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MITIGATING MISMANAGED MUNICIPAL SOLID WASTE DISPOSAL THROUGH BEHAVIOURALLY INFORMED INTERVENTIONS: THE CASE FOR EGYPT

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A COMPARATIVE AND FORECASTING STUDY OF WORKPLACE VISITS DURING PANDEMIC

EU Business School

“Difficulties are made to rouse, not discourage.
The human spirit is to grow strong by conflict.”

William Ellery Channing

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FOREWORD

At the time of launch of our last edition, the COVID-19 pandemic was wreaking untold havoc across industry and society. At that time, the world was barely adapting to a continuously evolving 'new normal' at breakneck speed - and not always inclusively. In that edition of the journal, we explored topics from the evolving perspectives on privacy, as more people spent time online, to the evolving nature of work - as more conventional approaches to productivity were rapidly made redundant. After several years of global economic growth and significant strides in improving development outcomes, 2020 seemed to have concluded on a disappointing note for many. As the 2020 decade drew to a close, an era of humanity culminated to make way for a new approach, one that we have the most influence in defining.

Fast forward and six months later, millions of vaccine doses have now been delivered around the world. The unprecedented pace of vaccine development reflects the sheer potential and resoluteness humanity is capable of when faced with adversity, and the cover design of this edition – Arise – champions the unwavering human spirit. Indeed, the human spirit is stronger than anything that can happen to it – words that are attributed to the illusory C.C. Scott but boldly appears at the entrance to the Yale New Haven Smilow Cancer Center. The protection against the pandemic that these vaccines offer has enabled a slow but gradual return of economic activity and is allowing human interaction to return to the new normal that we define. Institutional trust that was built in the previous decade was tested, humanity was reminded just how truly global and interconnected we have become – that we share a common destiny, and both organisational and individual adaptivity that were built over years were stretched. Businesses that passed the trust test, embraced globalisation, and survived the stretch, will now begin the process of rebuilding the global economy for the 2030 decade. These businesses have had to rethink our future of work, re-imagine our resource management, and push the possibilities of consumerism. Coming out of the pandemic, humanity must realise the biggest opportunity that has been presented to it in recent times - to build reliable, robust, inclusive, and innovative socio-economic systems.

These are some of the themes that will occupy us this year at ONResearch.

Suddha Chakravartti

Editor-in-Chief

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GCC 2.0: STRENGTHENING REGIONALISM AND PROMOTING A DIGITAL SINGLE MARKET IN AN ERA OF NEW GLOBALIZATION

Hussein Abul-Enein

ABSTRACT: *A new phase of globalization (New Globalization) characterized by the exponential use of digital technologies and the emergence of Big Tech companies introduces challenges to the traditional sovereignty of the Gulf Cooperation Council's (GCC) member states, requiring a coordinated effort to strengthen regionalism (regional cooperation and economic integration) across the region. This article argues that the harmonization of digital policy and regulations by GCC member states is an essential pre-condition of strengthened regionalism and demonstrates its impact on the GCC member state's ability to balance the influence of Big Tech companies and promote progress towards the establishment of a digital single market in the Gulf.*

KEYWORDS: big tech, digital single market, regionalism, Gulf Cooperation Council.

The exponential growth in the use of digital technologies has introduced the 'Second Unbundling', a new phase of globalization (New Globalization) characterized by high-quality communication networks that accelerate the provision of and trade in new types of digital services (Baldwin, 2016). This shift in international connections in comparisons to earlier forms of globalization that focused on trade in goods is accompanied by a boom in cross-border data flows and the rise of powerful multinational companies, such as Facebook, Amazon, Apple, Netflix, and Alphabet (van der Marel, 2020).

New Globalization presents challenges to the traditional sovereignty of nation-states (Masinde & Omolo, 2017). Big Tech companies are increasingly taking fundamental decisions and 'creating new authorities' (Telò, 2014) as demonstrated by Facebook's recent feud with the Australian government over a proposed Law that would have forced Facebook and Google to pay Australian media outlets for news content shared on their platforms (BBC, 2021).[1]

In addition, the absence of a unipolar power, including in the tech space, makes it impossible for a single country to meet the increasing global demand for digital services (Padoan, 2001). Without foreign cloud service providers and their digital infrastructure, local ride-hailing or food delivery companies would have not been able to meet the increasing demand for their services during the Covid-19 pandemic.

REGIONALISM AS A REMEDY

The challenges of New Globalization can be overcome by an increased focus on regionalism (regional cooperation and economic integration), which will allow nation states to bundle factors of production from two or more different countries to enable a form of trade that neither might be able to do efficiently alone (Baldwin, 2016; Deardoff, 2017).

Moreover, regionalism leads to the creation of bigger, more attractive markets, which in turn will boost the levels of foreign direct investments (FDI) as multinational companies compete to secure market access (*Ibid*). And increases the positive spill over effects (cheaper products and increased choice) of intra-regional trade as local companies compete to secure more customers and train for global competition (Hoffmann, 2000).

It also enables nation states to "pool their authority at a regional level" – to rescue their sovereignty and form bigger trading blocs with substantially higher bargaining powers (Grahm, 2008; Herbst, 2007; Masinde & Omolo, 2017). This yields higher returns when negotiating collectively with "external powers" (Borzel, 2016, p. 7) or regulating multinational companies and is best demonstrated through the European Union's approach to regulating Big Tech, including the passing of the Digital Services Act package (European Commission, 2021).

This article argues that the harmonization of digital policy and regulations is an essential pre-condition of strengthened regionalism and progress towards a digital single market, which in turn will aid the Gulf Cooperation Council (GCC) member states' response to the challenges of New Globalization, with emphasis on balancing the influence of Big Tech companies.

THE GULF COOPERATION COUNCIL

Established in 1981 by the Kingdom of Bahrain (Bahrain), the State of Kuwait (Kuwait), the Sultanate of Oman (Oman), the State of Qatar (Qatar), the Kingdom of Saudi Arabia (Saudi Arabia), and the United Arab Emirates (UAE) – the GCC is a regional organization that seeks to realize and strengthen cooperation between its member states in all economic and political fields. Despite predating the Dot-Com bubble, the establishment of the GCC is a prime example of the shift towards regionalism, suggesting agreement on the need for deeper economic cooperation in response to the challenges of New Globalization.

All GCC economic agreements (the 1981 Unified Economic Agreement, the 2001 Economic

1 The feud ended when the Australian government assured Facebook that the company will retain the ability to decide if news appears on Facebook so that the company will not be automatically subject to forced negotiations with Australian news agencies.

Agreement, the 2003 Customs Union Agreement and the 2008 Common Market Agreement) contain provisions on the need for harmonized standards, policies, and regulations to promote progress towards an economic Union. In fact, Article 24 and 25 of the 2001 Economic Agreement explicitly note that "Member States shall take all the necessary measures to ensure the integration of their communication policies, including telecommunication, post, and data network services…." and "Member states shall… unify their electronic commerce legislation", respectively (GCC, 2001, p.19). This suggests consensus on the positive relationship between the harmonization of digital policy and regulations, and regionalism.

GCC Regionalism in Crisis

In reality the desire to capitalize on economies of scale, lower transaction costs and enable access to bigger markets (Martini *et al*, 2016, p.xi) has led to several achievements, including intra-GCC coordination on radio spectrum allocation for fixed and mobile services and pan-GCC capacity building programs such as the One Million Arab Coders Initiative.

However, efforts have shied away from full harmonization of digital policy and regulations, which is noticeable in the various approaches GCC countries have taken on privacy and personal data protection, data classification, cross border data flow, cloud computing, Voice over Internet Protocol (VoIP), Artificial Intelligence (AI) and many others. For example, Qatar's 2014 National Information Assurance Policy V2.0 (Ministry of Transport and Communications, 2014) establishes a five-tier data classification framework, while Saudi Arabia's 2020 Data Classification Interim Regulations (Saudi Data and AI Authority, 2020) establishes a four-tier framework. This increases compliance costs by creating a dual burden[2], which in turn dissuades national companies from expanding regionally and restricts foreign companies' investments to the country with the least regulatory burdens, ultimately diminishing the GCC's collective bargaining powers, the benefits of regionalism and progress towards a digital single market (Dahlberg *et al*, 2020).

Strengthening GCC Regionalism

The harmonization of digital policy and regulations is the foundation of strengthened regionalism and progress towards a digital single market as it lays the foundation for effective economic cooperation and integration. Therefore, the fragmentation in digital policymaking described above must be corrected immediately.

GCC member states should remove local data residency requirements, currently characterizing national legislation[3]. In parallel the GCC secretariate should draft a common framework to enable intra-GCC (and global) cross-border data flows. Bahrain's Economic Development Board and the World Economic Forum's (WEF) Roadmap for Cross Border Data Flows (WEF, 2020) offers a good starting point as it notes how the free flow of data empowers countries and regions wishing to compete in the Fourth Industrial Revolution, including by lowering the costs of trade in digital services (*Ibid*).

Similarly, a common privacy and personal data protection framework is required to ensure that (i) individuals retain control over their personal data; and (ii) service providers can be held accountable

2 Dual burdens exist when in a common market, a service provider has complied with regulations in his own member state but is then required to comply with further requirements of the member state to which the service is being exported to.

3 Saudi Arabia's Interim National Data Governance Regulation

for the misuse (voluntary or involuntary) of consumers' personal data. Such a framework must allow for interoperability and be aligned with international best practice on maintaining confidentiality, integrity, and availability of personal data (Yatim, 2020). Here the GCC secretariate should look towards the European Union's General Data Protection Framework (European Commission, 2016), which has been transposed into, for example, the Dubai International Financial Centre's 2020 Data Protection Regulations (DIFC, 2020). This is an opportunity for the GCC to collectively bridge gaps in existing local privacy regulation and deepen cooperation on two issues of common interest: consumer protection and attracting FDI.

A common Cloud First Policy offers another exciting opportunity, noting (i) that several member states (Oman, Bahrain, and Qatar) have already developed and implemented similar national Cloud First Policies; and (ii) the growing recognition of cloud computing as a strategic enabler of business (intra-GCC digital trade) and public sector competitiveness.[4] This in principle should make agreement on a GCC Cloud First Policy relatively easier as there is a lower common denominator to build on.

A harmonized radio spectrum policy will further facilitate the availability of new connectivity solutions and enable their wide scale deployment across GCC member states, which in turn will stimulate trade in digital services. This can be accompanied by uniform radio spectrum licences and GCC wide radio spectrum auctions, which promise more revenue generation in comparison to single market auctions. Some argue that this may lead to non-equitable division of the benefits of integration, however, there are no reasons to justify why revenues cannot be distributed proportionally, according to market size (Atkinson, 2016). Others highlight that this may be beyond the "ceiling of GCC cohesion" (Martini *et al*, 2016) as market consolidation will lead to the demise or significant reduction in state-owned national operators' ability to compete in their home markets. This is a more valid argument as it may lead to the creation of regional monopolies.

Other areas for policy and regulatory harmonization include cybersecurity standards, e-commerce regulation, digital taxes (arguably less relevant given the rentier-state nature of GCC member states, but nevertheless important noting the demand for new sources of government revenue to finance Covid-19 recovery) and online harms.

Strengthening the GCC's Hand against Big Tech

Harmonizing digital policy and regulations across the GCC will end Big Tech companies' era of 'self-regulation' – as well thought and articulated regional laws and standards are likely to cover existing gaps in (or the lack of) national legislation – often exploited by these companies in the first place. By taking initiative GCC member states can steer clear of the consequences of self-regulation (the Cambridge Analytica scandal) and promote local and regional values on issues such as the ethical development and deployment of AI.

Second, in light of slow progress on international efforts to regulate trade in digital services, including the World Trade Organization's (WTO) E-Commerce Moratorium or the Organization of Economic Cooperation's (OECD) Inclusive Framework on Base Erosion and Profit Shifting – GCC member states have an opportunity to pool their authority at the regional level and capitalize on their relatively small number to articulate regional solutions that curb bad-practice, such as

4 IT spend in the GCC is expected to increase from USD 16.5 billion in 2019 to USD 20 billion by 2024 (Shah. K and Castillo. S, 2020).

Big Tech companies' exploitation of gaps and mismatches in tax rules to shift profits to low or no-tax locations – in the short term.

However, the above should not be interpreted as a call for excessive regulation, which may impact the proliferation of digital services and technologies in the region, rather than enable access to them on fairer terms. This further hinders the prospects of a digital single market.

Easier Said than Done?

Harmonizing digital policy and regulations will strengthen GCC regionalism and promote progress towards a digital single market, by laying the foundation for easier market integration and enhanced trade in digital services (Majnoni, 2002; Kox & Lejour, 2006). This assumes that GCC member states still hold the same commitment towards strengthening cooperation and integration (as envisioned in the 2001 Economic Agreement) rather than continuing to "compete with each other in sectors that offer scope for deeper regional initiatives" (Akhtar, & Rouis, 2010, p.2), such as the tech sector. A correct assumption noting that the latest GCC Summit reiterated the need to accelerate progress towards achieving a GCC-economic union by 2025 (GCC, 2021).

Regulatory harmonization and a digital single market also require a central executive body with the mandate to conceptualize and enforce common regulations (World Bank, 2010), and a robust dispute settlement mechanism (Bianco, 2018). Both remain missing, suggesting that "improvements in the organizational structure of the GCC" (World Bank, 2010, p. 22) are due.

Finally, while strengthened regionalism includes a degree of increased authority delegation to the GCC[5], it is a better alternative to the complete dilution of the role of nation states that is likely to emerge as a consequence of New Globalization. This is echoed by Borzel (2016, p.10) who contend that "what national governments loose in authority to regional institutions, they gain in legitimacy and problem-solving capacity in an era where threats are no longer confined by borders."

