productivity (Leitão, 2009). Organisational performance in the manufacturing industry is still not meeting expectations (Abdullah Mohammed Saif & Hussain, 2018; Saleh & Ndubisi, 2006). Although many studies have been conducted on organisational performance, its organisational performance is still not meeting expectations. As a result, this study contributed that organisational performance can be achieved through I-TOP Strategic Agility Model supported with dynamic capabilities theory. The I-TOP Strategic Agility model factors are disruptive innovation, organisational capabilities, and people. E&E manufacturing could focus on disruptive innovation as it promotes efficiency and effectiveness in market analysis, product

design, supply chain, and customers services through technological advancements, manufacturing technology, technology innovation, business intelligence and artificial intelligence (Ricciardi et al., 2017). In addition, E&E manufacturing should emphasise organisational capabilities. It builds the organisational abilities to scan and analyse internal and external environments, restructure and utilise organisational resources for organisational performance. Organisational capabilities enable organisations to reuse, restructure organisational resources based on internal and external changing business circumstances (Inan & Bititci, 2015).

Also, this study revealed that people consist of performers, transactors and transformers. Performers have relatively high importance followed by transformers and transactor in E&E foreign-based manufacturing industry. Performers perform the daily job according to the job description; transactors provide new idea and value add to the existing product or process whereas transformers bring up new ideas which support their organisation through blue ocean strategy to conquer a new market. Nonetheless, people are important resources to companies based on different characteristics to meet organisational objectives (Naser et al., 2019).

Furthermore, this study has proven the theoretical evidence that new organisational performance measurement through three happiness perspectives: employee happiness, customer happiness, and shareholder happiness. In this study, the non-financial performance was measured by employees' and customers' contentment and happiness. At the same time, financial performance was measured by shareholders' satisfaction and contentment. In this

study's IPMA analysis, employee happiness showed relatively high positive importance; thus, employee happiness should be focused on. When employees are contented and happy, they could increase creative thinking, perform well and create values for organisation performance. (Chaiprasit & Santidhiraku, 2011).

Future research could confirm and enhance further the findings and contribution from a happiness perspective for both personal and organisational well-being of organisational performance. Besides, future scholars can enhance the characteristics of people into three types called performers, transactors and transformers. Future scholars can also establish why only either performers or transformers play an important role compared to transactors in E&E foreign-based manufacturing or Malaysia as a whole. In a nutshell, this article elaborates on disruptive innovation, organisational capabilities, and people contribute to organisational performance. Organisational performance measurement through employee happiness, customer happiness and shareholder happiness is new and noble in the E&E manufacturing industry.

References

1. Abdelaziz Elgamal, M. (2018). Dynamic Organizational Capabilities: The Joint Effect of Agility, Resilience and Empowerment. Journal of Human Resource Management, 6(2), 44–49.
2. Abdullah Mohammed Saif, M., & Hussain, I. A. (2018). An Explanatory Study on Management Quality, Innovation and Long Term Orientation Towards Company Performance in Malaysia. International Journal of Law and Society, 1(2), 77–83.
3. Abushaiba, I. A., & Zainuddin, Y. (2012). Performance Measurement System Design , Competitive Capability , and Performance Consequences - A Conceptual Like. International Journal of Business and Social Sciences, 3(11), 184–193.

