

Overview of International Business Issues and Policies in the Global Context

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Abstract— This article is designed to provide readers with broad-based understanding of current issues and policies in international business. The article also provide readers with an overview of how international business issues and policies knowledge plays a critical role in formation and implementation of business strategy in the global context. It helps to equip readers with the key concepts and principles, as well as guide them to understand the significance of having a global presence. The discussion is explained sufficient include facts, examples, theories, arguments and supporting research paper from various sources.

Keywords— deglobalization; Industry 4.0; expatriation; issues and policies; international busines.

I. INTRODUCTION

In the overview of international business issues and policies, three areas will be addressed in this articles, which is:

Expatriation are very common in many MNCs. One of the vital duties of foreign managers is to cope up with the foreign culture while having a culture-shock. The challenges faced by expatriates, including foreign managers and how MNCs manage expats are discussed. Some examples are provided to support the justifications.

Deglobalization refers to the process of diminishing interdependence between countries. While it has been widely acknowledged that globalization brings profound effects on economic outcomes, economists warn that we should not neglect that deglobalization is on the way. The implications of deglobalization to MNCs and what they should do to ensure their competitiveness in the state of deglobalization are critically discussed.

Industry 4.0 has already begun to influence business. Most of the large organizations are adopting hi-technological advancement. Critiques raised the issue that industry 4.0 will replace the need for unskilled labour and firms will be more focused on the proximity to the customer. How industry 4.0 will affect MNCs are evaluate and critically discussed.

II. CHALLENGES FACED BY EXPATRIATES AND HOW MNCs MANAGE EXPATS

In this globalized era, a rising number of multinational corporations, where those companies had a responsibility to manage and control overseas subsidiaries, such as local clients, local employees and other related business. Expatriates play as an important role where refers as a home-country citizen which is sent by headquarters to fill in the positions at overseas firm and accomplish the transfer of coordination technology, as well as manage foreign operations [1]. A key purpose for using expatriates is expats serve successful accomplishment of global business strategies. However, variety of challenges expatriates might face when relocating for international assignment. Although the expats' job seem really adventures and well paid, most of them would simply disagree as the adjustment to a new country can be totally difficult especially when the lifestyle in host country is no longer the same [2].

2.1. Problems Expatriates Encounter in Foreign Country including foreign manager

Travel abroad to stay in another country is often an overwhelming experience for expatriate. One of the problem that expatriates faced is the cultural adaptation and adjustment in host-country. When living in a new cultural environment, it is really tough to spend time communicate with local colleagues due to language barriers [3]. Cultural clashes is unavoidable, where this phenomenon also imply emotional disorientation such as depression, and thereby brought implication for expats' psychological and corporate performance [4]. An example to be taken into consideration is the cultural shock facing by Samsung's expats in Germany. Samsung Electronics Co., a South Korea multinational company send 300 employees abroad faced minor problem in the host country. In a matter of cultural differences, expatriates reported suffering from language barrier. Most of the expats was struggle to work in diverse cultural settings if the host language is not spoken well, also led miscommunication in business practices [5]. In such, Samsung faced lack of managers on its side due to culture differences.

During cross-cultural transitions, safety and security as well as health problem is also challenges faced by expats and families [6]. New environments overwhelmed by stress of living and unsure security, where this do increase pressure for expats and families to live a normal life. Poor safety standard of road in some country do lead greater risk on accident. However, mental health during expatriation also brings impact on the chances of successful overseas assignment. For example, Lincoln Electric Holdings Inc. had manufacturing alliances and joint ventures with Mexico Company. The American Company send its employee to run a manufacturing factory at there. Lincoln loss hundred millions of dollar when the expatriate left the project midway through and returned home with his family after four years. It was state that the children and wife become depressed and faced problem such as immigration issues, housing loans, etc. As the expatriate act an important role in handle large manufacturing plant in Torreón, the situation cause disrupted of project [7].

One problem that faced by expatriate managers is difficulties on reshaping leadership styles in host country. Expats mostly faced managerial issues such as looking situations from number of perspectives, decision-making under uncertain conditions and tolerating ambiguity in workplace [8]. In high power distance countries, expats often required more authoritative approach than used-to-be, hence it is hard to establish a thriving cooperation with their local colleagues [9]. For instance, an American expatriates was send to Philips Carbon Black Limited's factory in India. The expatriate was assigned high position in Durgapur, where American leadership was not match into their culture [10]. Back then in U.S., workers are mostly high school graduates, hence he assume that the same goes to India's employees. However, the reality had pleasantly surprised him as most of them are master graduated engineers. In such, he was struggles with India's hierarchy which makes him arduous to form social bonds with subordinates. This well-defined hierarchy favor expatriate with more rights to guide local employees.