CONCLUSIONS

New Globalization introduces challenges to the sovereignty of nation states. Big Tech companies are increasingly taking fundamental decisions and creating new authorities. By harmonizing digital policy and regulations, which is an essential precondition to strengthened regionalism – GCC member states have an opportunity to balance the influence of Big Tech companies by ending the era of self-regulation, promoting local and regional values, and curbing bad-practice, while accelerating progress towards a digital single market.

5 Historically this has proven difficult, noting the prevalence of autocratic governance in GCC monarchies (Smith. B, 2015).

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DO CHINESE STATE-OWNED ENTERPRISES RUN GLOBALLY ON FAIR COMPETITION?

Romny Ly

ABSTRACT: *Today, state-owned enterprises (SOEs) play a significant role in global economic growth. In the past two decades, the phenomenal presence of Chinese SOEs has especially surprised the whole world. However, because of their tumultuous history, there are still concerns about the world economy. They are also suspicious of not working on a level playing field because they might enjoy some preferential government treatment. This essay seeks to investigate whether Chinese SOEs operate under fair competition in the world market. Based on previous research on Chinese SOEs and case study on conflict cases involving Chinese SOEs at the World Trade Organization (WTO) from 2002 to present, the study infers that Chinese SOEs may not work on a level playing field all the time, although the conflict cases studied are not necessarily conclusive. It would only be better when there is more optimism over Chinese SOEs if there are still real challenges to fair competition on the Chinese SOE industry's global market.*

KEYWORDS: **SOEs, WTO, transparency, China, Chinese industry, trade conflict case.**

Despite the rapid growth of privatization over the last two decades, state ownership remains relevant in middle and low-income countries. State-owned enterprises (SOEs) play a significant role in several nations, particularly in some emerging economies. It cannot be denied that SOEs can correct market failures of various critical domestic sectors, such as infrastructure and utilities, affecting citizens' daily lives. Due to their unique public ownership, however, they may obtain many preferential government treatment. Their exclusive privileges in specific sectors can hinder fair competition in the domestic market with other private firms and international corporations.

Since its connections between global firms keep growing, SOEs' success may also play a significant role in the international market. In particular, in the past two decades, Chinese SOEs have led to China's rapid growth and immense economic impact, which have posed concerns in other nations. The concern is that Chinese SOEs could disrupt the fairly competitive environment because they could benefit tremendously from unfair state advantages. Such presumed competition distortionary attitude of Chinese SOEs have spread into foreign trade and no longer just affects domestic markets. In recent years, tensions surrounding Chinese SOEs have grown between China and some trading partners, such as the US and the EU.

This work seeks to discuss how Chinese SOEs have been working on a level playing field by employing case studies as the primary methodology. The cases will be picked from the World Trade Organization (WTO) issues affecting Chinese SOEs. The WTO can be regarded as one of the most critical institutional factors in sustaining the global economic system and the only international organization that deals with trade among its members. In reviewing the WTO findings, it is noticeable that Chinese SOEs are likely to hinder fair competition on the world market. According to the specific attributes of Chinese SOEs in the world market environment, Zhou (2000), Li (2014), and other studies have been conducted on the potential issues they might bring. Despite SOEs' contribution to economic growth in China's domestic market, the inefficiency issue also triggered economic losses. However, Chinese SOEs have enjoyed some particular advantages with the government's preferential treatment, which can distort the playing field of operation against exported and manufactured products and services and contribute to unfair competition in the world market. Besides, state ownership can also be an international market concern because its governance and guidelines can drive it. This article examines whether Chinese SOEs compete fairly on the international market with other firms. Moreover, the work analyses whether disputes over the Chinese SOEs stem from the absence of transparency in the Chinese SOEs and SOE industries. In all conflict situations, Chinese SOEs have not operated on fair competition, and the transparency process must be strengthened to obtain further insight into Chinese SOEs and potentially establish a good trading relationship based on trust between trade partners.

The structure of this work is allocated into three parts. The first section starts with an overview of Chinese SOEs' distinctive characteristics and how they can be deemed a concern for themselves and the world market. Moreover, the work uses the case studies methodology to examine conflict situations concerning Chinese SOEs in the WTO to clarify the position of WTO on how Chinese SOEs operate on fair competition. Finally, there are some suggestions for promoting transparency in China and the WTO to bolster Chinese SOEs' issues on the world market.

DISTINCTIVE STRUCTURES OF CHINESE SOES

In the past four decades, China's post-reform development has been impressive. The size and effect of this development have been influential both nationally and internationally. Spectacular Chinese economic development has shifted its role globally, thus growing its potential to shape the global market's future course. According to the UNCTAD (2019) World Investment Report, China was the second-largest FDI recipient in the world after the USA. By 2018, China has now usurped the US as the top global trading nation (Ghosh, 2020). Additionally, "measured on a purchasing power parity (PPP) basis that adjusts for price differences, China in 2017 stood as the largest economy in the world" (Theodora, 2020). The rise of China has become a "global economic powerhouse" and a "trading superstate" (Shambaugh, 2013, pp. 156-157).

While much of this rapid development is driven by non-state-owned firms, it is impossible to overlook SOEs' role in the Chinese economy. The SOEs increase their domestic and global influence at unprecedented speed by accumulating assets and profits (Yu, 2014). In 2010, more than 30,000 Chinese companies were operating outside China, half of these being SOEs and representing more than 80 percent of China's outward investment (Zhang, 2010). Since China joined the WTO, Chinese SOEs have become more internationalized through overseas operations, foreign direct investment (FDI), and worldwide mergers and acquisitions.

However, with the current reform designed to improve corporate governance and SOEs' competitiveness, massive changes have taken place within the Chinese SOEs sector. The share of the gross domestic product (GDP) of Chinese SOEs has declined from more than 50 percent to 25 percent since 2003, accounting for 5 percent of industrial firms in 2018, compared to 18 percent in 2003 (Stratfor, 2018). Although the SOEs have declined, their strength has not diminished. In 2017, the centrally managed SOEs' assets reached about USD10.4 trillion, more than tenfold from 15 years ago (Stratfor, 2018). In the report of Fortune Global 500 in 2019, 129 Chinese enterprises made a list– up from 120 last year, among which the SOEs percentage on the list rose from 76 percent last year to 80 percent, and overtaken the annual ranking of the US firms among the biggest in the world (Roach, 2019).

The Chinese SOE sector has existed since the People's Republic of China (PRC) was founded in 1949. At that time, however, its position was more than merely interfering but replacing the market. In the 1980s, the economic reform led to a low-speed restructuring of Chinese SOEs to improve the SOEs' efficiency and vitality. In the 1990s, the insolvency wave of SOE almost ruined the entire sector and the national economy in general. Therefore the government started developing reforms to improve large SOEs while eliminating small SOEs. Since China entered the WTO in the early 2000s, the reforms focused mainly on "improving corporate governance [...] and constituted a modern enterprise system" (Chiu & Lewis, 2006, p. 13). Today, however, with the intense foreign competition and the economic downturn, government regulation over central SOEs has enlarged, leading to a situation where specific industries and services have been focused on a few central SOEs. In other words, in China, an oligopolistic economic trend has formed in some primary industries dominated by the government through SOEs.

The Chinese SOEs are characterized by their oligopolistic role in the domestic market, which relies not only on their specific technological, value, brand, or service advantages but also on the government's benefits through administrative legislation, resource allocation, and other market-driven policies. It helps China to monitor and uphold the sustainable growth of the national economy. Briefly, Chinese SOEs are not "simply a policy instrument, but real economic power of the government based on its belief in an evolving degree of central planning" (Chen, 2013, p. 8). They play a vital role in ensuring that the national central industrial policy is enforced and controlled, helps maintain government domination for some strategic industries, provides easier access to markets with the government's vast benefits, and has developed more rapidly due to various forms of government support.

CHINESE SOES: ARE CHINA'S PROBLEMS?

Although the Chinese SOEs make a significant contribution to the economy, the problems inside SOE are severe. Among other issues, organizational inefficiency and high rates of state interference are the most reported difficulties as they challenge business-oriented principles on the world markets. On the domestic market, SOEs typically satisfy the responsibility to correct market failure in terms of the public interest in some sectors, such as telecommunications and networking sectors, which may be inherent monopolies or oligopolies. Direct participation of SOEs in these sectors will lead to “greater economies of scale, more efficient pricing, and higher levels of investment and innovation” (World Bank, 2006, p. 2).

According to Li *et al.* (2015) claim that “Chinese manufacturing SOEs operate less efficiently than other types of firms in terms of profitability, labor productivity, and firm growth” (p. 112). The inefficiency issue could arise because Chinese SOEs receive preferential support from the government, such as subsidies, low-interest rates, and soft budget constraints. Chinese firms became sluggish and heavily indebted by this preferential treatment. According to an OECD study in 2019, “the SOE sector has been the major business group behind the soaring corporate debt, accounting for roughly 88 percent of it as of 2017,” and the debt of SOE was already 100 percent of GDP in 2009 (Molnar & Lu, 2019, p. 16). As the OECD states, the rise in SOE debt could be caused by lower interest rates, which suggests comfortable monetary conditions in the highly increased SOE debt (Molnar & Lu, 2019).

Another issue is the high degree of government interference in the Chinese SOEs. For example, the fifty-three prominent central SOEs leader is personally named by the party’s central department, making them entrepreneurs and a fleet of high political status on the market. Thus, “SOE is more a government agency than a free market player” (Mi & Wang, 2000, p. 298). Furthermore, the local or central government typically engages in the bulk of Chinese SOE investment decisions. It is thought to support political agendas, which pose questions on the world markets.

Although the world recognizes both the significance and the concern of the Chinese SOEs, the understanding we have about them is still very limited. In other words, it is a turbulent world that most people do not understand much about, as Chinese SOEs have been lagging behind their global peers for transparency. For example, there is a shortfall in transparency between its subsidiaries listed in China and listed overseas. According to Susan Côté-Freeman, director of the business integrity system for Transparency International, subsidiaries are frequently best listed outside China than their parent corporation in China (John, 2016). Consequently, the transparency system in foreign countries is better and necessitates more specific information from the SOEs. However, it reveals that compared with Western countries, there is no independent legal mechanism for regulating transparency in China. Although Chinese SOEs play a significant role in the world economy, the world knows little about it, which may confuse their effect on the global economy. Hence, Chinese SOEs can also be viewed as a possible concern.

CONCERNS OVER CHINESE SOES

State ownership does not represent a new economic paradigm. According to the World Bank, “modern theories of ownership generally take a restrictive view of both regulatory failure and the role of the state as owner” (2006, p. 2). SOEs are becoming a global market concern because of their fast expansion and exclusive state ownership, particularly in developing economies. The concern is commercial, considering their weight and government subsidies, which may affect fair market competition. Moreover, the problem is also political, considering the concerns that state leadership and guidance push them.

As already mentioned, as an incentive for performing non-commercial duties, SOEs may obtain some form of explicit or even implicit rewards or advantages from their home government owners. The SOEs' preferential treatment can be seen by preferential funding from SOEs, state banks, or other financial entities, privileged access to information, subsidies, tax reductions, and exemptions, grants, and other direct payments, privileged in the domestic marketplace, etc (OECD, 2016).

Many large private multinational enterprises (MNEs) can also be argued for this preferential finance, compared to some smaller firms. Some banks prefer loans with lower interest to large private MNEs owing to their excellent reputation on the market. State ownership is also not the only criteria for preferential consideration. In any case, these special provisions or benefits for SOEs are not always provided transparently and may give many private businesses an unfair condition. Additionally, the political issues are primarily related to the state ownership, as SOEs' activities can be connected to state development and industrial policies. The problem is that government-influenced economic policy strategies can be prioritized other than market objectives of optimizing profits for SOEs, so they "have to factor in the political goals and non-business motivations of their state owners" (Cuervo-Cazurra *et al*, 2014, p. 931).

However, several analyses indicate that the government does not inherently dictate Chinese SOEs as Choudhury and Khanna (2018) raised the idea that SOEs would function internationally to "achieve resource independence from other state actors" (p. 145). In other words, some SOEs may choose to carry out overseas expansion to avoid being pressured by the domestic government and used the excellent resources of the host nations instead of conducting strategic home government missions. Another critical motivation for SOEs to invest abroad, which is typically ignored, is their business strategy and organizational growth. Foreign energy investment in China, for example, make up a large portion of China's outward direct investment (ODI). It is also assumed to reflect the Chinese central government's national energy security strategy. However, Zhao (2015) claimed that Chinese energy industries, like other firms, are typically motivated by profit and self-development instead of central government energy strategy. Internationalizing SOEs may be a way to expand technical and management capabilities, efficiently distribute capital, and incorporate the firms' domestic product line.

Lastly, SOEs' foreign market issues are often due to their non-trade goals or to their presence in the vital infrastructure sector, which may challenge national security or other relevant national interests of the host countries. As discussed above, however, private MNEs may raise similar concerns. To some extent, alienation is more disturbing than state ownership.

THE TRADE-DISRUPTIVE ECONOMIC MODEL OF CHINA

Today, many nations are not only worried about Chinese SOEs but also about China's economic model. From the US perspective, China "maintains a state-led, trade-disruptive economic model not based on those fundamental principles [...] imposes substantial costs on and presents severe challenges to WTO Members" (WTO, 2018, p. 2). State plays a significant role in economic growth, and this critical economic feature of government may be counter to market economy principles. The Chinese government plays its position with strong indirect or direct economic influence, such as government ownership and primary economic players regulation. In SOEs, the state regulates and appoints key SOE executives and provides preferential access to vital resources such as finances and properties. Alternatively, preferential treatment of Chinese SOEs may contribute to unfair competition in the international market. However, it may pose questions that SOEs are motivated by political considerations.

China's economic system is also focused on government strategy, allowing Chinese SOEs to conduct their duties under government directives. To sustain those enterprises' growth, regardless of market values, China's government will have massive distorting subsidies and other types of funding for SOEs. Taking the Chinese steel industry as an example, they received significant government subsidies. Despite the persistent decline in world steel consumption, Chinese state-owned steel-producing firms are raising their output. There is an ongoing increase in the gap between growth capacity and stagnant consumption (OECD, 2016), leading to significant global excess capacity. In addition to direct exports from China, surplus capacity in China will hurt the global economy and lower world prices and a supply glut, rendering it difficult for even the most efficient producers to remain viable (WTO, 2018).