4. Agarwal, R., Chowdhury, M. M. H., & Paul, S. K. (2018). The Future of Manufacturing Global Value Chains, Smart Specialization and Flexibility! Global Journal of Flexible Systems Management, 19(1), 1–2.
5. Al-Dhaafri, H. S., Bin Yusoff, R. Z., & Al-Swidi, A. K. (2013). The Effect of Total Quality Management, Enterprise Resource Planning and the Entrepreneurial Orientation on the Organizational Performance: The Mediating Role of the Organizational Excellence --- A Proposed Research Framework. International Journal of Business Administration, 4(1), 66–85.
6. Ali, M. S., Miah, S. J., & Khan, S. (2018). Antecedents of Business Intelligence Implementation for Addressing Organizational Agility in Small Business Context. Pacific Asia Journal of the Association for Information Systems, 10(1), 89–108.
7. Anees-ur-Rehman, M., Wong, H. Y., Sultan, P., & Merrilees, B. (2018). How brand-oriented strategy affects the financial performance of B2B SMEs. Journal of Business and Industrial Marketing, 33(3), 303–315.
8. Baškarada, S., & Koronios, A. (2018). The 5S organizational agility framework: a dynamic capabilities perspective. International Journal of Organizational Analysis, 26(2), 331–342.
9. Cegarra-Navarro, J. G., Soto-Acosta, P., & Wensley, A. K. P. (2016). Structured knowledge processes and firm performance: The role of organizational agility. Journal of Business Research, 69(5), 1544–1549.
10. Chaiprasit, K., & Santidhiraku, O. (2011). Happiness at Work of Employees in Small and Medium-sized Enterprises, Thailand. Procedia - Social and Behavioral Sciences, 25(1), 189–200. Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, lawrence Erlbaum Associates, NJ.
11. Cooper, D. R., & Schindler, P. S. (2011). Business research methods. (11th ed.). New York: McGraw Hill.
12. Dana, L.P., Salamzadeh, A., Ramadani, V., Palalic, R. (2021). Understanding Contexts of Business in Western Asia: Land of Bazaars and High-Tech Booms. World Scientific: Singapore.
13. de Caro, F., Hirschmann, T. M., & Verdonk, P. (2020). Returning to orthopaedic business as usual after COVID-19: strategies and options. Knee Surgery, Sports Traumatology, Arthroscopy, 28(6), 1699–1704.
14. de Waal, A. A. (2008). The secret of high performance organizations. Management Online Review, April, 1–10.

15. Diener, E., Martin, & E.P., S. (2004). Beyond Money Towrd and Economy of Well-Being. Psychological Science, 5(1), 630–631.
16. Doshmanli, M., Salamzadeh, Y., & Salamzadeh, A. (2018). Development of SMEs in an emerging economy: does corporate social responsibility matter?. International Journal of Management and Enterprise Development, 17(2), 168-191.
17. Doz, Y. L., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. Long Range Planning, 43(2–3), 370–382.
18. Farooq, S., & Chris, O. (2011). A Technology selection of framework for integrating manufacturing within a supply chain. International Journal of Production Research, 12, 1537–1546
19. Fisher, C. D. (2010). Happiness at Work. International Journal of Management Reviews, 12(4), 384–412. García-Sánchez, E., García-Morales, V. J., & Martín-Rojas, R. (2018). Influence of technological assets on organizational performance through absorptive capacity, organizational innovation and internal labour flexibility. Sustainability (Switzerland), 10(3).
20. Gavin, J. H., & Mason, R. O. (2004). The virtuous organization: The value of happiness in the workplace. Organizational Dynamics, 33(4 SPEC.ISS.), 379–392. Gerald, E., Obianuju, A., & Chukwunonso, N. (2020). Strategic agility and performance of small and medium enterprises in the phase of Covid-19 pandemic. International Journal of Financial, Accounting, and Management, 2(1), 41–50.
21. Gong, T., & Yi, Y. (2018). The effect of service quality on customer satisfaction, loyalty, and happiness in five Asian countries. Psychology and Marketing, 35(6), 427–442.
22. Green, S. (1991). How many subjects does it take to do a regression analysis. Multivariate Behavioral Research., 26(3), 499–510.
23. Gupta, S., Misra, S. C., Kock, N., & Roubaud, D. (2018). Organizational, technological and extrinsic factors in the implementation of cloud ERP in SMEs. Journal of Organizational Change Management, 31(1), 83–102.
24. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2016). A Primer on Partial Least Squares Structural Equation Modelling (PLS-SEM). (2nd ed.). Thousand Oaks, California: SAGE Publications.
25. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Corrigendum to "Editorial Partial Least Squares: The Better Approach to Structural Equation Modeling?" [LRP 45/5-6 (2012) 312–319]. Long Range Planning, 6, 6301.

