In time of twilight, fiduciary accountable managers ensure sustainable business growth: Existing technology increases the production

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Abstract: Without a doubt, covid-19 caused the global trade to a standstill and price of oil to fall unprecedently. Contrary to the common belief, people are concerned about the severity of the disease and started wearing gloves. The demand for glove has increased. This study focuses on selected factories which uses existing technologies to produce gloves. Owing to the demand, gloves are exported, thus ensuring sustainable business growth. These factories use their existing machines to produce gloves. It is noted that inhouse mechanical and chemical engineers are working around the clock to innovate the existing machineries. Also, employees are encouraged to spearhead innovative ideas into the production lines. The qualitative analysis is used for this study. The finding of this paper reveals that during unprecedented times, the demand of gloves has increased globally, which concomitantly allowed locally owned companies to increase the production gloves. Ultimately, these companies are having a good time in harvesting profit and maintaining a sustainable business growth. These companies fully adhere to sustainable product and eco-friendly

Keywords: Innovation, sustainable business growth, process innovation

1. Introduction

The COVID-19 pandemic has surpassed thirteen million cases as of 16th of July. This virulent catastrophe has brought pervasive changes in economic and business aspects. This pandemic virus has changed the face if social, economic, and political aspects significantly. For economic activities to return to normal, it may take a year or two and some quarters believed that we may need to accept the fact that the virus will become an acceptable part of human conundrums. Some countries that rely on essential commodities from other countries are now getting worried that supply chain could be broken. This is because countries which once exported essential commodities are using these commodities for their own consumption. These countries announced their intention to stop exporting. At the same time, there is an increase of other products such as masks, gloves, canned goods, flour and rice and some others. In the early stage, many taught that the supply chain would be broken. However, some countries managed to lower down the spread of COVID-19 and they are now assisting other nations to supply the essential commodities, masks, medical supplies, food and other items (Dzulfiqa, 2020). Contrarily, other industries commonly being hotel and tourism industry, flight and entertainment are facing hard time if lockdown, and travelling restriction continues for an indefinite period (Chin,C., 2020). Fearing country's economy would be affected by recession, most countries have lifted the lockdown.

In developed countries, it has become customary to have green and environmental practices which occupy the heart of policy makers, governments, and manufacturers. It remains challenging for the manufacturing companies to comply to sustainable practices (Amankwah-Amoah, 2020). The large and established companies can comply to sustainable practises whereas small and medium sized enterprises (SMEs) may find it difficult to comply. It is challenging for such manufacturing companies which fall under the category of SMEs to comply to the sustainable practice during the COVID-19 pandemic. Not only gloves factories but other manufacturing companies are facing hard time in time of disruptions to their supply chain and some businesses have successfully adjusted. The disruption of supply chain is felt by many industries which seems inevitable. Owing to the restriction and exorbitant freight coupled with increased overtime in China, the costs have increased. Some companies looked for some countries to supply the essentials for production. Despite the destruction of supply chain, companies would prefer to have sustainable production with sustainable business growth.

1.1 Research Objective

Presently, there is sluggish economic growth, and it is expected some corporations would possibly wind-up but there are other businesses which are making profit due to the sudden demand of goods such as gloves and other items. This study is to find out how a glove factory innovates to increase production and relishing sustainable business growth.

The following addresses the research objective:

1. To examine the relationship between process innovation and sustainable business growth.

- 2. To examine the relationship between product innovation and sustainable business growth.
- 3. To examine the relationship between innovative ideas and sustainable business growth.

1.2 Research question

- 1. How process innovation has the positive effect on sustainable business growth?
- 2. Why product innovation has the positive effect on sustainable business growth?
- 3. How innovative knowledge has the positive effect on sustainable business growth?

2. Literature Review

In a period where movement control is enforced, companies which fall under the category of small and medium size enterprises may not wish to reduce its paid-up capital. They would prefer to maintain its capital and utilise the existing machineries for production. It is not possible to have a radical innovation as their funding is limited and global economy is surmounted by full of uncertainties. The only viable way is to innovate and retrofit their current process line, and thus ensuring quality products are produced without affecting the environment. In Malaysia, it is mandatory for each factory to send their employees to test for COVID-19 before they can operate the machines and handle the products.

Consequently, innovation speeds up production, improves the product and ensures that the company to harness profit (Mueller, Rosenbusch, & Bausch, 2013; Nguyen, Chen, & Lee, 2014). Likewise, studies corroborate that a company indulges on innovation of its products, processes and recognizes innovative ideas from the employees relishes competitive advantage (Camisón & Villar-López, 2014; Wang & Wang, 2012). Not only that, but these companies also experience a sustainable business growth. Of course, incorporating sustainable practices such as clean production, safeguarding the employees, eco-friendly products and limiting wasting of unnecessary resources would corresponds to the concept of sustainability.

The Central Bank of Malaysia predicts that there would be a negative growth rate (Chin, 2020) and recession is looming around the corner (Azril, 2020). Fearing to have a negative growth, the government devised fiscal and monetary policies to save SMEs from being insolvent. This is because 80% of the employment rate in Malaysia comes from SMEs which contributes to the economic growth. In terms of technological readiness, Malaysia ranked 51st position out of 144 countries (Schwab, 2015). Despite Malaysia's strong position in the podium, it is uncertain whether this country can maintain her position in future (Schwab, 2015) due to reduce in the country revenue and political stability.