Another challenge associated with expatriate managers is miscommunication with local subordinate of host country [11]. Conflict is unavoidable when expatriate and local employees of different communication style are brought together in the workplace. In construct, some expat manager faced problem to achieve teamwork for organizational effectiveness due to host countries' difference perception [12]. For instance, IKEA faced problem when sending western expatriate managers to train local employees during its early stages of entering China market. The challenges can be extraordinary, where global knowledge transmission will lead higher chances to distort the communication process. Sweden expatriate faced misunderstanding issue when explaining business task to subordinate, where "yes" does not mean agree, hence it is difficult to make sure the Chinese do understand the task [13]. However, gift in China is seen as critical factor on relationship building, while is different perceived by Western as bribery. To sustain harmony creation, Sweden manager is necessary to bought small gift for employees to exchange level of trust.

2.2. The Right Way of MNCs to Manage Expats

Although MNCs pursue to fill their organizations' require by strategically relocate talent employees from one country to another, there is a significant percentage of expats fail to encounter company's objectives. In order to minimize risk, one of the ways to manage expatriates is planning a repatriation program to ensure theirs's effectiveness when return [14]. Instead of international assignees return to share global knowledge, they face an entirely unrealistic and different expectations about return home adaptation. To reduce uncertainties associated to job performances, majority of re-entering expats were notified about the culture shock of home country and new office environment might have altered [15]. In such, the failure to address repatriation problems will lead to high turnover, disillusionment of expats and also cause ineffective on work performance.

For instance, Monsanto, a biotechnology agricultural company send around 50 expatriates to work at overseas. The Monsanto's program is designed to enhance productive performance in expats' job assessment and build the repatriation process more smoothly

[16]. One of the features of this program is the company brings expats back to U.S. for a couple of months on a short-term project before they're repatriated. This allows the expats reacquainted with new working style in headquarter. Hence, the reliability of their expectation in turn convey into higher adjustment, therefore this make sure for easy transition into their new role when return [17].

Another ways associated with manage expatriates is the role of human resource provide physical and psychological support for expatriates and families to concentrate on the well-being of workforce [18]. Proper assistance and counselling allow expats to overcome reverse shocks of organization culture and deal with psychological problem. Moreover, HR could addressed variety administrative support such as advices on tax reimbursement payment, help concern of accommodation or expats' children education, cost of living allowance, search job for expat's partner, mental health assessment as well as insurance and security [19]. To assist the expats and family to readapt the new life, workshop such as pre-departure assessment, intercultural training, counselling and consultations, and other aspects prove useful in the adjustment process [20].

For example, Honda's HR roles serve as a critical connotation to the success of expats doing international assignments. Honda offers all expats and families a cross-cultural workshop beforehand preparation to host country. The company shows videos of past expatriates and families describing difficulties and later suggestions on how to cope are given [21]. Then, after joining for weeks, a second training was offered such as language classes that goes into greater detail on communication [22]. In addition, the aspects of effectiveness in human resource at Honda's business industry is considered merger function for supporting expats to achieve sustainable performance.

III. IMPLICATION OF DEGLOBALIZATION TO MNCs AND ACTION TAKEN TO ENSURE COMPETITIVENESS

Deglobalization is a new term appear in the international economic literature where had sparked off numerous debates. The term is conceptually defines as a process of diminishing integration and interdependence across nation [23]. Many economic analyst had used deglobalization to highlight the trend of some countries may want to go back to trade policy and economic that place their countries' interests first. As expected, a number of economists were quickly adopt it, while some believe to have the opposite of the desired effect. Those trade policies can be in the form of tariffs and non-tariff barriers and also reflect on restrictions urge on the free movement of labour. The idea describe elaboration of administrative act to encourage utilize local goods by making imports costlier. In this regard, world trade growth has been growing at a slow-moving rate than output show evidence of deglobalization throughout the 20th century [24].