26. Hair, Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. European Business Review, 26(2), 106–121.
27. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115–135.
28. Hosseini, E., Tajpour, M., Lashkarbooluki, M. (2020). The impact of entrepreneurial skills on manager's job performance. International Journal of Human Capital in Urban Management, 5(4), 361-372.
29. Hubert Backhaus, S. K., & Nadarajah, D. (2019). Investigating the relationship between industry 4.0 and productivity: A conceptual framework for Malaysian manufacturing firms. Procedia Computer Science, 161, 696–706.
30. Inan, G. G., & Bititci, U. S. (2015). Understanding Organizational Capabilities and Dynamic Capabilities in the Context of Micro Enterprises: A Research Agenda. Procedia - Social and Behavioral Sciences, 210, 310–319.
31. Kawamorita, H., Salamzadeh, A., Demiryurek, K., & Ghajarzadeh, M. (2020). Entrepreneurial universities in times of crisis: Case of COVID-19 pandemic. Journal of Entrepreneurship, Business and Economics, 8(1), 77-88.
32. Khavari Abdollah, S., Arasteh, H., & Jafari, P. (2016). Assessing the Level Organizational Universities Agility; Case Study of Islamic Azad University in Mazandaran. Mediterranean Journal of Social Sciences, 7(3), 112–117.
33. Leitão, P. (2009). Agent-based distributed manufacturing control: A state-of-the-art survey. Engineering Applications of Artificial Intelligence, 22(7), 979–991.
34. Meenakshi, K., & Neha, G. (2020). The Impact of Pandemic COVID -19 in Workplace. European Journal of Business and Management, May, 8–18. H
35. Mikalef, P., Krogstie, J., van de Wetering, R., Pappas, I., & Giannakos, M. (2018). Information Governance in the Big Data Era: Aligning Organizational Capabilities. Proceedings of the 51st Hawaii International Conference on System Sciences, 9, 4911–4920.
36. Murkerjee, S. (2014). Agility: A Crucial Capability for Universities in Times of Disruptive Change and Innovation. Australian Universities' Review, 56(1), 56–60.
37. Muthuveloo (Muthuveloo, R. (2018). BOSS (Best Outreached Sustainable Strategy), Champion in Crafting Winning Corporate.

38. Muthuveloo, R., & Teoh, A. P. (2013). Achieving Business Sustainability Via I-Top Model. American Journal of Economics and Business Administration, 5(1), 15–21.
39. Muthuveloo, R., & Teoh, A. P. (2020). Optimisation of Organisational Performance via I-TOP Strategic Agility Model. Journal of Entrepreneurship, Business and Economics, 8(2), 154–174.
40. Naser, A. A., Hamada, A. S., & Hassein, A. M. (2019). Analyzing the Impact of Significant Factors on Motivation and Accountability of Employees in the Supply Chain of Organization. Int. J Sup. Chain. Mgt, 8(2), 409–412.
41. Oswald, A. J. (1997). Happiness and Economic Performance. The Economic Journal, 107(445), 1815–1831.
42. Oyedijo, A. (2012). Strategic agility and competitive performance in the Nigerian telecommunication industry: an empirical investigation. Business and Management Review, 2(3), 227–237.
43. Pohludka, M., Stverkova, H., & Ślusarczyk, B. (2018). Implementation and unification of the ERP system in a global company as a strategic decision for sustainable entrepreneurship. Sustainability (Switzerland), 10(8), 1–16.
44. Radović Marković, M., & Salamzadeh, A. (2012). The nature of entrepreneurship: Entrepreneurs and entrepreneurial activities. Lap Lambert Academic Publishing: Germany.
45. Radovic Markovic, M., & Salamzadeh, A. (2018). The Importance of Communication in Business Management. Proceedings of the International Conference on Employment, Education and Entrepreneurship (EEE), Belgrade, Serbia .
46. Radović Marković, M., Salamzadeh, A., & Vujičić, S. (2019). Selection of organization models and creation of competences of the employed people for the sake of competitiveness growth in global business environment. International Review, (1-2), 64-71.
47. Ravichandran, T. (2018). Exploring the relationships between IT competence, innovation capacity and organizational agility. Journal of Strategic Information Systems, 27(1), 22–42.
48. Reitz, A., Jentsch, C., & Beimborn, D. (2018). How to decompress the Pressure - The moderating Effect of IT Flexibility on the negative Impact of Governmental Pressure on Business Agility. Proceedings of the 51st Hawaii International Conference on System Sciences, 4613–4620.
49. Ricciardi, F., Zardini, A., & Rossignoli, C. (2017). Organizational integration of the IT function: A key enabler of firm capabilities and performance. Journal of Innovation & Knowledge, 3(3), 93–107.
50. Ringle, C. M., Wende, S., & Becker, J. M. (2015). SmartPLS 3. Boenningstedt: SmartPLS GmbH. Retrieved from http://www.smartpls.com.