Although the SOE reform has been underway in China for years, it is not a reform designed to discourage government interference in the economy and strengthen its role in economic governance. In other words, the current SOE reform in China seeks to strengthen, expand, and consolidate Chinese SOEs. It indicates that Chinese SOEs' global market environment will not shortly improve, so that it will remain a problem.

CASE STUDIES

Since entered the WTO, China has been involved in several dispute cases as the respondent. Six out of the forty-four situations in which China served as respondents included Chinese SOEs. These conflict resolution proceedings may be sources of information and expose how other WTO members anticipate Chinese SOEs. By analyzing the Panel and the Appellate Body's context and recommendations, this section uses case study methods to clarify WTO opinions on how Chinese SOEs are working at a global market level.

CASE 1: China – United States: Measures Affecting Trading Rights and Distribution Services for Specific Publications and Audiovisual Entertainment Products (DS363)

In this case, the US has accused China of limiting trading rights and market access of foreign firms with regards to the imported film, audiovisual home entertainment goods, sound recordings, and publications, whereas only certain Chinese government-designed and wholly or partially state-owned firms have the freedom to import the above goods. From the US standpoint, it appears that foreign individuals and firms enjoyed less preferential treatment than that given to firms in China regarding their right to trade. Indeed, Chinese SOEs had exclusive rights concerning the import of the above products. As a result, the Panel decided that in this situation, Chinese initiatives could be deemed inconsistent with China's duty to offer the right to trade in a non-discretionary manner and Chinese market access or national treatment obligations.

This case reflects China's trade-disruptive economic policy by giving Chinese SOEs exclusive import privileges, which have skewed the playing field against imported goods and services. For instance, China barred Facebook, Google, and other Internet firms from accessing the Chinese market on the pretext of internet censorship in China because the government must defend public morality. Moreover, to some degree, public morals are also perceived to be affected by associated publications and audiovisual media products. Nevertheless, China has not proven that the particular clause is appropriate for protecting public morality and may still be considered restricting imports. Therefore, it can be concluded that Chinese SOEs received some government support, which skewed the playing field against imported products and services in various ways, such as market access restrictions.

CASE 2: China – European Communities: Measures Affecting Financial Information Services and Foreign Financial Information Suppliers (DS372)

In this dispute, the European Communities appealed to the WTO that foreign financial information providers' presence or restriction was prohibited. Simultaneously, the Chinese national news agency, the "Xinhua News Agency," acts as the regulatory body for foreign news agencies and a foreign financial information provider's approval process. Xinhua or an agent authorized by Xinhua has to approve any operation. Therefore, if prospective customers choose to switch to a foreign provider's services, the service cannot be offered until Xinhua or the appointed authority has authorized it. From the European Communities perspective, China's actions were incompatible with China's GATS obligations, the TRIPS, and the Protocol of Accession. As a result, the case ended with the China-EU agreement, as China promised to implement new measures to provide foreign financial information services and foreign providers no less preferential coverage than accorded to Chinese financial information and service providers.

There are also two additional cases (DS373 and DS378) that express the same problem as China's financial and service supplier restraint but appealed by the US and Canada. Both were concluded by agreement between the two parties. Therefore, those three situations may be inferred that Chinese SOEs have become overly successful by playing fields against transnational information and imported services in different manners, such as the limitation of market access and the restriction of cross-border information. However, unlike dealing with unfair competition in China on the export side, other WTO members cannot respond to China's unfair competition concerning imported goods or services by implementing anti-dumping measures, making it more difficult to remedy such unfair competition in the short term.

Case 3: China – Mexico: Measures Relating to the Production and Exportation of Appeal and Textile Products (DS451)

In this situation, Mexico has stated that China offers various support programs for certain manufacturers and exporters of apparel. Including exemptions, concessions, offsets, income tax refunds, municipal taxes, import duties, and VAT applied on equipment for some categories of industries, preferential prices for land-use rights, discounted electricity and low-cost loans, extended periods repayment loan, and debt relief provided by state-owned banks. Moreover, in the Chinese market, Mexico has indicated that state-owned producers sell chemical fibers at below-market prices, which is a cheap input to apparel and textiles. State-owned banks have played a significant part by supporting financially. In other words, several Chinese SOEs have received opportunities in the manufacture and export of apparel and textiles. Therefore, Mexico claimed that these measures could be considered subsidies because it was government-supported or an entity owned and controlled by the Chinese government's public body. However, this case is still ongoing.

Although it still has no conclusion for this case from WTO, to speculate on the assumption, one can review the conclusion of a related case, Definitive Anti-Dumping and Countervailing Duties on Certain Products from China (DS379). The US imposed definitive anti-dumping and countervailing duties on China under the case of DS379 on the suspected Chinese government's financial contribution, benefits, and specificity. At the same time, China considered those actions against the US's obligations under the WTO framework, particularly the Subsidies and Countervailing Measures (SCM) and the General Agreement on Tariffs Trade 1994 (AD Agreement).

Additionally, a crucial element was stated in DS379, a public body. Because SOEs are public entities, any SOE investments or loans made by the state-owned banks may be viewed as subsidies. From the US standpoint, certain Chinese SOEs were public entities since the Chinese government was the majority shareholder of these firms and controlled them accordingly. However, China contends that if an entity exercises powers to conduct governmental character roles, it may be considered the public body. Therefore, China did not consider SOEs to be public bodies, and SOE investments and loans provided by state-owned banks should not be regarded as subsidies. However, the Appellate Body found that a public entity is an organization that occupies, operates, or has government authority. Thus, in DS379, the Appellate Body imposed that certain Chinese SOEs supplied steel, rubber, and petrochemical inputs to industries should not involve public bodies, whereas, given the role of the Chinese government in the banking sector, some state-owned commercial banks providing loans to industries in the offsetting investigation could constitute public bodies.

DS451 is close to DS379 as garment and textile factories are getting cheap input from state-owned chemical fiber manufacturers and low-interest loans from state banks. According to the Appellate Body's conclusion in DS379, public bodies may include state-owned banks so that Chinese apparel and textile manufacturing and export benefit from subsidies granted by public bodies that were certain Chinese SOEs.

CASE 4: China-US: Subsidies to Producers of Primary Aluminum (DS519)

In this case, the US has accused China of granting subsidies in China to private and state-owned primary aluminum producers since 2007. Subsidies included loans to some state-owned primary aluminum producers at a very low-interest rate and other financings through banks, government bodies or agencies, public bodies, or private bodies. Both DS451 and DS519 deemed state-owned banks as public institutions, and low-interest loans and other financing are known as subsidies for primary aluminum producers. Moreover, SEOs were providers of subsidies, as state-owned banks received low-interest loans and other funding and subsidy recipients, despite the advantages offered by the banks and the state to state-owned primary aluminum producers. With these subsidies, Chinese SOEs have a better international position to promote exports that can globally undermine fair competition and lead to excess capacity. Besides, controversies over public entities between China and other WTO members stemmed from the absence of a coherent definition and regulation of SOEs and public entities. Therefore, it is only through making each member understand clear definitions and rules that the WTO can standardize the SOEs' international operations and reduce disagreements between them.

In short, the WTO has found that the Chinese SOEs have inevitable unfair competition in the global market by analyzing controversies. On one side, Chinese SOEs enjoyed certain exclusive import privileges, which distorted the playing field against imported products and services. On the other side, unfair competition may originate from specific policy support or preferential treatment received by SOEs from the Chinese government or some firms' advantages by some state-owned banks. Throughout this review, however, the study has only discussed a few cases which are inadequate to make a firm statement. Further experiments should be focused on additional WTO dispute cases.

PROPOSAL FOR TRANSPARENCY IMPROVEMENT

According to Ostry (1998), transparency is "considered one of the basic rules governing the post-war trading system" (p. 1). The objective of transparency is "to illuminate trade policy practices to the benefit of both governments and traders" (Wolfe, 2017, p. 4). Therefore, any member of the WTO should uphold the principles of transparency. At the same time, the WTO is generally seen as the body for mediation and arbitration proceedings between members of the post-war trading system. Consequently, transparency would be "the third way in which the WTO rules and practices influence the trading system" (Halle & Wolfe, 2010, p. 3), because it is "in the form of good data and a forum for surveillance, can reduce the propensity to resort to dispute settlement" (Wolfe, 2013, p. 29).

TRANSPARENCY IN CHINA

The principal transparency of the current multilateral trading regime is based on the member states' administrative, legal infrastructure that could generate inside-out to meet the optimal transparency status (Ostry, 1998). There are two significant aspects of transparency practices currently in the WTO: efficient markets and democratic governance. In general, most Western nations share the same principles of democratic governance and the same ideals on the market, but China appears to be inconsistent with the Western camp. Nevertheless, the modern Chinese legal structure, mainly inspired by Western legal structures, still echoes its cultural and historical heritage. It emerged the issue that "there is no clear separation of powers in China— only a separation of functions" (Ostry, 1998, p. 14).

Moreover, since entering the WTO, many member states have questioned China's market economy status. Zhou *et al.* (2019) found out that the central argument was whether the current WTO system should apply to intervention on the domestic market by China's government, even in global competition owing to "China's state capitalism" (p. 1). Due to the different expectations of transparency procedure among China and other members, Chinese resentment may overburden the WTO conflict process that can be learned from the cases alluded to in the previous discussion. Under such conditions, the Chinese government should strengthen the regulatory legal system to regulate the SOEs' operations. For example, it should require periodic annual reporting with an international standard from the SOEs to ensure information disclosure and enhance transparency. Meanwhile, Chinese SOEs should provide the public with reliable financial reports that include their policy and economic objectives, what sort of supports or subsidies they are getting from the state, etc.

Generally speaking, disclosure of the information is the secret to strengthening the transparency process in China. Chinese SOEs should adopt the ideals of "trueness, completeness, timeliness, and openness" to enhance the efficiency of disclosure of information (Ma, 2005, p. 3). *Trueness* is the main principle for disclosing information, which entails the Chinese government and SOEs to ensure that the information is accurate, precise, and comprehensible. Transparency, after all, is nothing without correct information. Also, *completeness* obliges SOEs to provide all types of information to the public, both financial and non-financial. The financial condition of SOEs should be understood, but also information about their social responsibilities, etc. Again, *timeliness* implies annual governance and financial update to provide the public and decision-makers with a more detailed overview of the operational situation. Finally, *openness* indicates that not only shareholders but also stakeholders can simply access information. Bit by bit, China will develop a better transparency system based on WTO guidelines and the above criteria for disclosing information.

TRANSPARENCY AT THE WTO

$The WTO definition describes transparency as the "degree to which trade policies and practices, and the process by which they are established, are open and predictable" (Halle & Wolfe, 2010, p. 3). Today, transparency involves three forms under the WTO, including dispute settlement system, notification, and surveillance. Dispute settlement is the most well-used, although there is still much improvement for the other two. For example, the ambiguity of what notification requires leads to poor records regarding notification of subsidies from members (Wolfe, 2017). A more comprehensive regulation on the flow of information within the WTO is needed to increase transparency. The purpose of transparency practices for all members is to be clarified because it can only work if all the parties involved share the same objective. To normalize information processing, guidelines should be developed to determine who should produce the information, obtain the information, which information is required, and how it should be supplied to ensure that the information is accurate. The practical implementation of the WTO transparency structure could mitigate the information asymmetry to rebuild trust among member states and improve the predictability of policies and the multilateral trading system's stability.

In general, transparency appears to be a better approach for SOE-related spillovers than a hunt for formal rules (Shaffer *et al*, 2015). As Halle and Wolfe (2007) claim, if trade policy is made in the light of day, it may not always be captured by interest groups. It can also better understand the Chinese SOEs' effects on the market and the world economy. Moreover, transparency is far from being an embedded principle of governance (Potter, 2014). It will only attain the desired status when all its members are interested in building a trust relationship, sharing the information, and making it a habit.

CONCLUSIONS

In many economies, SOEs have played a significant part. However, most SOEs are accused of disrupting the environment of fair competition on the world market. As a typical representative of SOEs, Chinese SOEs are at the core of the issue. Thus, the discussion on how Chinese SOEs work on fair completion on the world market never ended.

This paper explored how Chinese SOEs act on a level playing field under the modern multilateral trading system by analyzing their concerns and examining controversies involving Chinese SOEs over the WTO. Although the cases that have been reviewed in this work revealed that Chinese SOEs were not performing on fair competition, "it is difficult – and often impossible – for members to assess China's compliance with its WTO obligations" (WTO, 2018, p. 6). In other terms, it should be only inferred that the result is by no means conclusive but plausible. Indeed, controversies over Chinese SOEs may also be exacerbated by the lack of transparency in China's SOE sector. Therefore, the sunshine of transparency from the WTO and China is vital to highlight the ambiguous Chinese SOEs to expose better and solve Chinese SOEs conundrum.

A drawback of this issue is that Chinese SOEs' may present challenges on the world market that do not have fundamental solutions. It would be advantageous for other members to learn more about the volatile world of Chinese SOEs and behave appropriately by improving China and the WTO's transparency mechanism. However, China's reform is necessary to address the alleged unfair competition issue in the Chinese SOE sector. The necessary reform cannot be the transition that China undertakes to consolidate government power in the Chinese SOE sector. Otherwise, it would concentrate on distinguishing government from industry, enhancing the vitality and competitiveness of SOEs, and adhering to the neutrality of competition and market principles.