Given the current global economic uncertainty, it is not sure how SMEs in Malaysia can thrive in the competitive market. It is due to the stiff competition of foreign products with reduced cost (Al Mamun, 2018; Anuar & Yusuff, 2011), and the products are also eco-friendly (Gandhan & Kee, 2019b; Gandhan, Kee, Mahasenan, & Jayasenan., 2020). Sensing prolonged shut down would cause recession, the government lifted the lockdown with conditions so that the businesses operate as usual and increase the gross domestic product.

2.1 Innovation

At present, corporations are enduring hard times during the shutdown period. With deplorable state of low economic activities, it is predicted that SMEs would be in a horrendous situation. In most countries, the government allocated fund and directs bankers to extend the loan repayment. It is not possible now for SMEs to indulge into radical innovation or innovating radically because it is costly to invest. The prudent way is to use the available resources, improve the machines, processes and allow the employees to contribute innovative ideas. In coherent with the aforementioned statement, research and development will not ensure a company to become successful and what is required is the internal capabilities (M. Kodama, 2017).

Process innovation is determined by the internal and external situation in which all these factors coordinate with each other (Asemikha, Musona, Tokkeli, & Saarenketo, 2019; Bharwani & Mathews, 2016; Fellnhofer, 2017). It includes new elements which are introduced in the production process or services that are used to make products or provide services (Hervas-Oliver & Sempere-Ripoll, 2015; Schallmo, Brecht, & Ramosaj, 2018). Additionally, process innovation does not require radical change (Moore, 2004). The process is done within the production unit by mechanical or chemical engineers. However, Fellnhofer (2017) asserts that innovation is not a one-time event, but it takes several interrelated activities to boost the process of innovation. Based on the seminal studies, it is revealed that corporations which allocate fund to innovate enjoys high performance and financial gain (Chooi & Ha, 2011). Several studies suggest that high-performing companies generally have a formal process of innovating new products or services (Bharwani & Mathews, 2016; Calvino, 2019; Choi & Ha, 2011).

Product innovation is one of agendas of each corporation. The product innovation includes latest design, ecofriendliness, and compliance to quality assurance. The purpose of product innovation is to have a competitive advantage. Currently, the market trend has varied because customers do not owe allegiance to any products (Hamilton, 2016). As such, new products that are introduced in the market must lure customers. Most product innovation is due to demand factor, but supply aspect is another driver for product innovation (Thi Canh, Thanh Liem, Phung, & Khuong, 2019). Thi Canh et al. (2019) observed that increase in sales is due to process and product innovation. Owing to the increase of unemployment globally, most companies would not allocate fund to innovate on machines or research on products (Lv, Tian, Wei, & Xi, 2018).

Knowledge sharing is part of innovation. It is imperative that without knowledge sharing in the organisation during the pursuance of innovation such organisation may not excel. Knowledge sharing happens among the employees by sharing their innovative ideas either to increase the production or improve the product (Noori, Bagheri Nasrabadi, Yazdi, & Babakhan, 2017; Nyuur, Brecic, & Debrah, 2018; Reidolf, 2016). For this to be effective, the company must allow employees to share their innovative idea for the best interest of the company. Literally, knowledge comprises of tacit and explicit which was conceptualised by Polanyi (Indarti, 2017; Scott, 1995) and later by Nonaka (Holste & Fields, 2010; Mamun, 2018).

The explicit knowledge can be implemented in the organisation whereas the tacit knowledge reflects to the knowledge of an employer, skills and know how. To date, there is lack of seminal scholarly contribution between innovation and sustainable business growth. Most of scholarly contribution, innovation has positive effect on sales or firm growth, performance or increase of market share.

2.2 Sustainable Business Growth

Gandhan and Kee (2019c) denotes sustainable business growth as the process of steady growth without any decline in profit as compared to subsequent years in which a company is in position to leverage its growth upwards in terms of profit and performance. It encompasses a director or manager who decides in the best interest of the company. The capital of the corporation is maintained properly without any reduction. In such process, a corporation heads to sustainable business level, business shifts from economic to three dimensional namely social, environment and economic, and all of which are concerned to sustainability. The study on sustainable business growth is at infancy stage and it needs to be explored as depicted at Table A 1