51. Rohrbeck, R., Etingue Kum, M., Jissink, T., & Gordon, A. V. (2018). Corporate Foresight Benchmarking Report 2018: How Leading Firms Build a Superior Position in Markets of the Future. Ssrn Electronic Journal, May, 3–17.
52. Salamzadeh, A. (2021). How Could Universities Help Entrepreneurs Manage Global Crises?, Journal of Organizational Culture, Communications and Conflict, 25(3), 1-2.
53. Salamzadeh, A., & Dana, L. P. (2020). The coronavirus (COVID-19) pandemic: challenges among Iranian startups. Journal of Small Business & Entrepreneurship, 1-24.
54. Salamzadeh, A., Farsi, J. Y., & Salamzadeh, Y. (2013). Entrepreneurial universities in Iran: a system dynamics model. International Journal of Entrepreneurship and Small Business, 20(4), 420-445.
55. Salamzadeh, A., Hadizadeh, M., & Mortazavi, S. S. (2020). Investigating the Impact of Social Media on Entrepreneurship Development: Explaining the moderating role of Digital Technologies and Social Norms. Media Studies, 15(2), 37-51.
56. Salamzadeh, A., Tajpour, M., & Hosseini, E. (2019). Corporate entrepreneurship in University of Tehran: does human resources management matter?. International Journal of Knowledge-Based Development, 10(3), 276-292.
57. Saleh, A. S., & Ndubisi, N. O. (2006). An evaluation of SME development in Malaysia. International Review of Business …, 2(1), 1–14.
58. Schalock, R. L., Verdugo, M. A., & van Loon, J. (2018). Understanding organization transformation in evaluation and program planning. Evaluation and Program Planning, 67(November), 53–60.
59. Sekaran, U. & Bougie, R. (2013). Research methods for business: A skill-building approach (6th ed.). West Sussex, UK: John Wiley & Sons.
60. Sooreh, L. K., Salamzadeh, A., Safarzadeh, H., & Salamzadeh, Y. (2011). Defining and measuring entrepreneurial universities: a study in Iranian context using importance-performance analysis and TOPSIS technique. Global Business and Management Research: An International Journal, 3(2), 182-199.
61. Suh, C. J., & Lee, I. T. (2018). An empirical study on the manufacturing firm's strategic choice for sustainability in SMEs. Sustainability (Switzerland), 10(2).
62. Sulakhe, P. A., & Bakre, P. P. (2019). Investigating Factors and Their Impact which Affect the Happiness Index of an Entrepreneur. IJRAR- International Journal of Research and Analytical Reviews, 6(1), 353–356.

63. Tajpour, M., Hosseini, E., & Salamzadeh, A. (2020). The effect of innovation components on organisational performance: case of the governorate of Golestan Province. International Journal of Public Sector Performance Management, 6(6), 817-830.
64. Tanha, D., Salamzadeh, A., Allahian, Z., & Salamzadeh, Y. (2011). Commercialization of university research and innovations in Iran: obstacles and solutions. Journal of Knowledge Management, Economics and Information Technology, 1(7), 126-146.
65. Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(March), 509–533.
66. Teoh, A. P., Lee, K. Y., & Muthuveloo, R. (2017). The impact of enterprise risk management, strategic agility, and quality of internal audit function on firm performance. International Review of Management and Marketing, 7(1), 222–229.
67. Tuzovic, S., Wirtz, J., & Heracleous, L. (2018). How Do Innovators Stay Innovative ? A Longitudinal Case Analysis Sven Tuzovic , Jochen Wirtz and Loizos Heracleous Accepted for Publication in : Journal of Services Marketing Special Issue on : Customer Engagement in Service Innovation : Theoretical and E. Journal of Services Marketing, 32(1), 34–45.
68. Ulijn, J., & Salamzadeh, A. (2021). Investigating the Influence of Cultural Factors in the Disclosure of Corporate Strategies in Annual Reports by 100 European Firms: Does Context Matter?, International Journal of Business and Globalisation, forthcoming.
69. Wamuuru, C. G., & Jamleck, D. M. (2016). Human resource management practices, employee behavioral outcomes and organizational performance in public service : A critical literature review. Management and Economic Journal, 4, 203–219.

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