There are three facets of future study that can be explored. Firstly, it could continue to evaluate future arbitration proceedings at the WTO and find more shreds of evidence on how Chinese SOEs operate legally. Moreover, this work was pointed out that transparency could potentially mitigate the issues posed by Chinese SOEs theoretically. Consequently, it should also be analyzed whether controversies in the WTO can be minimized by enhancing the process of transparency with empirical testimony. Finally, the fundamental solution to the issue is restructuring the Chinese SOEs or just the economic system. Additional studies can focus on producing more comprehensive market-oriented proposals for improvement.

Given the challenges presented to the global market by Chinese SOEs, China's policy should not obstruct business or investment with Chinese SOEs. Instead, as economic globalization continues to progress, "we need to learn how to live with China's SOEs as regular foreign investors as well as business rivals for a long time to come" (Chen, 2013, p. 1).

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A COMPARATIVE AND FORECASTING STUDY OF WORKPLACE VISITS DURING PANDEMIC

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ABSTRACT: *This paper summarizes the frequency of workplace visits' during the pandemic period between February and November 2020 in the world. Furthermore, 5 countries' data have been particularly observed and discussed. The objective is bringing a global look with a following micro examples in order to observe how workers' density in the workplaces have been impacted due Covid-19.*

KEYWORDS: **workplace visits; forecasting; pandemic; 5 countries' data.**

Working, workers, and workplaces have been intensively upset during the current pandemic (Güneri & Hayircil, 2021; Güneri & Muller, 2021). Since the outbreak of the COVID-19 pandemic in March 2020, mobility in general has massively dropped worldwide (Warren & Skillman, 2020). The authors of this study are observing in another study the telework subject on social media during the pandemic period (publication in preparation). According to their observations, people do not talk too much about telework, neither on Twitter nor on Facebook. Neither do they often describe where and how they work. Contrarily, telework is becoming a protest or humour subject.

Furthermore, some employees go to the workplaces even when they are teleworking. One of the authors of this research actually does telework, but she regularly goes to the office to be able to work in a professional environment, even if she stays isolated and does not cross other colleagues. Another interesting observation is that the distance to the workplace, and the possibility of driving to the workplace by car, as opposed to public transport with greater chance of contact with the COVID-19 virus, also play a role in the change in mobility (Abdullah *et al*, 2020). For these reasons above the authors are interested in the data about workplaces published by Our World in Data[2]. Hence, the first research question is:

« *How often are workplaces occupied during the pandemic?* »

1 Author names are in alphabetical order according to last surnames' initials.

2 https://ourworldindata.org/grapher/workplace-visitors-covid between 02.17.2020 and 29.11.2020.

On the other hand, because the authors have diverse origins and they live in countries different than they were born and/or grew up in, this study was a good occasion to be able to compare five different countries, where they actually live, according to the frequency of workplace visits. The second research question is:

« *What is the frequency of workplace visits in France, the Netherlands, Turkey, Egypt and India?* »

DATA OBSERVATION

This study emerged following exploration of the data (Data, s.d.) about workplace visitors. In the first step, comparative graphs on excel are shown and all the countries in the data have been compared (general comparison of frequencies at global level). In the second step five countries have been identified with specific reasons (specific comparison of five countries: France, the Netherlands, Turkey, India, Egypt).

General Comparison of Frequencies at Global Level

In the graph below (Figure 1), global data of workplace visits between 17/02/2020 and 29/11/2020 is considered. The average of daily workplace visits from around the world are taken and plotted.

Figure 1: Average workplace visits in the world between 17/02/2020 and 29/11/2020

The graph shows an obvious sharp decrease of 50 points during the first wave global lockdown followed by a steady increase, starting 9/04/2020, stabilizing around 20 points below 0 around the beginning of June 2020. This level seems to be kept stable throughout all the periods of our study with slight fluctuations that could be explained by national holidays in certain countries.

Specific Comparisons of Five Countries: France, the Netherlands, Turkey, India, and Egypt

There are two reasons that these countries have been chosen for this study:

1. The three authors actually live in France and the Netherlands. The author who lives in the Netherlands was born there, but of Indian origin. One of the authors who is from Turkey, was born in Egypt. He is half Lebanese and half Turkish. He lived in Egypt, in Turkey, and currently he resides in France. The other author is from Turkey; she grew up in Turkey and, at present, lives in France.

2. The economic and cultural differences in the five countries: Besides France and the Netherlands, which are the members of European Union, the other countries are located in different regions. The common point between all these countries is that they have different cultures, different official languages, and they also have different economic levels. The implications in each country during the pandemic period are also not identical. The confinement dates, the telework obligations, the state supports are various depending on the conditions particular to them. There is also a demographic impact, such as for example – while India has a massive percentage of young population, the Netherlands has issues with aging (Dullemen, 2013).

Below, by referring to the data[3], we compared the workplaces visits in five countries and we made a forecast if companies/businesses in these countries will revert to their pre-pandemic work systems by May 2021:

1. France witnessed a sharp decrease by around 70 points in its workers mobility during the pandemic (Figure 2). A gradual return saw the curve increase back around the [-40, -20] interval after lockdown and during summer. The forecast to move up to the [-20,10] interval from December to the end of the forecast period (May 2021) indicating that the situation will not go back to the pre-pandemic conditions, and that a portion of workers will remain working from home.

3 https://ourworldindata.org/grapher/workplace-visitors-covid between 02.17.2020 and 29.11.2020

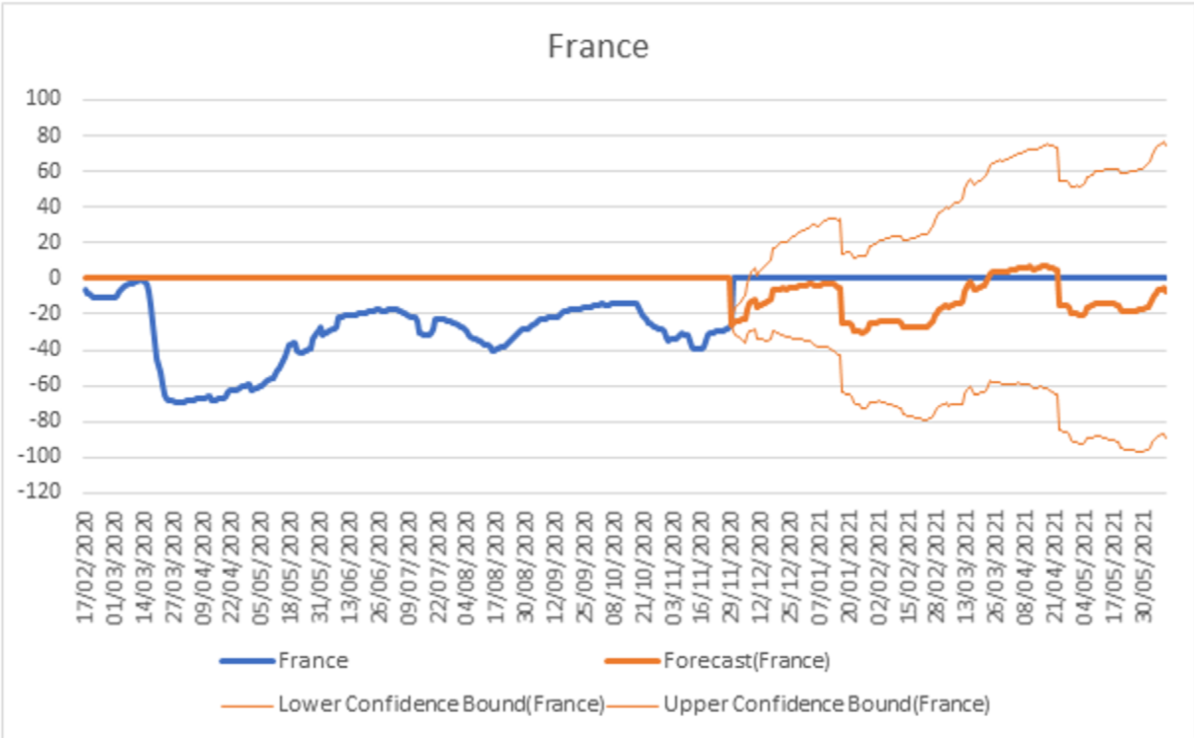

Figure 2: Forecast of after pandemic workplace frequencies in France

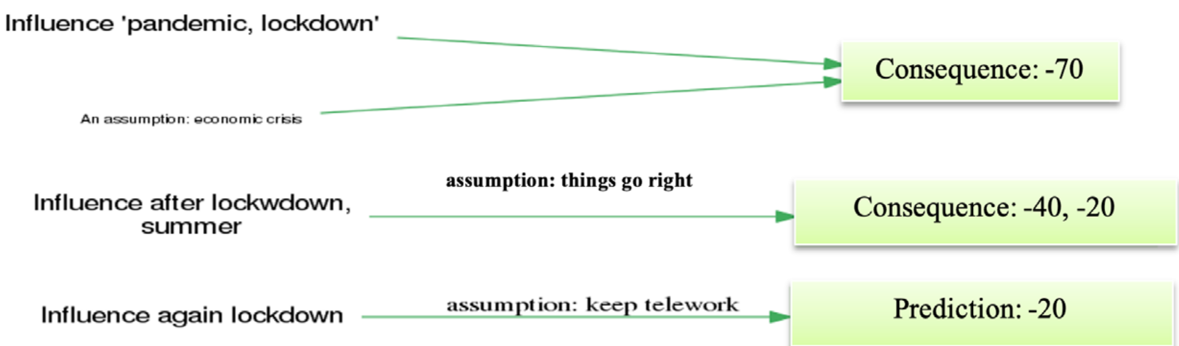

Figure 3: Schematisation of the forecasting for France

2. As for the Netherlands, another European country, the decrease in mobility was not as sharp as in France (Figure 4). The curve hits its minimum at -45 points during lockdown and a rebound to the [-40, -20] interval during summer and the following months. The forecast shows a similar trend to the one witnessed for France.

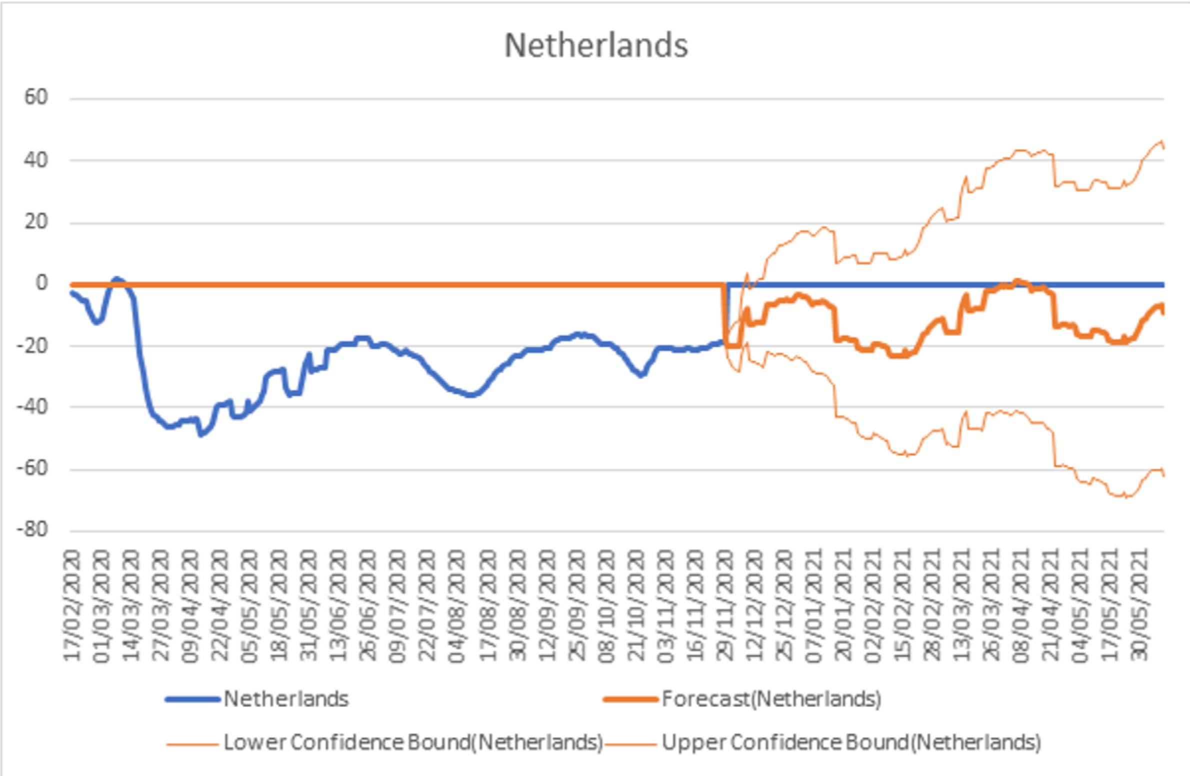

Figure 4: Forecast of after pandemic workplace frequencies in the Netherlands

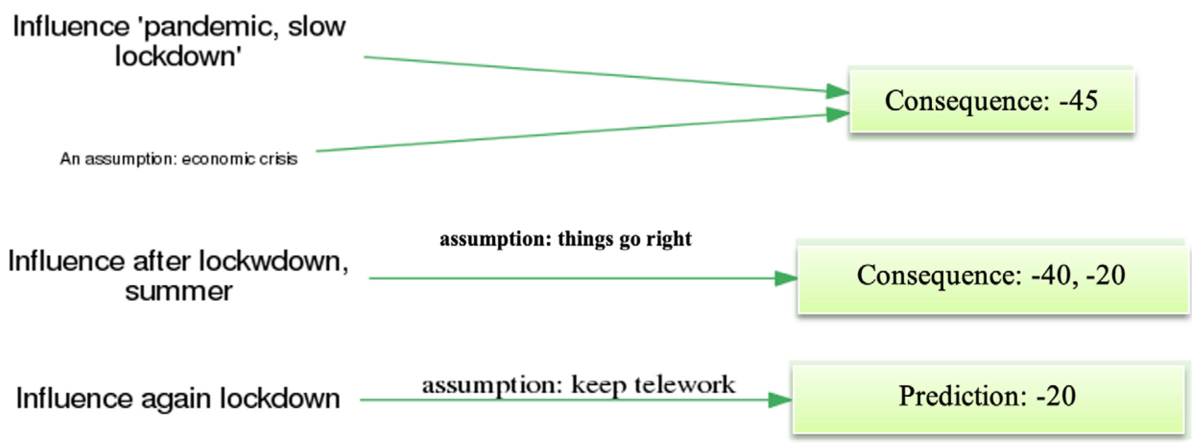

Figure 5: Schematisation of the forecasting for the Netherlands

3. Egypt, like the rest of the world, shows a steep decline in its curvature during the global lockdown period (Figure 6). However, unlike the European countries, it shows a consistent gradual incline taking it back to a negligible level below 0 (pre-pandemic rates). The two steep declines around the end of May and the beginning of August coincide with the religious feast (Eid-Al-Adha) where the whole country is on pause, so these are to be ignored and not considered.