Author	Торіс		Findings		
(Khan & Naeem, 2018)	The impact of strategic quality orientation on innovation capabilities and sustainable business growth: Empirical evidence from the service sector of Pakistan		The results indicate that strategic quality orientation which affects the innovation capabilities. This allows a company to endure sustainable business.		
(Cole, 2017)	Why getting operations decisions right is critical: implementing sustainable business growth depends on it		The decision maker has positive impact on sustainable business growth.		
(Fellnhofer, 2017)	Drivers of innovation success in sustainable businesses	The results indicate that these dimensional are significant and positive predator perceived innovation success throug different level. Stevenson's multiple entrepreneurial approach offers driver innovation success in sustainable busin			
(JinHyo, WooYoung, & JeongHo, 2015)	Knowledge strategy and business model conditions for sustainable growth of SMEs		It is found that sustainable development of SMEs requires two kind of open innovation which are knowledge strategy.		
(Maria, Santos, Svensson, & Padin, 2014)	Indicators of sustainable business practices: Woolworths in South Africa		Findings reveal that comprehensive governance system ensures sustainable business practice.		
(Gandhan & Kee, 2019b)	The fiduciary accountability of directors ensuring sustainable business growth in the public- listed companies, and SMEs		Fiduciary accountability of director or managers are explicitly noted in the listed corporation with good and accountable governance. Business judgement is agreed by the BOD after evaluation of business prospect. In some situations, future investment is given to professional expert to study about the project and possible prospects. Directors and managers remain		

Table A.1 A summary of studies relating to the sustainable business growth.

				accountable to the corporation and stakeholders. SMEs fiduciary accountability of a directors or managers are evidenced in corporation and they are also accountable to the stakeholders.
(Gandhan 2019c)	&	Kee,	Innovation in SME contributes to sustainable business growth	Study is based on the rubber glove factories in Malaysia in which accountable governance promotes sustainable business
				growth.
(Gandhan 2019a)	&	Kee,	A comparative study on fiduciary accountability of directors ensuring sustainable business growth	With accountable in the management, managers can ensure the corporation to endure sustainable business growth.

2.4 Fiduciary accountable managers

The fiduciary accountable managers or directors have one thing in common, that is, to serve in the best interest of the company. They would not plunge to any hasty decision. This is because any decision could cause serious repercussion such as financial loss or winding-up of a company. Owing to this, a director or manager would decide base on careful evaluation before any risky venture. The fiduciary accountability of a manager is not all about profit-making or financial performance but it is more to the best interest of a company.

2.5 Case Study Theoretical Discussion

According to Blaikie (2008) questions of "how" and "why" are suitable for explanatory. It assists a researcher to seek to answer a question which links the real life. This is not possible to use survey questionnaire methodology because it is too complex (Yin, 1984). The advantage of an explanatory case study is another research strategy which is suitable for investigation of "contextually phenomenon" (Blaikie, 2008). It could be queried by means of using how or why questions, a researcher is in position to have some control and focuses on contemporary instead of historic information (Yin, 1984). Also, the interviewer takes the role of a student and tries to get information based on the experiences of a respondent (Yin, 1984).

2.6 Gap in Literature

In time of covid-19, it is expected that many companies would be forced out of business. This is due to lack of income to meet the fixed cost expenses. The sustainable business growth ensures a company to sustain its operations for more a year. To date, there is inadequate study on sustainable business growth. Another lacuna is innovation which based on product, process and sharing of innovative idea. Although innovation is widely studied, innovation during the pandemic is needed for a company. Studies on process, product and innovative ideas not thoroughly studied. In a similar vein, sustainable business growth is not widely studied academically.

2.7 Proposition

Resource based view (RBV) asserts that competitive advantage can be achieved by means of using internal factors rather than external factors. For purpose of this study, it is appropriate to link RBV because companies can exploit external opportunities utilising resources instead of acquiring skill (Barney, 1991; Barney & Hesterly, 2006). It is assumed that companies can become competitive by means of using their own resources. This also lies on the capabilities of a company to use the internal resources to produce products and relish competitive advantage.

Teece, D (2007) defined dynamic capabilities as a company is in the position to integrate, build and reinforce internal and external competencies to encounter varying environments. The dynamic capabilities arose from the resource-based view of a firm. With the innovation which is based on knowledge, a firm undergoes reconfiguration of their process (Kodama, 2017). Grant (1991) knowledges that integration entails flexible integration across the innovative knowledge. In view of this, the following proposition:

- Proposition 1 How innovative knowledge increases the production?
- Proposition 2 How innovation contributes to sustainable business growth?
- Proposition 3 How employees contribute their innovative knowledge?
- Proposition 4 How product innovation contributes to sustainable business growth?
- Proposition 5 How fiduciary accountability of a manager ensures sustainable business growth?

Based on RBV, the research framework of this study is depicted at Figure A1. With dynamic capabilities, a company uses the available resources to innovate the process and product. The employees play an integral part in production. They have vast experiences which will translate to the innovation of the product and production. Innovation increases the production which entails a company to have sustainable business growth. In view of this, research framework is depicted below:



3. Research Methods

The methodology is qualitative because of selected glove companies in Malaysia. Owing to the restriction movement control, most of the conversations were done through telephone and video conferencing (Stephens, 2007; Sturge., Judith, & Hanrahan, 2004). The questions raised are confined to the research framework. In time of pandemic, it was difficult to make appointment and only several calls were made. The government had relaxed the movement control and inter-state travel before the second surge of coronavirus cases in July 2020. It was possible to collect the necessary information and employees were interviewed.