3.1. Implication Deglobalization to MNCs

A deglobalization scenario would cause unfavorable impact to every single companies. Therefore, companies need to take measured approaches to safeguard workers and mitigate financial, followed by operational expose. First and foremost, many MNCs have suspended operations or reduced output of facilities in affected areas [25]. Because of the current pandemic, working from home or required social distancing and travel restrictions have been invoked. Thereby, government and MNCs around the world work together to monitor the situation and quickly adjust to the new environment. One of the example can be seen is the outbreak of Covid-19 has a big influence to MNCs. In January 2020, China shutdown all factory across every country's provinces in order to stop the transmission of the coronavirus [26]. Where most of the world's automotive parts come from China, this long suspension of production will negatively influence the overall supply. Many automotive production facilities in neighboring countries suspended operation at the start of the coronavirus epidemic when reported of interruption of flow critical components from China. Therefore, the shutdown of Nissan's factory in Japan due to a shortage of Chinese parts caused Nissan to not meet their quarterly estimates [27]. The situation are similar to Hyundai's factory in South Korea also reported delay in production and shipment, as well as introduction of newly models [28]. Both of these biggest car makers in the world are dealing with dwindling supplies, hence they are forming a concerted effort to cut down its supply chain dependencies from China. Consequently, MNCs need to come out own protocols and crisis management framework for an effective response to these epidemic.

The direction toward deglobalization can be seen to all part of developed world. In addition, MNCs faced interruption of their routine business operations is one of the major implication of deglobalization [29]. According to Reference [30], nearly every company in Fortune 1000 had experience and confronting the compete reality that business will not carry on as usual. The business disruptions can be caused by technology failures or natural disaster and also pandemic events. MNCs must integrate pandemic planning considerations into existing adaptability management practices to provide a comprehensive feedback and progression for their most critical services and products. For example can be seen during epidemic event, where shipping operations have cancelled a quarter of sailings to the port because the impact of China's outbreak that affected business operation within the Pacific. As

Chinese business shutdown, Port of Los Angeles, the largest gateway for seaborne imports had reported a sharply reducing on imports with a number projecting of 25% drop in container volumes [31]. Since the epidemic impact ripples through supply chain, there is an expectation of reducing volume of cargo for the next and following month. However, since the South Korean ocean carrier, Hanjin filed for bankruptcy, yard congestion has also built-up at the port because there is shortage of truck drivers and port workers to pick up the Hanjin's empty containers from Southern California's port [32]. Hence, those empty shipping cargos create nuisance as they take over the space and littering all over the warehouse yards. The situation cause more problem and need action to be taken as the lack of space cause delay of the containers deliveries for all shipping operations.

3.2. Measurement taken by MNCs

Today, the pressures facing by many businesses can seem overwhelming. First of all, the changing of business rules approach is one of the measurement had taken by MNCs to ensure their competitiveness in the state of deglobalization [33]. Most of the strategies require changes in the way the business operates. According to Reference [34], around 26% of businesses expect the deglobalization to have a slightly high effect on their revenue. In such, MNCs gratified with the shift from a coordinated rule-making to a complicated of network business landscape with different regulation and processes. When pandemic hits reality, all emerging services and products are arising out at the internet marketplace. In order to minimum the risk, business to business (B2B) or business to customer (B2C) relationship are making an appearance through network where the rules of these relationship need to be define well. For instance, before American companies, most of the Chinese companies had forced to confront the reality of coronavirus shutdowns, and act as a blueprint for changing the appearance of this pandemic situation. As customers plan to stay at home and shuttered shops everywhere, savvy business owners change their sales strategy to avoid heavy losses. A cosmetics company in Wuhan, Lin Qingxuan had closed over 35% of its stores during the coronavirus outbreak [35]. However, the brand's beauty advisors took the strategy in digital platform. More than 100 amount of online influencers used WeChat tool to increase online sales and engaged customers' virtually. As a result, Lin Qingxuan achieved 200% growth compared to the earlier year's sales [36].