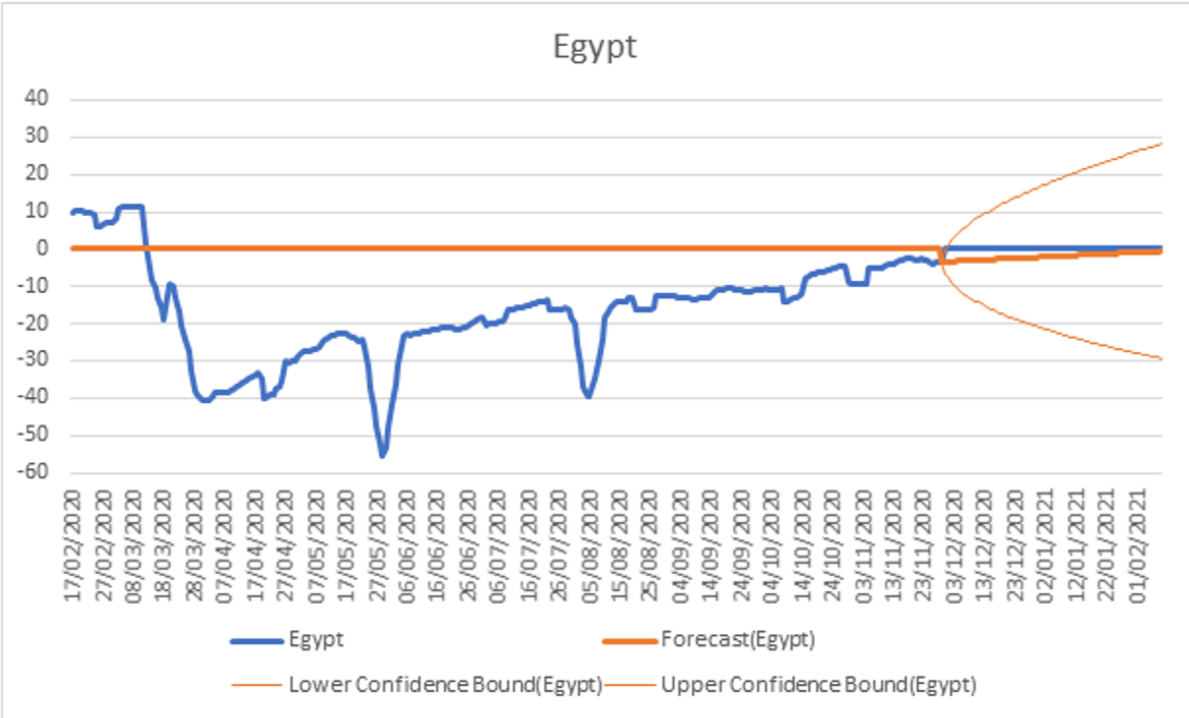

Figure 6: Forecast of after pandemic workplace frequencies in Egypt

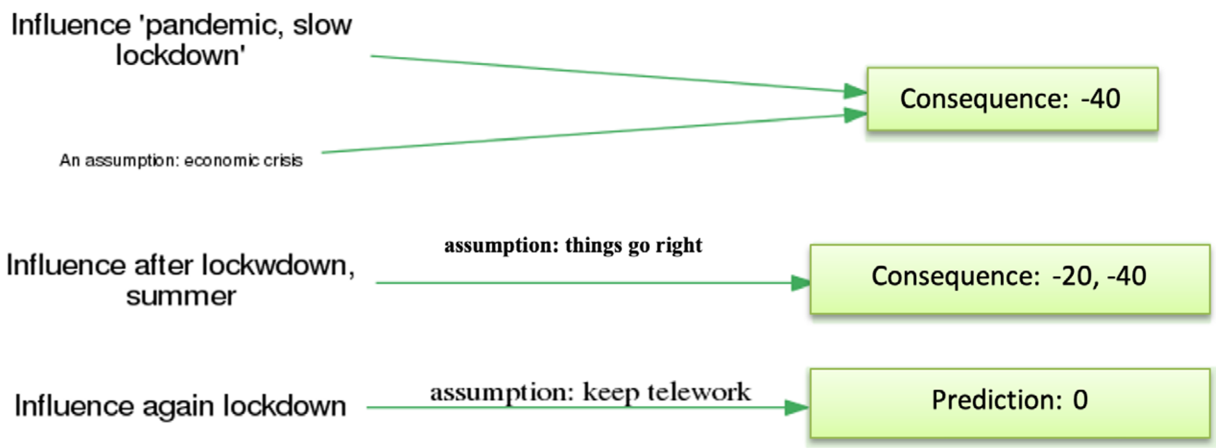

Figure 7: Schematisation of the forecasting for the Egypt

4. Turkey stands out from the rest of the countries in its sharp decrease and increase level (Figure 8), probably indicating that the decision to work from home is more tied to rules than personal will. Being a country with an Islamic majority, it also witnesses declines around the two feasts in May and August. Nevertheless, Turkey's forecast, like Europe's, does not indicate a return to pre-pandemic rates. This could perhaps be explained by its ability to adapt to work-from-home conditions.

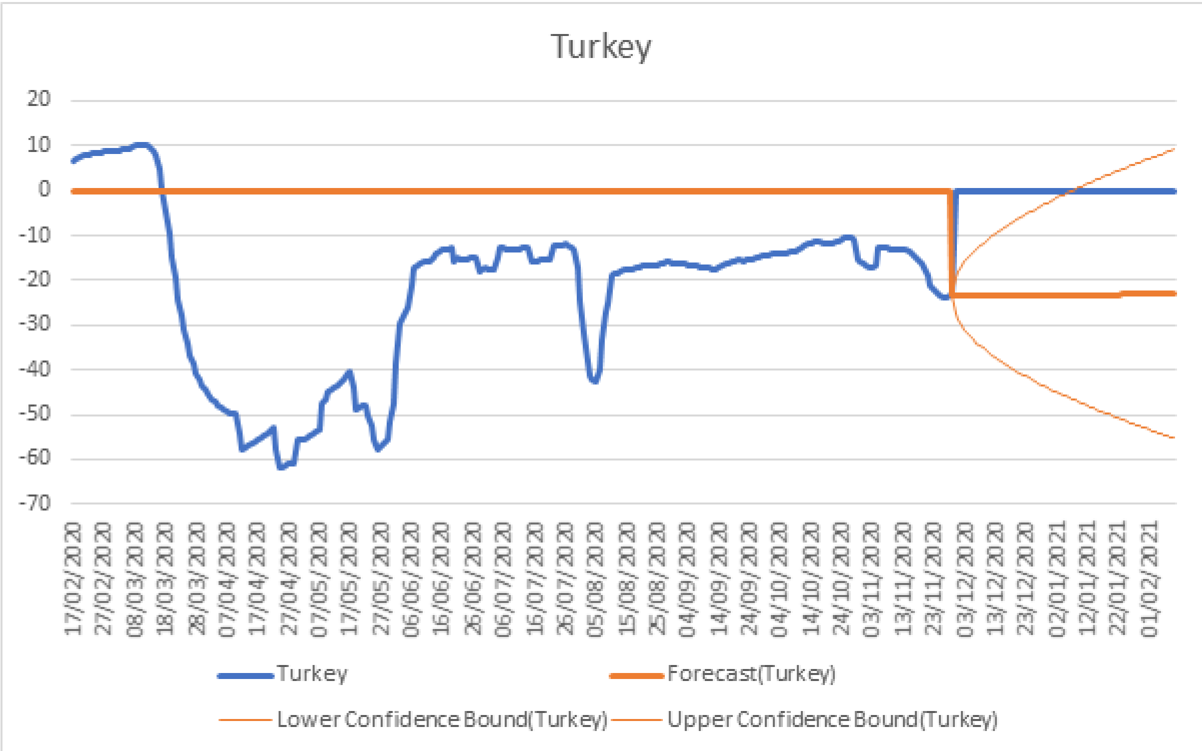

Figure 8: Forecast of after pandemic workplace frequencies in Turkey

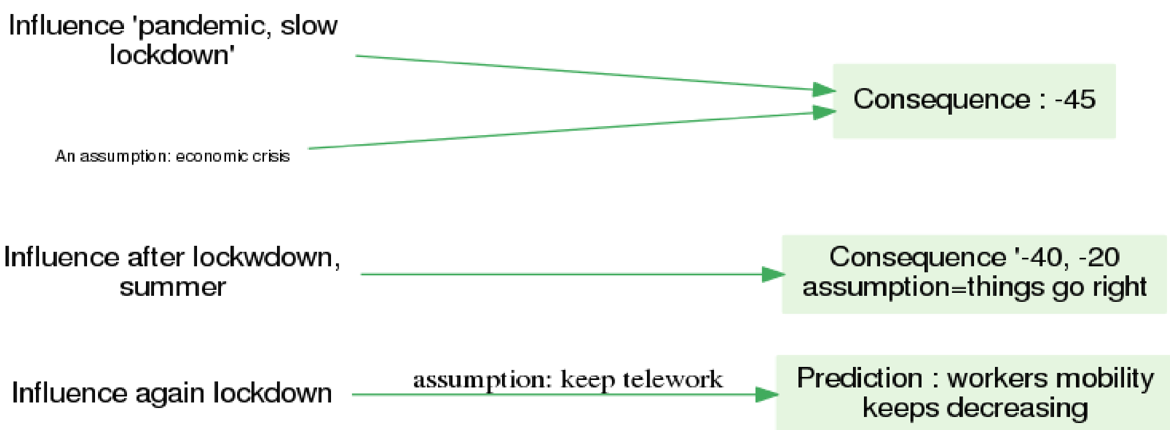

Figure 9: Schematisation of the forecasting for Turkey

5. As for India, a sharp decrease hitting -60 points around the end of March and gradually increasing back to the [-35, -20] interval but not at all coming near the 0 point which represents pre- pandemic rates (Figure 10). A forecast shows it staying around the -20 points indicating that a part of its workforce will continue working from home.