Although telephone conversation can be short, it is possible to get the necessary information (Chapple, 1999; Holt, 2010; Vogl, 2013). Telephone conversation does not give the opportunity for the interviewer to ask specific questions because the respondents may refuse to divulge on the ground of company's trade secret (Opdenakker, 2006). The duration of telephone conversation should be more than ten minutes because the interviewees would get mentally and psychologically affected (Kumar, 2019). In order to have more information, it is necessary to have face to face interview (Kumar, 2019). Face to face interview gives the opportunity for the interviewer to know whether the respondent is willing to share the company information. Huber and Power (1985) opined that data collected should include respondents who are managers, skilled workers, engineers, and workers. Whilst carrying out the interview, it is vital to move on to another question if the respondent refuses to answer. The information comprising trade and company operation shall be kept confidential. The interview is confined to glove factories of different states that fall under the category of SMEs. Amongst these companies, the sample size is confined to six factories. Furthermore, these companies have been in operation for the last ten years which accentuates the company's strong presence in the glove production industry.

3.1 Data collection

Most of the data was collected from telephone conversations and virtual video conferences. For virtual conversation, only two companies agreed to meet by means of using Microsoft Teams. The meetings conducted were less than fifteen minutes to avoid mental fatigue. Most of the interview and meetings took place during the period of lockdown. To avoid mental fatigue during the restriction of movement, limited questions were asked during the interview and face to face interview was carried out after the lockdown was lifted. The questions raised on product innovation is depicted at Table A 2. Managers, a group of engineers and skilled workers of the six factories were interviewed separately and all of them provided positive responses through-out the questionnaires. The questions answered positively were ticked below.

Table A.2 Produ	ct Innovation
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NO	Question	F1	F2	F3	F4	F5	F6
1	Company produces new products	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V
2	Products have newness for the customers	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
3	New products have new friendly components	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
4	My company have competitive products	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

From the interview, it can be deduced that the directors and managers encouraged their engineers, quality control experts and designers to collaborate in producing eco-friendly gloves. The gloves are degradable without

causing any ecology and health consequences. Moreover, six factories allocated a modicum amount of funding for research to improve the quality and to prevent allergic reactions when then the gloves are being used.

The respondents were glad that this year there is unusual increase of gloves locally and internationally. These companies used natural rubber with composition of nitrile and neoprene to produce gloves for various uses such as household, industrial use, chemical, food handles and hospitals. Also, their products are certified and complied to the directive of SGS UK Limited System, ISO190, US FDA CFR 21 and Europe Union Standard.

Table .	A.	3	Process	Innovation
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Ν	Question	F	F	F	F	F	F
0		1	2	3	4	5	6
1	Company learns new process of production.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
2	Company keeps with the latest development of production.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
3	Company has no difficulty in introducing new process.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
4	Company has latest machines to speed up the process.		\checkmark			\checkmark	
5	Company has less nosy machine.		\checkmark			\checkmark	
6	Production use less electricity.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

Insofar as process innovation is concerned, a factory purchased automation process machine. With inclusion of high technology and digital operation, manufacturing process is technical and automated. The working environment is clean. However, the respondents refused to elaborate where it was purchased and actual capacity of production. Owing to trade secret, respondents preferred not to reveal about the type of machineries purchased and what sort of incremental innovation was done.

The machine was handled by a qualified chemical engineer and technicians. Other factories maintained the existing machines with some technical modifications. The modification was spearheaded by both mechanical and chemical engineers. Table A 3 indicates that six factories innovated the machines, processes, and product. Although the degree of innovation varies from a factory to factory, each company or factory produces the gloves with full capacity. Process innovation are carried out on daily basis. According Hammer and Champy (1993) is radical innovation in the manufacturing process innovation. However, other factories would include innovating process includes improving work process, information, flexibility in working hours and materials (Yamamoto & Bellgran, 2013). The mechanical engineers of the respective factory stressed that inhouse innovation is the common feature of process innovation. It is policy of the companies producing gloves not to invest on radical innovation but rather increase the capital of the company.

In today's uncertainty market and trade war, companies have an indispensable role in allowing employees to share their innovative ideas. According to Table A 4, six factories encouraged employees in production and processing line to come out with any innovative ideas. These factories accept any innovative way to increase production and product improvement. It has become ingrained in the culture of these organisations to reward the staff members who introduced innovative method of production or product innovation. Fearing that such staff would leave the organisation, these companies sponsored the staffs to overseas for courses so that they can be promoted.

Amidst the social distancing is enforced, employees of each factory were interviewed separately without having any social contact. The questions asked were simplified which is depicted at Table A4. To reduce weariness, questions posed to them were direct, and it took less than five minutes. Most of the employees interviewed gave positive response of their factories. Consequently, the interviewed employees consensually agreed that modus operandi of each factory is similar when it comes to the implementation of innovative ideas. The process of implementation initially starts with an employee who introduces to his supervisor. It is conveyed to the managers in which they would discuss with a group of engineers the viability of the innovative ideas. If it is accepted overwhelmingly the innovative idea is implemented. The employee fully acknowledged that any innovative ideas initiated by them is appreciated and notified on the company's organisation media. They are rewarded with bonus and some other rewards. Without discrimination, employees are given the opportunity to attend courses for self-actualisation which corresponds to sustainability's concept. Not only that companies are complying to sustainability but also complying to International Labour Regulations such as rewarding the employees, justified wage, holiday, and leave.