Eventually, MNCs already need to obey by the variety of regulations in the markets in which they operate. Therefore, where local knowledge is define as 'specific to a host country's knowledge [37], it is essential for the business to require deep local knowledge in order to be effective. To reasonable mitigate or manage threats, MNCs need to emphasize high extraordinary levels on specialized knowledge at the local level [38]. Those knowledge can be gathered through transfer and learning of knowledge from various local sources such as domestic suppliers, host-country's subsidiaries and also joint venture partners at the local. In turn, the requirement of local knowledge was pretty much become more demanding as MNCs need it to be more specific and details on knowing how to ensure their competitiveness in the state of deglobalization. MNCs can implies tailored and more localised models from the local sources at the host country. For instance, a China-based Japanese MNC, Shiseido corporate with its local suppliers. They had investigated their own collaboration mechanisms to mutually develop new knowledge that meet both home-based quality standards, as well as suited the changing demand of the China's market [39]. Thus, Shiseido arranged and set-up a joint venture with the Beijing Liyuan Cosmetics group for mutually-dependent relationship between the local knowledge from the domestic suppliers and global knowledge from the MNC. After establish a production facilities in Beijing, Shiseido can conduct research on Chinese hair, skin and consumer behaviour with its latest cosmetics techniques [40]. So far, the MNC had the ability to fine-slice and fine-tune their marketing activities to the local environment.

IV. INDUSTRY 4.0 AND ITS EFFECT ON MNCs

A fourth industrial revolution referred as Industry 4.0 has emerged and driving the world in the past few decades [41]. The revolution had completely change the landscape of business, as well as the interaction between peoples and their environment. A number of people predict that it brings a new age of bounty into the industry but significant number see outcomes possibilities in the vast data sets used to drive change in this new revolution. A whole new level of digital technology with the help of interconnectivity with Internet of Things (IoT), newly cyber-physical system and real-time data accessing had pushed the world into Industry 4.0 [42]. The industry transformation with new integration help business to react more quickly to market changes. Rising uses of connectivity forces computers are meant to be communicate each other to ultimately make decisions without human's activities [43].

4.1. Driving forces for MNCs

As well as understanding the idea of Industry 4.0, the opportunity for business is one of the important elements that encourage

multinational companies (MNCs) to move towards this approach [44]. The newly application of technology and transformation of processes make significant changes in the future production systems and field of work where in the case that autonomous machines are inevitable. By developing new technologies, companies' machines were connected and collected massive volume of data which used to inform for performances and maintenance. These smart machines help analyzing data to identify insight in a short timeframe that impossible for human to handle by its own. The Industry 4.0 offers opportunity for MNCs to optimize their operation efficient by quickly spot out issue to be taken for attention [45]. For instance, one example of innovation trend is Big Data in the South Africa gold mining industry. The company found method to capture more data from sensors in its equipment. The advanced data analytics tools collected data in real time and alert with issue of impossible imagined of fluctuations in oxygen levels during the leaching process. The industrial company benefit from this revolution by embedding sensors into the machines to collect data about the factory machines' conditions. Their yield increase by 3.7% and this evolution also helps to saved \$20 million yearly [46]. These technologies changes to every operation of the factory as well as its supply chain. The new tools offered by Industry 4.0 helps MNCs undertakes smarter energy consumption and real-time yield optimization [47]. By following this approach helps MNCs to predict machine failures and enable to schedule maintenance operations in factory before any mistake occur.

Secondly, in line accompanied with expected changes, MNCs are becoming highly interested in the application of Industry 4.0 to ensure long-term competitiveness [48]. With more and more products or services and channel to be digitized, this innovation lead to growing competition of innovation design. However, MNCs nowadays are well-prepared for the new expectations and technologies. They can increase their competitive advantage and market share through innovative development based on Industry 4.0 technologies [49]. While Industry 4.0 is increasing competitiveness in manufacturing industry, many companies take long-term on strive for solutions and innovative measurement aimed at development. Data and interconnectivity of machine and process is a key elements to this transformation. This can be seen on example case in the automotive industry where most of them implement the Industry 4.0 applications effectively. The competitiveness can be done by providing better services, higher quality and product than competitors in the market. Volkswagen jump on the trend by creating 'Automotive cloud'. The company joined forces with Microsoft to invent a cloud network which offer digital added-value services for customers. The newly cloud network offer range of features such as personal digital assistant, predictive maintenance service and smart home connectivity, etc [50]. In Industry 4.0, Volkswagen makes impressive strides in developing advanced autonomous and electric vehicles as well as an estimated 4 million brand offerings per year to its IoT with the help of this cloud service [51]. Volkswagen emerge effective approach of transmitting and managing unlimited amounts of data to their vehicles. Consequently, the incorporating communication platform and cloud-based storage emerges as a successful way for increasing competitiveness and overcome challenges in a long run.