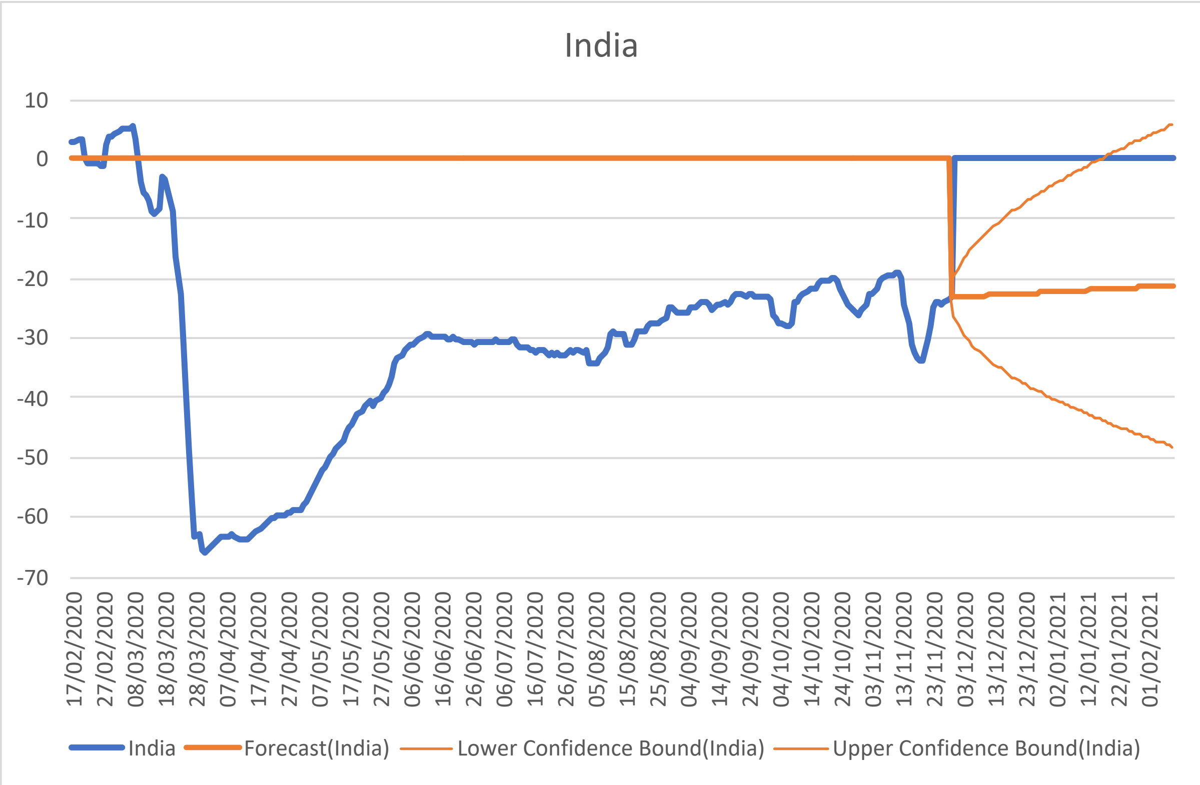

Figure 10: Forecast of after pandemic workplace frequencies in India

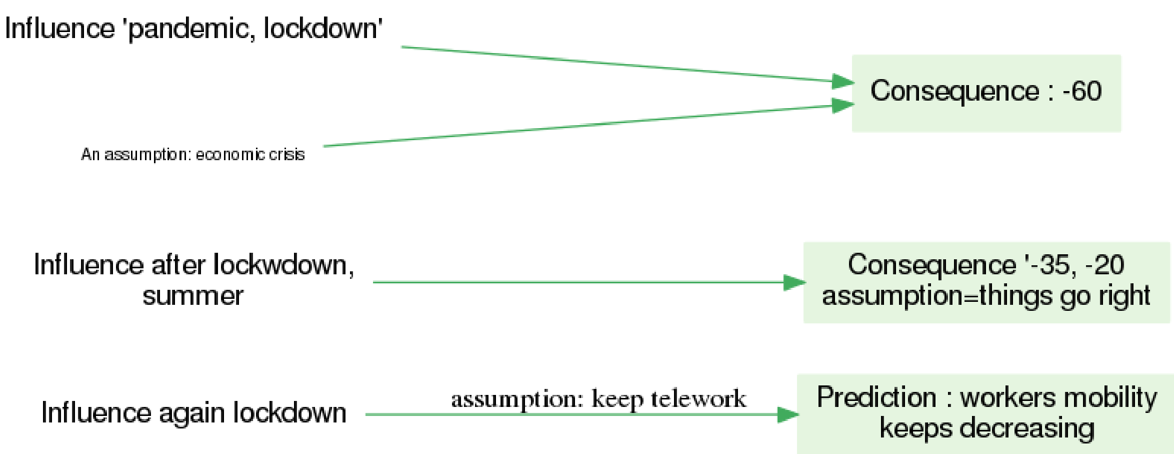

Figure 11: Schematisation of the forecasting for India

DISCUSSIONS

It is important to consider how and why these differences occur. France and the Netherlands both have a good coverage of Wi-Fi, even in people's homes and remote areas. Nevertheless, in the Netherlands, the decrease in mobility was not as sharp as in France. This could be due to the fact that the Netherlands is a smaller country and travelling to the workplace is usually a short distance. The rules about working from home (due go COVID-19) were somewhat free to interpretation. It was recommended to work from home and stay at home as much as possible. Yet many people continued to visit friends and family, perform outdoor activities and travel to the workplace. As the gravity of COVID-19 became clear, the government became more decisive.

In Egypt, the fall in mobility was not as steep; this could be due to relatively weak Wi-Fi coverage, and less strict COVID19-rules. The forecast is that people will start going to back to the workplace. Perhaps because the conditions of working from home are not optimal. This is contrast to Turkey, where - as suggested earlier in this paper - perhaps the homes in Turkey are more easily adapted to form a work-from-home office. For India, it also seems that workers will not to go back to the workplace in future. This could be due to good Wi-Fi connections, and the fact that in India commuting from home to work and vice versa is usually very long due to large distances and bad infrastructure. If these hours can be avoided, it seems like Indian workers prefer to continue working from home.

FURTHER RESEARCH

As mentioned in this paper, the countries differ in culture, language, and COVID-19 rules. In order to provide a scientifically sound answer as to why there are differences in mobility, the different parameters, such as rules, culture, national holidays, COVID-rules, population, Wi-Fi coverage, etc, should be studied. Moreover, this study could be expanded by looking at more countries. By looking at a bigger sample of countries, it will become easier to explain the changes in mobility, considering COVID-19-rules, culture, population, and other parameters as mentioned above. This short paper is a small start to the possibility of researching the relationship between mobility and COVID-19. As many factors play a role, studying a larger array of countries will give interesting insights in how culture, clearer governmental rules and communication, geography, etc, all play a role in times of crises, such as COVID-19.

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MOODY´S: AN ANALYSIS OF THE HRM FUNCTIONS CONCERNING ORGANIZATIONAL DEVELOPMENT

Alexandra Thérèse Fernande Christiane Molitor

ABSTRACT: *Capital is being affected by factors like global competitiveness and workforce policies. This paper provides an overview of the human resource management functions in Moody´s organization. It focuses on three human resource management activities and aims to demonstrate their impact on organizational development. A context review was employed to collect all secondary data, derived majorly from the company's website and reports. The significance of organizational development was highlighted by throwing light on the company´s strategy, which is based on diversity, inclusion, and leadership engagement. The paper concludes that Moody´s is a success story regarding its HR functional area since employees are highly evaluated and appreciated.*

KEYWORDS: human resource management, organizational development, workforce.

In 1909, Moody's was founded by John Moody. The purpose of Moody's was to provide investors with important information about companies and to analyse companies' performance and assets. At that time, his firm was on the top within the securities industry, which motivated him to find a new company Moody's Investors Service, in 1914, including rating stocks and bonds. Later, his firm covered the whole US bond market (Press, 2004). Today, Moody's Corporation is the parent company of Moody's Investor Services and Moody's Analytics. The purpose of Moody's Financial Services is to provide investors with an understandable insight into the global debt market through credit ratings and research. Moody's Analytics provides data, analytics, and insights to leaders of financial, non-financial, and government companies, with powerful tools to comprehend risks (Moody's, 2020a).

This article focuses on human resources functions, illustrating all the human resources practices of Moody's Corporation. It takes into consideration the job analysis, human resources planning, and recruitment, to demonstrate how these activities support the organizational development and its importance. The paper presents the importance of human resource management activities, which lead to organizational development (OD) in Moody's.

The first section of the article defines and illustrates all human resource management functional activities of Moody's Corporation that support organizational development. The second section focuses on the importance of organizational development and presents a scale of significant human resource management activities.

HUMAN RESOURCE MANAGEMENT FUNCTIONS AND ACTIVITIES

Human resource management (HRM) is about using people to achieve organizational objectives. It is a concern of all managers at every level since they need to use the potential of employees to enhance productivity. HRM is more significant than ever due to the global increasing competition, and the constant changes in the workforce and regulations that affect businesses (Stewart & Brown, 2019).

HRM is divided into six essential functions.

1. Staffing is based on four components, job analysis, human resources planning, recruitment, and selection. It ensures that the company has enough employees with the necessary skills.
    - Job analysis includes two main points: the job description, which determines the required tasks, duties, and responsibilities, and the job specification, which defines the required skills, knowledge, physical demands such as values and behavior, and the ability to do the job.
    - Human resource planning refers to find a common point of internal and external potential employees who meet the requirements. This step enables the recruitment process and other HR actions.
    - Recruiting people is about attracting qualified employees who meet the expectations of the companies.
    - The selection process identifies the best-suited employee out of the application pool.
2. Human resource development is a significant function that includes, training, development, career planning and development, and organization development (OD).
    - Training and development are essential to prepare new employees with skills and knowledge for their role, and later on, developing their skills and growth on a long-term basis for future roles. Employees should have a plan where they determine the goals, they want to achieve.
    - Career planning is about identifying ways to achieve their goals, while career development is about giving opportunities to employees with experience and high qualifications to get promoted or reassign.
    - The fundamental purpose of organization development is to make the firm more effective, for example, by creating a positive environment. Additionally, it influences the corporate culture of a company (Diamantidis & Chatzoglou, 2019).
3. Performance management is responsible for the progress of the company by maximizing the productivity of individuals, teams, and the organization itself.

4. Compensation consists of direct and indirect financial compensation and nonfinancial compensation. Direct financial compensation is about providing employees with their wages, salaries, and commission. Whereas indirect financial compensation refers to benefits, such as sick leave, a free parking space, or medical insurance, nonfinancial compensation is a form of incentives employees receive but do not overtax the organization. Cases in which that employees feel comfortable in their work environment, is a good example.

5. The fifth function is employee and labor relations. Every company is required by law to bargain in good faith with unions. Labor unions defend employees' rights and mediate disagreements, and employees have the right to elect representatives.

6. Safety and health are another important functional activity in human resources. Safety guarantees the employees 'safe environment, and health refers to the well-being of the employees, which gives them the right to stay at home in case of illness. Employees who operate in a safe workplace and are healthy tend to be more productive (Martocchio, 2019).

THE MOODY'S CASE

HR planning consists of three steps - to attract, develop and retain employees. Recruitment is about attracting a sufficient number of people with the required skills over a while to apply for the job. Among Moody's sources are universities, former employees, unemployed and employed people if they match their profile. The methods they use to attract employees are web blogs or career websites, like LinkedIn, by publishing job offers (Moodys, 2020b). Due to the COVID-19 pandemic, Moody's offers also online sessions where they inform potential employees about their business, what kind of people they are looking for, their mission, their goals and culture.

After the recruitment process, the selection process starts, which consists of six steps. Moody's puts a very high value on diversity and educating its employees. So, in the selection process, they choose the most suited candidate for the job who shares Moody's culture and the goal of the company (Moody's, 2020b).

The second step of HR planning is about developing employees, which refers to providing them with training in order to increase their skills, knowledge, and competence. Retaining employees is the last step, referring to compensation and labor relations. A company needs to be able to keep their talented and skilled employees because it would cost them a lot of money if they would lose their most valuable assets. Moody's is all about diversity and inclusion, and therefore, they have six different employee resources groups (ERGs). The purpose of ERGs is to be more effective by creating an inclusive work environment. These groups support the recruitment, development, and retention of diverse and talented individuals (Moody's, 2020c).

IMPORTANCE OF ORGANIZATIONAL DEVELOPMENT

Organizational development (OD) is one of the most significant functions in HR because it refers to the success of the company (Martocchio, 2019). It is a planned and systematic attempt to change the company positively. The importance of OD lies in the way of how a company uses its available resource to solves problems. By identifying the company and employee's needs, the efficiency of the firm can be improved (Quain, 2020). The most valuable assets of a company are employees. Each firm is responsible for their learning process, by providing them with training and development opportunities. Investing in training and development is not only about increasing the performance of employees, but it is also about personal growth. Creating a learning culture is essential because it can decrease anxiety or frustration in the workplace. Training and development lead to an increase in motivation, confidence, and morale because employees feel satisfied with their work. The job satisfaction causes a sense of security to the workforce, and, therefore, absenteeism and turnover are reduced (Rodriguez & Walters, 2017).

Ray McDaniel, President & CEO, states that "*Moody's and our leadership team are committed to making diversity and inclusion part of the fabric of our organization. This helps to create an environment that maximizes every employee's contribution, widens the leadership pipeline and ultimately increases the quality of our opinions, products, and services*" (Moody´s, 2020d).

The people strategy of Moody's is based on three components, understanding diversity and inclusion (D&I), leadership engagement, and diversity engagement. Moody's wants to make sure that their employees understand and value the purpose of D&I. Moody's diversity council is responsible for strategic plans on implanting D&I on the daily basis of the firm. In the eyes of Moody's, having a diverse workforce is essential for long-term success. Nobody should feel excluded based on their, gender, sexual orientation, gender identifies, race, nationality, religion, etc. The employees of Moody's have high workplace flexibilities, and everybody can modify their hours and work locations with their managers to ensure a healthy work-life balance. Moody's offers a large variety of training, mentoring, and networking opportunities for the needs of women professionals, such as "Senior Women's Leadership Forum" and "Working Parents Circle". Moreover, Moody's has six employee resources groups (ERG's). The first one is the "Moody's Women ERG" to improve recruitment, retention, promotion, and development of female workers. The second group is the "Moody's Multicultural ERG" to use diverse talents to their advantage. "Moody's Lesbian Gay Bi Transgender and Allies (LGBTA) ERG" creates a work environment that respects, welcomes, and supports LGBTA professionals so that they can perform to their fullest potential and contribute to the goals of the firm. "Moody's Veteran ERG" is about recognition and supporting veterans to raise awareness of issues that may impact them. "Moody's Generational ERG" wants to use the experience of all generations to create a healthy work environment, to support everybody, and which gives value to the firm. The third group is the "Moody's Minds ERG", which encourages employees to manage and talk about their mental health. Employees and managers should feel confident to support each other's mental health.

The company has received a set of awards for its contribution to diversity and inclusion in the workplace (see Appendix). Since 2012, it has been the best workplace company for LGBTQ people in the US, as this was recognized by the Human Right Campaign Foundation. Also, it has been an inspirational workplace since 2019 in the UK, as it was awarded with the "Stonewell's Workplace Equality Index" (Moody's, 2020c).

Furthermore, Moody's employee value proposition (EVP) offers unique benefits for all the employees. They see investments in benefits as an investment in their employees. Moody´s says that the EVP stands for what they believe in, having real-world impact, working with inspiring co-workers, having a voice, and being heard, and building a secure future. A lot of the offered benefits are for both, employees, and their families, such as health, life, and accidental insurance, financial wellness support, parental leave, or retirement plans. Some benefits, including flexible spending accounts and health saving accounts, are provided to help the establishment of a secure financial future. The company provides a lot more benefit plans, depending on the location and team (Moody's, 2020b).

CONCLUSION

Moody's is a success story. They are all about inclusion and diversity, which is one of their greatest strength and achievement. They put a high value on the well-being of their employees by offering a large variety of training, employee resources groups, and benefits. They make sure that their employees have a work-life balance in order to contribute their fullest potential. Moody's is on the right path. If they head in the same direction, they will reassure even greater profitability and workforce motivation by understanding and satisfying employees ´needs.

In the authors opinion, Moody's is a modern and forward-looking company that has recognized "people power" and prioritized their work engagement. Working for a company where one knows that they are valued, welcomed, and supported, has a positive impact on their performance and well-being.