NO	Question raised	Employees of Factory E	Employee of Factory F					
		1 2 3 4 5	1 2 3 4 5					
1	Innovative knowledge	$\checkmark \checkmark \checkmark \checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark \checkmark \checkmark \checkmark$					
2.	Implementation of innovative knowledge	$\checkmark \checkmark \checkmark \checkmark \checkmark \checkmark$	$\checkmark \checkmark \checkmark \checkmark \checkmark \checkmark$					

3.	Recognition by employer	\checkmark	v								
4.	Reward given	\checkmark	v								
5.	Courses given	\checkmark	V								
6.	Promotion									\checkmark	

In addition, a company must be prudent when it comes to investing on innnovation. This is due to the uncertainty in the future market (Tidd & Pavitt, 2005). On the contrary, innovative knowledge generated by employees does not require capital investment and any innovative ideas would beneift the organisation. Of course, such knowledges can be accrued by leveraging on available resources or employees innovative ideas which enhances competitive advantage. According to Zack (1999), a company which manages the knowledge displays distinctive characteristics. These include a company applies any innovative, uses it properly with skill, knowledge to solve problems and creates opportunity. Additionally, knowledge is power (Foucault, 2007) and such knowledge or ideas which are shared among the employees would go along way for a company to endure sustinable business growth.

Table A. 5 Sustainable business growth

NO	Questions	Res posi	pond itively	ents V		responded		
		F1	F2	F3	F4	F5	F6	
1	My company identify and analyses the potential aspects of sustainable business growth (Szczepanska-Woszczna & Kurowska-Pysz 2016	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
2.	My company have talented programmes (Szczepanska- Woszczna & Kurowska-Pysz, 2016).	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
3.	My company fully committed in the operation of ensuring sustainable business growth (Szczepanska-Woszczna & Kurowska-Pysz 2016)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
4.	Company products or services are innovated by using the available resources to meet sustainable business growth? (Yuliansyah. & Ahmand Razimi, 2015)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
5.	Company has clientele relationship with customers in terms of satisfaction and loyalty? (Yuliansyah. & Ahmand Razimi, 2015)	~	√	√	✓	√	√	
6.	Company produces eco-friendly product.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
7.	Company produces degradable gloves.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	

Additionally, each respondent was allocated twenty minutes regarding the question of sustainable business growth. It was necessary to raise extra questions to clarify about the sustainable business growth. Although the respondents answered positively to the question raised as depicted at Table A 5, they were tolerant and answered all the questions. These companies have business strategy towards sustainable business growth. As part as the business strategy and the capability of these companies, gloves of various uses were sold locally and exported globally. With increase in sales, it was possible for these companies to relish sustainable business growth.

The aforesaid factories adhered to green manufacturing and complying to δR , that is, reduce, recycle, recover, re-design and remanufacture (Jayal, Badurdeen, Dillon, & Jawahir, 2010). However, most of the gloves manufactured are bio-degradable because of natural rubber. It does not affect ecologically, and it is eco-friendly. It was noted that three factories installed tanks to collect rainwater which is connected to water filter treatment. Owing to dry weather, two factories erected huge tank to collect rainwater. The treatment and filtered system connected to the tank which is sent to the manufacturing plant.

According to the manager of each factory, sales increased tremendously because of covid-19. Despite increase in the production of gloves, health and welfare of the workers are the priority. Of the six factories, one factory invited to look at the production and how employees handled the final product. The process was hygienic,

and machines did the entire processes. The electric engineer remarked that energy utilised was economical and no harmful toxin emitted. The decision-making during the pandemic, managers and directors takes prompt action and ensure the best interest of the companies. They remain fiduciary accountable to the company and stakeholders. Figure A 2 depicts that a company has the capabilities to utilise the resources to manufacture the gloves of different uses.

Figure A. 2 Process of production with innovation



The underlying theories specifically states a company must possess the capabilities to use the resources. Having viewed the process, the company has the capability to transform the existing machines to work efficiently and increase the production. The machines were partly innovated by mechanical and chemical engineer. While in the factory, the machines producing the gloves were not noisy. The employees ranging between skilled to semi-skilled were encouraged to bring innovative ideas such as to increase production and improved the quality of gloves.

In time of restriction movement control, all employees were tested for covid-19 and daily temperature taken before handling the machines. The habitual practice in manufacturing process includes cleaning and disinfection of manufacturing facilities. According to the engineer, to ensure clean production the company uses GMP-mandated employees protection equipment. In production line, the air is circulated out and cleared.

Additionally, the financial manager commented that more automation would be used in near future. Since the gloves were exported globally, less human handling is required and safe to exports products. According to him, the company is cautious when comes to investment and any investment on machineries evaluation is done by experts.

4. Analysis

Most of the interview respondents were managers with more than five years of experience. Furthermore, interview with employees were done with the permission of the glove factories. Based on the proposition 1, six factories agreed that innovative knowledge increased the production and improved the product quality. Although these glove factories fall under the category of SMEs, they allow innovative idea so that products could be improved or increase the production. These companies are supportive to their employees and motivate them to procreate innovative ideas. For any organisation to excel, the support from the high echelon of managers is the root cause of the company to sustain its business.