4.2. Barrier facing by MNCs

In addition, a number of challenges could restrain manufacturers in implementing Industry 4.0. One of the threat is the cyber-hacking where MNCs were worried that business and data vulnerable to attackers [52]. As innovative and disruptive as may appear, there is a grave concern about the cyber security issues. This particular problem involved lead lesser protection on MNCs' data and privacy through technological solutions. With promising numerous start-ups in the industry, they are not too familiar with the risk involved and often overlooked these security aspects. Hence, critical essential that proper cyber-security measures must implemented and developed in order to come up efficient additive manufacturing platforms that are digitally safe from cyber-attacks.

With the spread of new technologies and raising number of vulnerability in Industry 4.0, MNCs fear on safety handling private data and information. Hackers are motivated to steal intelligence on processes such as secret formulas or blueprints of confidential designs, etc [53]. One of the example can be seen in Hanesbrands database hacked. This well-known undergarment manufacturing was breached by a hacker and gained access to around 900,000 customer information [54]. The hacker not only route into and account for company's equipment exploits and also manipulate the system over the internet. The intentional disruption of manufacturing processes by these hackers lead to a damage on manufacturing operation. Another pose threat to manufacturing industry is facing leaking of customers' financial information including credit cards numbers. Furthermore, cyber-security aspects is consider new field where mostly all countermeasures are still in theirs offset. MNCs with lack of digital security knowledge need to approach more on security problems in the industry [55].

Another major challenges to the implementation of Industry 4.0 is the MNCs face formidable issue on adoption of new technologies such as lack of skilled workforce with the competences required in future [56]. To capitalizing the new trend, the unfavorable labor market conditions with need of evolving skills will challenge the MNCs. They need to take drastic action to

increase its production of skilled manpower to meet the requirement of Industry 4.0 or may face the risk of left behind. With the upcoming changes of manufacturing industry, manufacturers essentially need workers who are skilled in deploying and maintaining Internet of Things- enabled products [57].

Besides, there is a challenge for manufacturers to train millennials to become qualified workers as well as attract this generation tap into the manufacturing workforce. The reason of the issue is because of collective social bias that many views about low-paid career and risk of hazardous to well-being of workers in manufacturing [58]. In order to change the public perception, MNCs should promote new technologies and modern manufacturing environment by engaging students through factory tours. Therefore, this helps reshape the image of manufacturing and career landscape for millennial workers to enter workforce. For instance, Germany was a successful example to mobilize its industrial sector with its skilled workforce [59]. Graduates in Germany are encouraged to take up dual vocational training. Student can master in demand skills within a short time framework, this reflect German education system has been highly effective in preparing students for the adaption of new technology in the workforce. The successful approach taken in Germany also creating certainty in the labor market.

V. CONCLUSION

In an increasingly globalized economy, expatriation is a necessary element in the process of growing international business. MNCs use expatriates not only for corporate control and expertise reasons in vital global markets. A well-managed and proactive response to expatriate's problem may help MNCs retain experienced international employees and reduce turnover.

Based on discussion, it has been observed the world is moving away from globalization era. While the outbreak of coronavirus could be the most relevant turning points towards deglobalization. Therefore, implications can be happen to the MNCs such as a sudden suspended of operations, and some may facing business operations' disruption. In order to ensure competitiveness, MNCs can takes measurement by making new business rules approach and emphasizing on local knowledge requirement in this state of deglobalization.

In summary, MNCs should take Industry 4.0 into account in order to capture the potential. Ultimately, a greater insight in factory's operation will support faster decision-making and brings greatest effect on yield. The Industry 4.0 is critically tied to data and its strictly required protection. Lastly, the involvement of skilled workers could find a ways of selling technology to the customer in the market.