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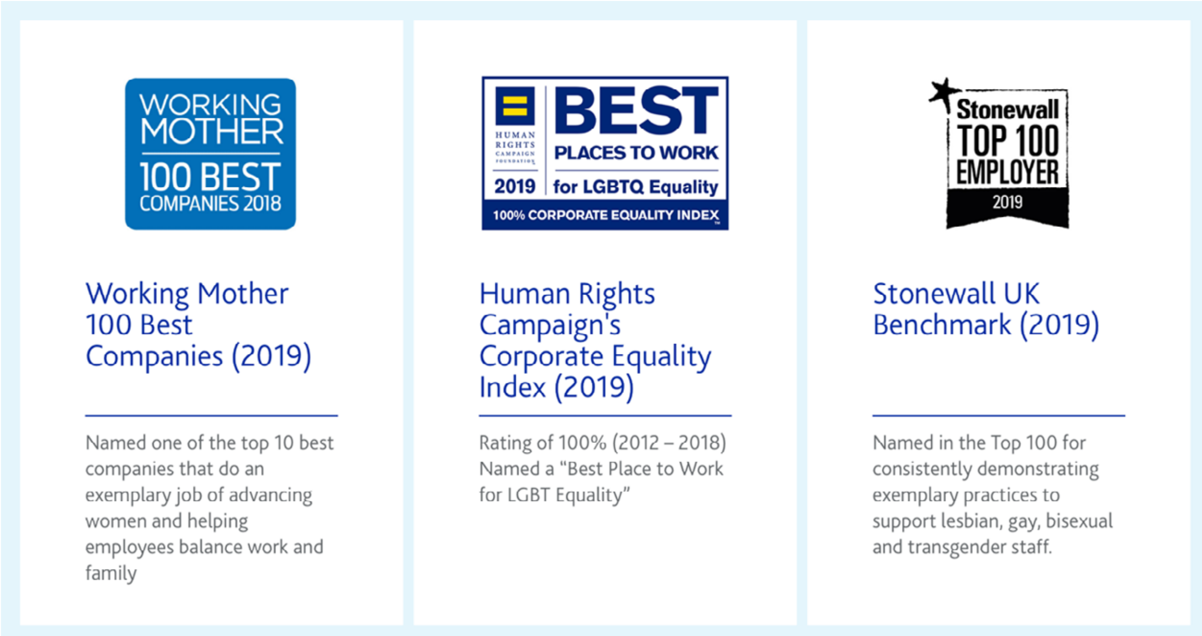
APPENDIX

Examples of the Moody´s Awards related to diversity and inclusion in the workplace.



Source: (Moody's, 2020c).

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MITIGATING MISMANAGED MUNICIPAL SOLID WASTE DISPOSAL THROUGH BEHAVIOURALLY INFORMED INTERVENTIONS: THE CASE FOR EGYPT

Hassan Abul-Enein

ABSTRACT: *Municipal Solid Waste (MSW) is defined as day-to-day trash produced from households, schools, hospitals and commercial outlets. This includes everyday items such as food, cans, paper, plastic, carton packaging, clothing, appliances, etc. Mismanaged solid waste disposal has serious and hazardous impacts, as it increases the risk of disease transfer and contamination. Further, it negates urbanisation and sustainable development efforts and results in serious economic loss to businesses and governments. This paper discusses the possibility of applying behaviourally informed policy interventions in Egypt to counter excessive littering and waste disposal challenges. It starts by defining the littering and waste disposal problem in Egypt, while briefly exploring what has already been applied. It then proposes three interventions (a tax break scheme, usage of footpaths, colours and patterns, and roll out of social media and awareness raising campaigns) building on behavioural theories including loss aversion, framing, libertarian paternalism, and colour-coding and visualizations. The paper concludes with a discussion, affirming the benefit such interventions may yield.*

KEYWORDS: municipal solid waste, behavioural public policy, loss aversion, framing, libertarian paternalism, color-coding and visualizations, nudges.

Municipal Solid Waste (MSW) is defined as day-to-day trash produced from households, schools, hospitals and commercial outlets. This includes everyday items such as food, cans, paper, plastic, carton packaging, clothing, appliances, etc. (EPA, 2016). Mismanaged MSW disposal has serious and hazardous impacts; MSW landslides and dumps serve as a ground for insect and pest breeding, transmitting disease through breeding vectors, impacting the health, productivity, and cleanliness of communities. Further, it compounds pollution, degrades climate conservation, contaminates oceans and results in serious economic loss to numerous stakeholders including businesses and governments (Schultz *et al,* 2011). Thus, mismanaged MSW threatens sustainability and urbanization efforts (Silpa *et al,* 2018), affecting day-to-day lives and impacting the wellbeing of every single individual on Earth.

This paper discusses the application of behaviourally informed policy interventions in Egypt to counter MSW and littering disposal challenges. It starts by defining the waste disposal problem globally and in Egypt, while briefly exploring what has been applied so far. It then moves to outline behavioural theories such as loss aversion, framing, libertarian paternalism and, colour-coding and visualizations – using them to shape three proposed interventions to promote better MSW management in Egypt. The paper concludes with a discussion, affirming the benefit such interventions may yield while complementing ongoing efforts and policy developments.

MISMANAGED MUNICIPAL SOLID WASTE: THE WORLD AND EGYPT

Global waste generation and incorrect disposal and waste management

In 2016, 2.01 billion tonnes of MSW were generated globally. This is expected to continue to incline over the next 30 years, reaching 3.40 billion tonnes by 2050 (Figure 1). Unfortunately, only 33% of waste currently produced around the world is disposed correctly, constituting a serious threat to sustainable development (World Bank, 2016).

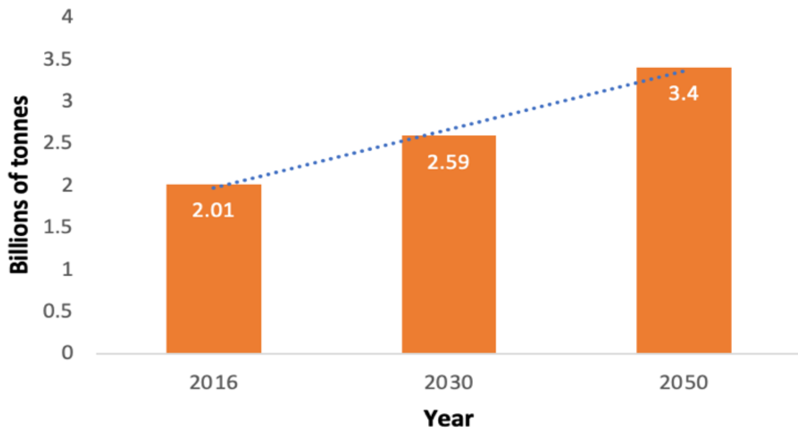

Figure 1: Projected global waste generation (World Bank, 2016).

There are numerous factors that cause or contribute to mismanaged and incorrect MSW disposal. These can be categorized into financial, infrastructure, planning and coordination and behavioural factors. As an operation in its entirety, waste disposal is expensive. This means that often local authorities do not have fully fledged resources to address the matter due to financing gaps and inadequate resource allocation. Moreover, fragmented infrastructure (including weak transport networks, limited space, recycling capacity and technology accessibility) hampers waste management, forcing many communities to incorrectly dispose of waste, filling open landslides and dumps. Waste disposal also requires integrated and coherent policy and coordination between a variety of stakeholders. Fragmented policy and coordination between institutions accelerates the expansion of operational gaps, increasing the frequency of incorrect waste disposal. Lastly, individual behaviour and environmental awareness play a significant role in incorrect MSW disposal. Littering, defined as any disposal or discarding of waste, in a disorderly manner and in violation of regulatory and environmental frameworks, results in waste dumps and landslides filling up more quickly and in an uncontrolled manner, aggravating the MSW disposal challenge.

The Middle East and North Africa

The MENA region produces the least in terms of MSW (Figure 2). However, it is amongst the fastest growing regions in waste production globally. It is also a region where half of MSW is mismanaged and disposed incorrectly. Projections estimate that the region's waste generation capacity will double by 2050, sounding the alarm for a critical future challenge (World Bank, 2016). This is compounded by the fact that elements causing mismanaged and incorrect waste disposal are augmented across the region and specifically in lower income countries.

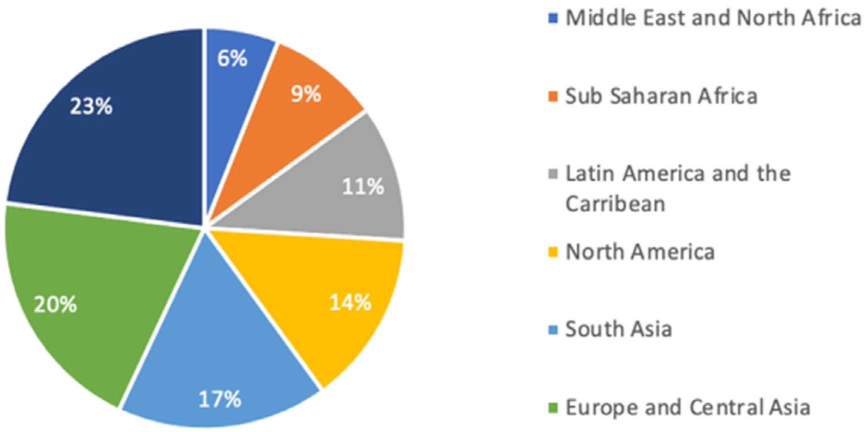

Figure 2: % of waste generation by region (World Bank, 2016).

Egypt

With a population of over 100 million (CAPMAS, 2018), Egypt is one of the highest waste-producing countries globally. It generates on average 55 tonnes of MSW daily (EEAA, 2016). Of Egypt's annual waste generation only 20% is disposed correctly (GIZ, 2019) with 44.8% of local households disposing and littering MSW in the street and in the Nile River (CPAS, 2017). Additionally, Egypt has one of the lowest waste collection rates across the region (World Bank, 2016), resulting in a critical challenge to well-being and development. Figure 3 depicts the severity of this phenomena across a set of locations in Egypt.

Figure 3: Examples of waste dumps and litter across Egypt.

What Has Been Done So Far?

To date, governmental interventions in Egypt that aim to manage littering and MSW disposal have focused on cash incentives and recycling. For instance, in the district of Heliopolis, kiosks were set up to purchase trash from citizens under the theme "Cash for Trash" (Noureldine, 2017). Moreover, in collaboration with the EU and the United Nations Environment Programme, the "Enough Plastic Bags" campaign was launched to limit the use of plastic bags across Egypt and promote recycling. This saw the Egyptian Ministry of the Environment distribute more than 4000 biodegradable bags across select youth centres and hubs to complement the national green strategy and promote recycling (UNEP, 2017).

Meanwhile, a recent governmental push to update infrastructure across new and old neighbourhoods and invest in technological machinery to manage waste disposal has yielded positive results. Partnerships with international organizations and the private sector have also been pursued progressively (World Bank, 2016). From a regulatory vantage point, a parliamentary committee in August 2020 approved an updated draft environmental law to cement the State's environmental protection efforts and consolidate the 1994 and 2009 waste management decrees. At the same time, an influx in the number of start-ups aiming to mitigate the trash and waste challenge has been recorded (Aggour, 2015). These include companies like Bekia, Go Clean, Up-Fuse and Green Pan. Multiple Non-Governmental and grassroots initiatives have also embarked on waste management and disposal engagements, cleaning trash sites and beaches, successfully raising awareness and supporting local municipalities' waste management.

Apart from these, there have been minimal attempts to behaviourally address incorrect disposal and littering (Torky, 2017). In addition, limited awareness about waste disposal and recycling and the fact that waste disposal sites are not widely dispersed (or visible) across densely populated locations, compounds the MSW challenge in Egypt.

BEHAVIORAL THEORY AND PUBLIC POLICY INTERVENTIONS

Many pilot interventions in countries like Denmark, Canada, the United States, and Australia have outlined the value behaviourally informed interventions may yield in supporting correct waste disposal and management (Afif *et.al*, 2015). Evidence also indicates a strong correlation between waste disposal and individual behaviour (Schultz *et al*, 2011). Developing behaviourally informed interventions therefore is valuable for a country like Egypt. This also corresponds with wider literature that affirms the role behavioural policy interventions play in supporting the realization of sustainable development. Prior to proposing key behavioural interventions for Egypt, the following section will explore key theories informing behavioural public policy interventions, while drawing on global experiences.

Loss Aversion

Loss aversion prescribes that individuals will feel the impact of losses by a greater magnitude than that of gains (Oliver, 2019). This builds on decades of studies, dating back to Adam Smith's exploration of pain and utility (Ashraf et al, 2005). Throughout the years, loss aversion has become a cornerstone of behavioural science (Shafir & Le Beouf, 2002; Camerer, 2000), with studies on its impact and perception applied across industries that include military (Nincic, 1997), trade (Freund *et.al*, 2004), health and insurance (Cardon, 2018) and even sports (Anbarci *et.al*, 2018).

Loss aversion was popularized by Kahneman and Tversky's (1991) dissection of prospect theory. Prospect theory's deviation from rational choice theory, is the principle that individuals weight risks, losses and gains across reference points. This reformulated the understanding and application of reward and penalization, since gains and losses could not be understood definitively (Camerer *et al*, 2000).

Tversky & Kahneman (1991) affirmed this through a study of a group of students who were asked to value coffee mugs. After separating participants, one group was told the mugs were their property while the other group was asked what amount they would pay for it. On average, sellers valued their mugs at $7.00 and buyers at $3.50 (Oliver, 2019), with the mug evaluated as a gain by buyers, and as a loss by sellers (owners), and the mugs themselves being the reference point (Tversky & Kahneman, 1991). This was replicated across different settings confirming loss aversion's impact, which is in line with Tversky and Kahneman's initial observation that the aggravation that arises from loss, is more than the pleasure of a similar gain (1979), influencing behaviour as per the value function below (Figure 4).