Factory 3 purchased latest process machine to increase the production. The machines are manipulated by competent workers. With the exceptional of Factory 3, the remaining factories (F1, F2, F4, F5 & F6) curtail their cost by allowing the experienced mechanical and chemical engineers to modify the machine to have perpetual and accelerate the production. Retrofitting machineries is a form of innovation. All in all, gloves produced by the six factories are tested OEM/ODM manufacturer safety gloves.

Regarding Proposition 2 is about innovation which contributes to sustainable business growth. The sustainable development towards sustainable business growth confines to eco-friendly product, no reduction of capital and harvesting profit. Although, the managers were not willing to divulge the profit but agreed that there was positive financial return (Borland, Bhatti, & Lindgreen, 2019). Based on the RBV (resource-based view) and dynamic capability, these factories used their own resources, and reduce the cost on innovation by allowing a team of engineers to innovate. The influence of external environment, these factories were able to improve their product, that is, eco-friendly products and thus securing competitive advantage (Teece, 2009, 2014; Teece, 2007).

Not all innovative idea of employees is implemented. This is because the innovative idea goes through the process of evaluation and effectiveness before implementation. As such Proposition 3 innovative idea of employees is implemented after consent given by managers or team of experts. It has positive effect on the sustainable business growth.

Product innovation of gloves mainly lies on degradable and eco-friendly. No doubt the gloves produced are of quality, the product is quite similar. Most glove manufacturers do not wish to transfer the cost of innovating product onto the customers. To avoid cost shifts to the customers, these factories engage their experts to undertake

the innovation process. In competitive market, it is not wise to allocate fund to innovate radically because of the cost.

Noted that directors or manager or engineers are accountable in fiduciary sense. They make sure that profit accrued in each company is sustainable manner. Although, managers perform their fiduciary duties.

Whilst process of glove, water becomes polluted because of leaching. It is used to remove the substances found in newly produced gloves. The tank which containing polluted materials are processed without affecting the environment. Water treated primarily and sludge is disposed into the central tank.

5 Discussion

Owing to the unprecedented demand for gloves, six factories have increased the production and experiencing a good financial return. The gloves are exported across the global. According to the marketing managers of the six factories, pandemic disease triggered the demand, which eventually encouraged the increase in the production of gloves. In addition, the glove manufacturing process has a low carbon footprint and does not pollute the environment. This is because most of gloves use nitrile to product gloves.

Innovation has a positive effect on sustainable business growth. It is consensus of opinions amongst the managers that sales increased because of COVID-19. Since the factories are not large, the cost is not high compared to a large organisation. Although there is in rise of unemployment, this sector, that is, glove industry is reaping profit and workers are not terminated.

Based on the collection of data which lasted more than four months, engineers ensure that the machines perform at optimum level and no technical breakdown was noted. These factories produced the products around the clock to meet the demand. In a final note, the marketing of gloves is managed by the respective company and enduring sustainable business growth.

Having interviewed the managers, they agreed that there were handsome earnings due to the increased sale. In case of post-covid 19, managers were sceptical whether such earning could be harnessed.

As part of sustainable policy of these factories, water used to produce of rubber glove is treated at the factory site. The polluted water is treated with friendly chemical flocculation and undergo a series of processes. In the process of treating the water, zinc is produced which is sent to the main treatment plant. It is the mandatory law in this country not to dispose of sludge or chemicals into the river or drain. The law requires the zinc must be less than I milligram per litre, and Chemical Oxygen Demand must be less than 50 milligrams per litre. To date, there is no notice being issued by the government authorities to these factories for non-compliance.

6 Limitation of study

To have a clear understanding, it is proper to include a large or public listed corporation which manufactures gloves. This would give an insight on sustainable business growth of glove factories and innovation has positive effect on sustainable business.

7 Future Study

The future study should include market orientation as an important variable and innovation for sustainable business growth in glove factories. No doubt, this study is confined to companies that fall under SMEs category, it is proper to include large companies which produces gloves as well.

8 Conclusion

The unprecedented demand of gloves in time of COVID-19 contributed towards a sustainable business growth of gloves companies. Although innovation had been done in the past, the increase in demand both locally and globally gave rise to the increase in the production of gloves. In case COVID-19 is not contained globally, glove companies would continue to produce at full capacity and employ more workers. Despite no innovation is done during the pandemic, the machineries innovated by a team of engineers contributed to increase in production. As such it is correct to that innovation has a positive impact on the sustainable business growth.

References

- 1. Al Mamun, A. (2018). Diffusion of innovation among Malaysian manufacturing SMEs. European Journal of Innovation Management, 21(1), 131-141.
- Amankwah-Amoah, J. (2020). Stepping Up and Steeping Out of COVID 19: New Challenges for Envormmental Sustainability Policies in the Global Airline Industry. Journal of Cleaner Production. doi: https://www.doir.org/10.1016/clepro.2020.123000
- 3. Anuar, A., & Yusuff, R. M. (2011). Manufacturing best practices in Malaysian small and medium enterprises (SMEs. Benchmarking: An International Journal, 18(3), 324-341.