REFERENCES

- [1] Riusala, K., and Suutari, V, "International knowledge transfers through expatriates," *Thunderbird International Business Review*, Vol 46 Issue 6, pp.743-770, 2004.
- [2] Shortland, S., and Cummins, S, "Work-life balance: Expatriates reflect the international dimension," *Global Business and Organizational Excellence*, Vol 26 Issue 6, pp.28-42, 2007.
- [3] Zhang, L. E., and Peltokorpi, V, "Multifaceted effects of host country language proficiency in expatriate cross-cultural adjustments: a qualitative study in China," *The International Journal of Human Resource Management*, Vol 27 Issue 13, pp.1448-1469.
- [4] Lee, H. W, "Perceptive of expatriation and cross-cultural adjustment," *Journal of Global Business Management*, Vol 2 Issue 1, pp.22-30, 2006.
- [5] Brull, S, "Samsung Copes With Culture Shock," *The New York Times*. Available at: <https://www.nytimes.com/1995/05/11/business/worldbusiness/IHT-samsung-cope-with-culture-shock.html>, 1995.
- [6] Rosenbusch, K., and Cseh, M, "The cross-cultural adjustment process of expatriate families in a multinational organization: A family system theory perspective," *Human Resource Development International*, Vol 15 Issue 1, pp.61-77, 2012.
- [7] Mohn, T, "The burden on the expatriate worker's family," *The New York Times*. Available at: <https://www.nytimes.com/2008/12/02/business/worldbusiness/02iht-02expat.18311857.html>, 2008.
- [8] Andreason, A. W, "Expatriate adjustment of spouses and expatriate managers: An integrative research review," *International journal of management*, Vol 25 Issue 2, p.382, 2008.

- [9] Muenjohn, N., and Armstrong, A, "Transformational leadership: The influence of culture on the leadership behaviours of expatriate managers," *International Journal of Business and information*, Vol 2 Issue 2, 2007.
- [10] Carroll, A. M, "Expatriate hiring: How are Indian businesses managing culturing integration?," *The Economic Times*. Available at: <https://economictimes.indiatimes.com/expatriate-hiring-how-are-indian-businesses-managing-culturing-integration/articleshow/5982457.cms>, 2010.
- [11] Selmer, J, "Effects of coping strategies on sociocultural and psychological adjustment of Western expatriate managers in the PRC," *Journal of World Business*, Vol 34 Issue 1, pp.41-51, 1999.
- [12] Feldman, D. C., and Bolino, M. C, "Increasing the skill utilization of expatriates," *Human Resource Management*, Vol 39 Issue 4, pp.367-379, 2000.
- [13] Novicevic, M. M., Morf, D., Evans, M., Sanders, L., Sun, W., and Cecil, C, "Adapting Competencies for Emerging Markets: The Case of IKEA's Entry into China," *Journal of Applied Management and Entrepreneurship*, Vol 17 Issue 2, p.4, 2012.
- [14] Black, J. S. and Gregersen, H. B, "The right way to manage expats," *Harvard business review*, Vol 77 Issue 2, pp.52-53, 1999.
- [15] Baum, M., and Isidor, R, "The influence of the cultural context on expatriate adjustment," In *Expatriate Management*, pp.165-190, 2017.
- [16] Solomon, C, "Repatriation Up, Down or Out," *The Workforce News*. Available at: <https://www.workforce.com/news/repatriation-up-down-or-out>, 1995.
- [17] Lublin, J. S, "Repatriation Up, Down or Out Going Overseas for a Job? Coming Home Is the Hard Part," *The Wall Street Journal*. Available at: <https://www.wsj.com/articles/going-overseas-for-a-job-coming-home-is-the-hard-part-1504620001>, 2017.
- [18] Sharma, N., Bhatt, J. K., and Singh, M, "Effectively managing expatriate assignments with HRM policies and practices," *Journal of Resources Development and Management*, Vol 3, pp.17-21, 2014.
- [19] Fee, A., and McGrath-Champ, S, "The role of human resources in protecting expatriates: Insights from the international aid and development sector," *The International Journal of Human Resource Management*, Vol 28 Issue 14, pp.1960-1985, 2017.
- [20] Arians, H, "The Right Way to Integrate and Manage Expats in Your Organization" *Medium*. Available at: <https://medium.com/pldx-org/the-right-way-to-integrate-and-manage-expats-in-your-organization-58f145c930ce>, 2017.
- [21] Sekiguchi, T., Froese, F. J., and Iguchi, C, "International human resource management of Japanese multinational corporations: Challenges and future directions," *Asian Business & Management*, Vol 15 Issue 2, pp.83-109, 2016.
- [22] Greimel, H, "Honda to make English official language by 2020," *Automotive News*. Available at: <https://www.autonews.com/article/20150703/OEM/150709942/honda-to-make-english-official-language-by-2020>, 2015.
- [23] Postelnicu, C., Dinu, V., and Dabija, D. C, "Economic deglobalization—from hypothesis to reality," *Economics and Management*, Vo 18 Issue 2, pp.4-14., 2015.
- [24] Weldon, D, "Is deglobalisation on the way?," *BBC News*. Available at: <https://www.bbc.com/news/32783365>, 2015.
- [25] Sułkowski, Ł, "Covid-19 pandemic; recession, virtual revolution leading to de-globalization?," *Journal of Intercultural Management*, Vol 12 Issue 1, pp.1-11, 2020.
- [26] Tan, H, "There will be a 'massive' shuffling of supply chains globally after coronavirus shutdowns," *CNBC News Economy*. Available at: <https://www.cnbc.com/2020/03/20/coronavirus-shocks-will-lead-to-massive-global-supply-chain-shuffle.html>, 2020.
- [27] Bbc.com., "Nissan to shut Japan factory due to shortage of Chinese parts," *BBC News*. Available at: <https://www.bbc.com/news/business-51441344>, 2020.
- [28] Ewing, J, Boudette, N. E. and Abdul, G, "Virus Exposes Cracks in Carmakers' Chinese Supply Chains," *The New York Times*. Available at: <https://www.nytimes.com/2020/02/04/business/hyundai-south-korea-coronavirus.html>, 2020.

- [29] Flejterski, S, "Globalization and Deglobalization—Costs and Benefits, Winners and Losers," *Logistics and Transport*, Vol 39, pp.79-86, 2018.
- [30] Dentons.com., "Covid-19 and its impact on the global economy," *Dentons Insights*. Available at: <https://www.dentons.com/en/insights/alerts/2020/march/11/covid-19-and-its-impact-on-the-global-economy>, 2020.
- [31] Smith, J, "Port of Los Angeles Sees Coronavirus Impact Sharply Reducing Imports," *The Wall Street Journal*. Available at: <https://www.wsj.com/articles/port-of-los-angeles-sees-coronavirus-impact-sharply-reducing-imports-11582648931>, 2020.
- [32] Phillips, E. E, "Empty Hanjin Containers Pile Up, Causing Headaches at Southern California's Ports," *The Wall Street Journal*. Available at: <https://www.wsj.com/articles/empty-hanjin-containers-pile-up-causing-headaches-at-southern-californias-ports-1475782623>, 2020.
- [33] Garg, S., and Sushil, "Deglobalisation as a challenge: a case study of the USA," *Journal for Global Business Advancement*, Vol 11 Issue 6, pp.753-775, 2018.
- [34] Moyo, D, "Are Businesses Ready for Deglobalization?," *Harvard Business Review*. Available at: <https://hbr.org/2019/12/are-businesses-ready-for-deglobalization>, 2019.
- [35] Williams, C, "COVID-19: China's e-commerce," *Global Risk Insights*. Available at: <https://globalriskinsights.com/2020/05/covid-19-chinas-e-commerce/>, 2020.
- [36] Leesa-Nguansuk, S, "Quick action helps firms seize opportunity in crisis," *Bangkok Post Business*. Available at: <https://www.bangkokpost.com/business/1899905/quick-action-helps-firms-seize-opportunity-in-crisis>, 2020.
- [37] Almeida, P., and Phene, A, "Subsidiaries and knowledge creation: The influence of the MNC and host country on innovation," *Strategic Management Journal*, Vol 25 Issue 8-9, pp.847-864, 2004.
- [38] Wang, P., Tong, T. W., and Koh, C. P, "An integrated model of knowledge transfer from MNC parent to China subsidiary," *Journal of world business*, Vol 39 Issue 2, pp.168-182, 2004.
- [39] Utsunomiya, Y, "Shiseido positions itself for China cosmetics boom," *The Japan Times News*. Available at: <https://www.japantimes.co.jp/news/2003/11/18/business/shiseido-positions-itself-for-china-cosmetics-boom/>, 2003.
- [40] Chang, L, "Shiseido's Expansion Plans Center on Chinese Market," *The Wall Street Journal*. Available at: <https://www.wsj.com/articles/SB108004018440062798>, 2004.
- [41] Lasi, H., Fettke, P., Kemper, H. G., Feld, T., and Hoffmann, M, "Industry 4.0," *Business & information systems engineering*, Vol 6 Issue 4, pp.239-242, 2014.
- [42] Rübmann, M., Lorenz, M., Gerbert, P., Waldner, M., Justus, J., Engel, P., and Harnisch, M, "Industry 4.0: The future of productivity and growth in manufacturing industries," *Boston Consulting Group*, Vol 9 Issue 1, pp.54-89, 2015.
- [43] Lee, J., Bagheri, B., and Kao, H. A, "A cyber-physical systems architecture for industry 4.0-based manufacturing systems," *Manufacturing letters*, Vol 3, pp.18-23, 2015.
- [44] Stock, T., and Seliger, G, "Opportunities of sustainable manufacturing in industry 4.0," *Procedia Cirp*, Vol 40, pp.536-541, 2016.
- [45] Lu, Y, "Industry 4.0: A survey on technologies, applications and open research issues," *Journal of Industrial Information Integration*, Vol 6, pp.1-10, 2017.
- [46] Miningreview.com, "Industry 4.0 is electrifying the mining industry," *Mining Review Africa*. Available at: <https://www.miningreview.com/health-and-safety/industry-4-0-is-electrifying-the-mining-industry/>, 2019.
- [47] Hilbert, M, "Big data for development: A review of promises and challenges," *Development Policy Review*, Vol 34 Issue 1, pp.135-174, 2016.
- [48] Bahrin, M. A. K., Othman, M. F., Azli, N. N., and Talib, M. F, "Industry 4.0: A review on industrial automation and robotic," *Jurnal Teknologi*, Vol 78 Issue 6-13, pp.137-143, 2016.