- 4. Asemikha, A., Musona, J., Tokkeli, L., & Saarenketo, S. (2019). Business model innovation and entrepreneurial orientation relationships in SMES: Implications for international performance. Journal of International Entrepreneurship, 1-29.
- 5. Azril, A. (2020). Malaysia's Statistics Department foresees recession in the next four to six months, Malay Mail.
- 6. Barney. (1991). Firm resoruces and sustained competitive advantage. Journal of Management, 17(1), 99-120.
- 7. Barney, & Hesterly, W. S. (2006). Strategic Managemment and Competitive Advantage. Upper Saddle River, NJ: Pearson Prentice Hall.
- 8. Bharwani, S., & Mathews, D. (2016). Customer service innovations in the Indian hospitality industry. Worldwide Hospitality and Tourism Themes, 18(4), 416-431.
- 9. Blaikie, N. (2008). Designing Social Research. London: Sage Publishing Ltd.
- Borland, H.,, Bhatti, Y., & Lindgreen, A. (2019). Sustainability and sutainable development strategies in the U.K. plastic electronics industry. Corporate Social Responsibility and Environmental Management, 26(4), 805-818.
- 11. Calvino, F. (2019). Technological innovation and the distribution of employment grwoth: a firm-level analysis. Industrial and Corporate Change, 28(1), 177-202.
- 12. Camisón, C., & Villar-López, A. (2014). Organizational innovation as an enabler of technological innovation capabilities and firm performance. Journal of Business Research,, 67(1), 2891-2902.
- 13. Chapple, A. (1999). The use of telephone interviewing for qualitative research. Nurse Researcher, 6(3), 83-96.
- 14. Chin. (2020). For first time in 22 years, negative growth rate projected for Malaysia retail industr, Malay Mail.
- 15. Chin, C. (2020). Covid-19: Travel in the time of coronavirus and movement control order, The Star.
- 16. Choi, S. B., & Ha, G. R. (2011). A study of critical factors for technological innovation of Korean manufacturing firms. Journal of Independant Economic Business, 21, 1-24.
- 17. Cole, G. (2017). Why getting operations decisions right is critical:implementing sustinable business grwoth depend on it. Annals in Social Responsibility, 3(1), 56-59.
- 18. Dzulfiqa, F. (2020). Exports of agricultural commodities continue despite logistical disruptions, The Jakarta Post.
- 19. Fellnhofer, K. (2017). Drivers of innovation success in sustainable business. Journal of Cleaner Production, 157, 1534-1545.
- 20. Foucault, M. (2007). Surveiller et punir : Naissance de la prison, . Paris: Gallimard.
- 21. Gandhan, & Kee. (2019a). A comparative study on fiduciary accountability of directors ensuring sustianable business growth. Paper presented at the Asia International Conference, Langkawi.
- 22. Gandhan, & Kee. (2019b). The fiduciary accountability of directors ensuring sustainable business growth in a public listed companies and SMES. International Journal of Recent Technology and Engineering (IJRTE), 8(3s2), 605-615. doi: https://www.DOI:10.35940/ijrte.C1130.1083S219
- 23. Gandhan, & Kee. (2019c). Innovation in SME contributes to sustainable business growth. Paper presented at the ICBS, Malaysia.
- Gandhan, Kee, D., Mahasenan, & Jayasenan. (2020). Study on the fiduciary accountability, sustainable business growth in the listed companies and SMES. Humanities & Social Sciences Reviews, 8, 887-900. doi: 10.18510/hssr.2020.81106
- 25. Grant. (1991). The resource based theory of competitve advantage:implication for strategy formulation. California Management Review, 33(3), 114-135.
- 26. Hammer, M., & Champy, J. (1993). Reengineering the corporation: a manifesto for business revolution. New York: Harper Business.
- 27. Hervas-Oliver, J. L., & Sempere-Ripoll. (2015). Disentangling the Influence of Technological Process and Product Innovations, Journal of Business Research, 68(1), 109-118.
- 28. Holste, J. S., & Fields, D. (2010). Trust and tacit knowledge sharing and use. Journal of Knowledge Management, 14(1), 128-140.
- 29. Holt, A. (2010). Using the telephone for narrative interviewing: a research note. Qualitative Research, 10(1), 113-122. doi: http://www.0.1177/1468794109348686
- 30. Huber, G. P., & Power, D. J. (1985). Retrospective reports of strategic-level managers: Guidelines for increasing their accuracy. Strategic Management Journal, 6(2), 171-180. doi: 10.1002/smj.4250060206
- 31. Indarti, N. (2017). Impacts of external knowledge and interaction on innovation capability among Indonesian SMEs. International Journal of Business Innovation and Research(4), 430-450.
- 32. Jayal, A. D., Badurdeen, F., Dillon, O. W., & Jawahir, I. S. (2010). Sustainable manufacturing: modeling and optimization challenges at the product, process and system levels. ournal of Manufacturing Science and Technology, 2(3), 142-152.