- [49] Lampropoulos, G., Siakas, K., and Anastasiadis, T, "Internet of things in the context of industry 4.0: An overview," *International Journal of Entrepreneurial Knowledge*, Vol 7 Issue 1, pp.4-19, 2019.
- [50] Bass, D. and Rauwald, C, "VW will connect 5 million cars through Microsoft cloud," *Automotive News Europe*. Available at: <https://europe.autonews.com/article/20180928/COPY/309289936/vw-will-connect-5-million-cars-through-microsoft-cloud>, 2019.
- [51] Dedezade, E, "Volkswagen and Microsoft partner to create new Automotive Cloud," *Microsoft News Centre Europe*. Available at: <https://news.microsoft.com/europe/features/volkswagen-and-microsoft-partner-to-create-new-automotive-cloud/>, 2018.
- [52] Hofmann, E., and Rüsç, M, "Industry 4.0 and the current status as well as future prospects on logistics," *Computers in industry*, Vol 89, pp.23-34, 2017.
- [53] Wells, L. J., Camelio, J. A., Williams, C. B., and White, J, "Cyber-physical security challenges in manufacturing systems," *Manufacturing Letters*, Vol 2 Issue 2, pp.74-77, 2014.
- [54] Craver, R, "Hanesbrands database hacked," *Winston-Salem Journal*. Available at: https://www.journalnow.com/business/hanesbrands-database-hacked/article_543b338e-3664-11e5-b77e-c77df1e08b5c.html, 2015.
- [55] Prinsloo, J., Sinha, S., and von Solms, B, "A Review of Industry 4.0 Manufacturing Process Security Risks," *Applied Sciences*, Vol 9 Issue 23, p.5105, 2019.
- [56] Zhong, R. Y., Xu, X., Klotz, E., and Newman, S. T, "Intelligent manufacturing in the context of industry 4.0: a review," *Engineering*, Vol 3 Issue 5, pp.616-630, 2017.
- [57] Almada-Lobo, F, "The Industry 4.0 revolution and the future of Manufacturing Execution Systems (MES)," *Journal of innovation management*, Vol 3 Issue 4, pp.16-21, 2015.
- [58] Kirschenbaum, A., Oigenblick, L., and Goldberg, A. I, "Well being, work environment and work accidents," *Social Science & Medicine*, Vol 50 Issue 5, pp.631-639, 2000.
- [59] Thesundaily.my, "Talent shortage will hamper nation's Industry 4.0 aspiration," *The Sun Daily*. Available at: <https://www.thesundaily.my/local/talent-shortage-will-hamper-nation-s-industry-4-0-aspiration-NY331942>, 2019.