- 33. JinHyo, Y., WooYoung, J., & JeongHo, Y. (2015). Knowledge strategy and business model conditions for sutainable growth of SMEs. Journal of Science and Technology Policy Management, 6(s), 245-252.
- 34. Khan, & Naeem. (2018). The impact of strategic quality orientation on innovation capabilities and sustainable business growth. International Journal of Quality and Reliability Management, 35(8).
- Kodama. (2017). Corporate innovation based on holistic leadership: A case study of softBank (193-217 Ed. Developing Holistic Leadership ed.). England: Emarald Publishing House.
- Kodama, M. (2017). Developing strategic innovation in large corporations—The dynamic capability view of the firm. Journal for Corporate Transformation, 24(1), 221-246. doi: https://doi.org/10.1002/kpm.1554
- 37. Kumar, R. (2019). Research Methodology. London: Sage Publication Ltd.
- 38. Lv, W.-D., Tian, D., Wei, Y., & Xi, R.-X. (2018). Innovation Resilience: A New Approach for Managing Uncertainties Concerned with Sustainable Innovation. Sustainability, 10, 3641. doi: 10.3390/su10103641
- 39. Mamun, A. A. (2018). Diffusion of innovation among Malaysian manufacturing SMEs. European Journal of Innovation Management(1), 113-141.
- Maria, A., Santos, D., Svensson, G., & Padin, C. (2014). Implementation, monitoring and evaluation business practices: framework and emprirical illustration. Corporate Governance, 14(4), 515-530. doi: https://www.doi.101108CG-02-2013-00022
- 41. Mueller, V., Rosenbusch, N., & Bausch, A. (2013). Success patterns of exploratory and exploitative innovation a meta-analysis of the influence of institutional factors. Journal of Management, 39(6), 1606-1636.
- 42. Nguyen, H. V., Chen, J.-S., & Lee, C.-S. (2014). The effects of co-opetition capability on innovation practices and competitive advantage: A cross-national comparative study. Paper presented at the IEEE International Conference on. 2015.
- 43. Noori, J., Bagheri Nasrabadi, M., Yazdi, N., & Babakhan, A. R. (2017). Innovative performance of Iranian knowledge-based firms: Large firms or SMEs? Technological Forecasting and Social Change, 179-185.
- 44. Nyuur, R. B., Brecic, R., & Debrah, Y. A. (2018). SME international innovation and strategic adaptiveness. International Marketing Review(2), 280-300.
- 45. Opdenakker, R. (2006). Advantages and disadvantages of four interview techniques in qualitative research. Forum: Qualitative Social Research, 7(7).
- 46. Reidolf, M. (2016). Knowledge networks and the nature of knowledge relationships of innovative rural SMEs. European Journal of Innovation Management(3), 317-336.
- 47. Schallmo, Brecht, & Ramosaj. (2018). Process Innovation: Enabling Change by Technology. Germany: Springer.
- Schwab, K. (2015). The global competitiveness report 2015–2016. In X. Sala-i-Martín (Ed.). Switzerland.
- 49. Scott, D. (1995). Everyman Revived: The Common Sense of Michael Polanyi. New York: William Eerdmans.
- 50. Stephens, N. (2007). Collecting data from elites and ultra elites: Telephone and face-to-face interviews with microeconomists. Qualitative Research, 7(2), 203-216.
- 51. Sturge., Judith, & Hanrahan, K. J. (2004). Comparing telephone and face-to-face qualitative interviewing: A research note. Qualitative Research, 4(1), 107-118.
- 52. Teece. (2009). Dynamic capabilities: and dynamic management-oranizing for innovation and growth. England: Oxford University Press.
- 53. Teece. (2014). The foundations of enterprise performance: dynamic and ordinary capabilities in an (ecnomic) theory of firms. The Academy of Management Perspectives, 28(4), 328-352.
- 54. Teece, D. (2007). Explicating dynamic capabilities: the nature and microfoundations of sustainable enterprise performance. Strategic Management Journal, 1319-50.
- 55. Thi Canh, Thanh Liem, Phung, & Khuong, V. (2019). The impact of innovation on the firm performance and corporate social responsibility of Vietnamese manufacturing firms. MDPI, 11, 3666-3670.
- 56. Tidd, & Pavitt. (2005). Managing Innovation: Integrating Technological, Market and Organizational Change (Third ed.). Chichester: John Wiley & Sons.
- 57. Vogl, S. (2013). Telephone versus face-to-face interviews: mode effect on semi-structurediInterviews with children. Sociological Methodology,, 16(1), 133-177. doi: http://www.0.1177/0081175012465967
- 58. Wang, Z., & Wang, N. (2012). Knowledge sharing, innovation and firm performance. Expert systems with applications, 39(10), 8899-8908.
- 59. Yamamoto, Y., & Bellgran, M. (2013). Four types of manufacturing process innovation and their managerial concerns. SctVerse Scidirect, 479-484.
- 60. Yin, R. (1984). Case study research: Design and Methods. Beverly Hills, CA: Sage Publication.
- 61. Zack, M. (1999). Developing a Knowledge Strategy. California Management Review, 41(3), 125-145. doi: https://doi.org/10.2307/41166000