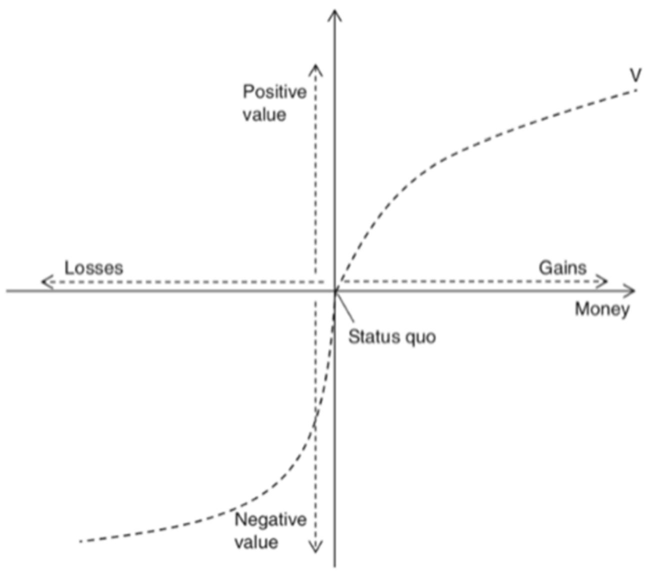

Figure 4: Value function of loss aversion. (Oliver, 2019).

Framing

Framing is concerned with the presentation of an issue in a specific manner to influence individual behaviour (Slovic and Lichtenstein, 1983; Heap *et al*, 1992; Kahneman, 2011; World Bank, 2015.) As wording reflects choices (or at least an understanding of a choice), framing prescribes that changing the presentation of a matter (for instance a policy problem) often affects outcome(s) (Leicester *et.al*, 2012).

Tversky and Kahneman explored this principle in another study. By manipulating positive and negative framing of survival rates - following a hypothetical outbreak of a disease originating in

Asia - the study found that risk preferences towards a medical discourse changed, even though probabilities were technically the same (1989). Again, this was replicated in other contexts, including a famous seminal study carried out by Johnson and Goldstein (2003, 2004) who found that organ donation in the United States doubled on average when the organ donation system was reversed from an opt-in to an opt-out system.

Nudges and Libertarian Paternalism

Nudges have become popular over the course of the last decade. The word "nudge" has become one of the most cited words in behavioural science. Nudges originated through articulations on paternalism and liberty (Hansen, 2016) and were popularized by the publication of the notorious book on health and happiness by Thaler and Sunstein (2008) - with the word framed across its cover.

As per Figure 5, nudges build on behavioural theory that focuses on interventions that respect freedom, while aiming to influence individual choice architecture (Hansen, 2013). Nudges are essentially interventions that are liberty preserving and target automatic decision-making processes. Nudges are informed by behavioural economics and do not use large financial incentives opposite to other interventions. Most importantly, however, is the fact that they influence internalities, not externalities (Thaler & Sunstein, 2008; Oliver, 2019).

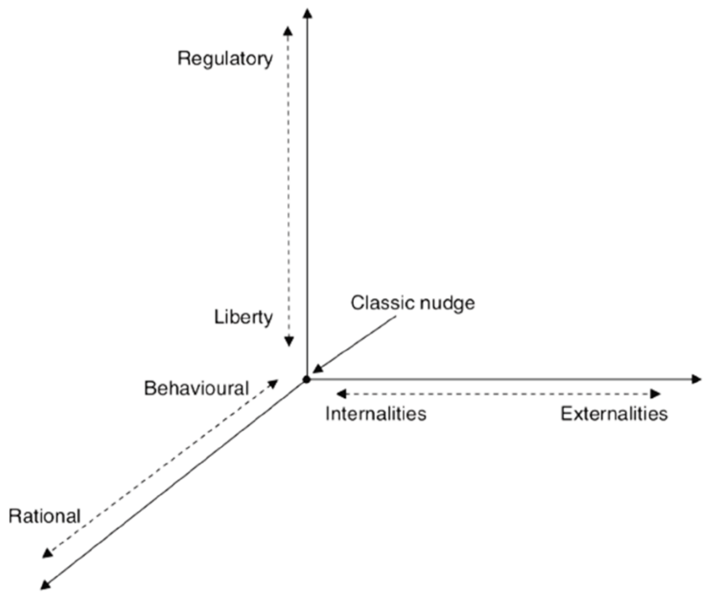

Figure 5. Nudges (Oliver, 2019).

The first nudge to be circulated widely was Schiphol Airport's experimentation with an image of a black housefly affixed onto male urinals. By merely placing an image of a housefly, airport authorities were able to reduce urine spillage by 80% (Vicente, 2006). Following suit, entities all over the world have replicated and adopted nudges globally, with nudges and libertarian paternalism remaining a cornerstone of interventions carried out by various behavioural policy teams (World Bank 2015; OECD 2017; EU, 2016). This for instance (and of direct relevance to the paper) includes nudges applied in Denmark to counter waste and littering. By printing footsteps on the ground that lead to waste bins, research showed a critical reduction in litter and waste across select locations (Hensen, 2011), due to individuals following footpaths and disposing of waste in designated bins. The intervention was simple to execute, behaviourally informed, targeted internalities and was not expensive, therefore affirming how nudging is of great value in influencing behaviour and promoting environmental conservation (Byerly *et.al*, 2018).

Colour-coding

Using colours to enhance and complement behavioural change has been recorded on numerous occasions (Spence *et al*, 2006; Kalyuga *et.al*, 1999, Keller, 2006; Greene, 2001). Colour-coding reinforces learning and supports the creation of visual memory (Mehta & Zhu, 2009; Janzen, 2006), stimulating cognitive visualizations. In a London study for instance, researchers found that individuals are 59% more motivated to dispose and recycle waste if bins and deposit sites are visible, colourful, accessible and easy to reach (CSI, 2015).

INTERVENTIONS

The above section explored key theories informing behavioural public policy interventions. It is worth noting that correct waste disposal requires comprehensive frameworks that account for factors such regulation, financing, partnerships, collaboration and individual behaviour. Behavioural interventions are therefore not a panacea on their own and these other factors must be addressed. However, they are not covered by the scope of this research. Instead, the following section proposes three interventions that focus on tackling individual behaviour to support correct MSW management in Egypt.

Tax Break Scheme

The first intervention proposed is a tax break scheme directly linked to waste disposal and waste depositing. Citizens across Egypt would be automatically enrolled in a system linked to national IDs. In return for individuals weighing and depositing MSW in designated areas across municipalities they would receive annual tax breaks that would be directly correlated to the amount of waste deposited. National databases would record this throughout the year, and it would be automatically accounted for as a tax break and exemption.

Footpaths, Colours and Patterns

The second intervention focuses on enhancing the visibility of waste deposit sites while encouraging individuals to avoid littering. This intervention consists of 3 elements:

1. A set of tracks leading up to bins and garbage cans. This mirrors what has been applied in Copenhagen (Figure 6.)

Figure 6: Waste deposit footpaths in Denmark (Hansen, 2016).

2. Colourful waste bins and eye-catching waste sites. Already, recycling efforts in Egypt have adopted new colour-coded trash bins and disposal sites (Figure 7). This element would further consolidate this progress on a national level, by changing existing, rusty garbage sites. (Figure 8).

Figure 7: Updated reycling and waste deposit sties in Helioplis (Badr, 2017).

Figure 8: Traditional garbage collection site in Egypt (Slackman, 2009).

Awareness raising posters placed across densely populated areas and in the vicinity of disposal sites. The posters should include messaging such as ''littering and trash disposal on the streets damages your heath and the future of your children. Join us in creating a cleaner and more sustainable future." Figure 9 provides an example of a poster with similar messaging in Arabic.

Figure 9: Example of an awareness raising poster in Arabic.

Social media and awareness raising campaigns

The final proposed intervention is the rollout of a national awareness campaign. This would share vital information on trash depositing, adverse effects of littering and the importance of sustainability for a better future. The main objective of the campaign would be to raise awareness and inform the public. Key celebrities including the likes of Mohamed Salah would be engaged to influence behaviour and maximize coverage. Multinational companies with a large footprint in Egypt would also prove to be significant in raising awareness and promoting proactive environmental conservation.

DISCUSSION

The following section discusses each of the abovementioned interventions, respectively.

I. Developing and rolling out a tax break scheme is likely to be of greater benefit compared to traditional "cash for trash" schemes since it would build on loss aversion and framing. Payments made through traditional "cash for trash" schemes are extremely low, standing at less than $1/kg (Noureddine, 2017). Accumulating tax breaks and exemptions throughout the year increases the perception of the overall reward value. Concurrently, because taxation is high in Egypt, averaging 25%, (Baduel *et.al*, 2017), individuals - as per loss aversion - would be more inclined to commit to this scheme as they would use their status quo as a reference point. This is in line with Kahneman and Tversky's findings on reward and choice, affirming that the loss of a larger amount of money in the future (in this instance the tax break) will resonate more and will have a significantly higher impact than a smaller or a similar gain (cash for trash benefits). As the tax scheme would also automatically enrol every citizen, an opt-out consent system would lead to a relative increase in trash deposit commitments, as per framing and in line with the results demonstrated by Johnson and Goldstein.

II. The second intervention builds on nudges and libertarian paternalism. The use of colours, footpaths, and posters does not involve regulatory change or controls and is liberty preserving. The intervention is premised on influencing actions that contribute to a harmful outcome in the long run (littering and incorrect waste disposal) - one that arises from individual behaviour and involves low financial costs and implications. Therefore, as a nudge, this intervention would help promote better waste depositing and disposal, in line with Hensen, and Thaler and Sunstein's findings on choice architecture and the stimulation of positive human behaviour. On the other hand, making disposal sites and bins more visible through colour codes and schemes would build on social learning and visual memory stimulation. This would complement the impact of a nudge, pooling more people towards correct waste disposal by locking behaviour and promoting positive action.

III. Raising awareness through the dissemination of information has been a popular policy instrument for centuries (Weiss & Tschirhart, 1994). Although it could not be causally linked on its own to behaviour change (Rice & Atkin, 2012) but it has proven to be complementary and supportive. Social media and awareness raising campaigns open channels of communication, promoting learning and dialogue. This ultimately accelerates collaboration and action, contributing to the progress of society (Huffman, 2000).

CRITIQUES

The use of financial rewards and penalties has been interlinked with discussions on altruism and behaviour, building on self-determination theory (SDT). As developed by Richard Ryan and Edward Deci (2000), SDT is concerned with motivation and behaviour from the vantage of autonomous and controlled action (Dinsely *et.al*, 2019). There has been a conception that financial rewards and penalties crowd out behaviour as they infer a sense of control negating on altruistic motivation (Frey & Jegen, 2001) in line with SDT. In a study in a nursery, Gneezy and Rustichini (2000) for instance found that late collection of children by parents increased when a penalty scheme was established. Parents even continued to be late after the penalty was removed. Gneezy and Rustichini attributed this to the commodification of late collection, outweighing the moral obligations of parents. Thus, it could be stipulated that tax break schemes as a lost reward (penalty), might commodify individual behaviour such as littering. However, the opt-out structure coupled with automatic enrolment as proposed for the first intervention, decreases the crowding out threat, as it emphasizes meaningful and rational conduct (De Young, 1996; Deci & Ryan, 2000; Vallerand & Reid, 1984). It also does not involve excessive controls (penalties) so it will not be perceived negatively by the public.

Nudges have been critiqued as much as they have been championed. Many have questioned the true validity and impact of nudges (Mols *et.al*, 2015), labelling them as a vague approach to solving wicked problems. They have also been critiqued as they may occasionally backfire or infringe on ethics (Marteau *et al*, 2011; Bronchetti *et al*, 2011; Goodwin, 2012). These critiques are valid. However, it is worth underlining here that nudges - and by extension any other behavioural intervention - on its own will not suffice in solving all the problems as mentioned before. Nonetheless, when behavioural interventions are bundled together and utilized alongside regulatory, coordination and financial interventions, influencing choice architecture proves to be valuable (Thaler & Benartzi, 2004). Thus, using the proposed nudge is likely to complement national waste disposal efforts.

Rolling out the above proposed interventions will not be smooth. There is a need to take into consideration operational mechanisms and overarching implementation. As a solution, there would be a need to pilot the interventions and adapt them accordingly. Slums across Giza and Cairo suffer the most from littering and excessive waste disposal (Bakry, 2015). Areas such as "Sudan Street" and "Ramlet Boulak", which are densely populated. could serve as initial focal zones.

Meanwhile, some may argue that monitoring waste deposits and allocating a tax break on a yearly basis may be challenging. That is true, however, it is also feasible through digitalization. Around 58% of Egyptians are digitally connected and have access to mobile phones and devices (ITU, 2019). There is also a solid national database used to disperse subsidies and state support. Therefore, developing a scan and weight system (through RFID self-checkout machines) and linking it to national databases would not be burdensome.

Further, another critique revolves around the lack of commitment and participation. This is valid and necessitates caution. Awareness levels fluctuate across communities and individuals might not be interested or even aware of their misconduct. Developing an extensive social media and awareness campaign will aid in overcoming this hurdle. Social media platforms also represent accessible channels to disseminate information. They have transformed every aspect of day-to-day life and behaviour (Luo & Smith, 2015). The use of "influencers" secures greater outreach as it harnesses the power of social networks (Newman, 2003). Egypt has a success story that builds on the above; a national campaign launched in 2007 to raise awareness about Female Genital Mutilation (FGM) and its adverse effects contributed towards a 13% reduction in FGM occurrences (UNICEF/UNPFA, 2017).

Lastly, to secure the success of these behavioural interventions, there will be a need to monitor and collect data. The use of digital systems will aid this. Field research is nonetheless critical and valuable. A consortium of different researchers could report regularly on progress. To ensure resilience, there would also be a need to adapt the project to findings and feedback and engage in multi-stakeholder dialogue with various groups to effectuate and maximize value creation.

CONCLUSION

This paper outlined a set of interventions including a tax break scheme, usage of footpaths, colors, and patterns, and roll out of social media and awareness raising campaigns that build on loss aversion, framing and libertarian paternalism. It offers an approach that could complement national sustainable development and environmental conservation efforts in Egypt, as it may aid in raising awareness and adjusting individual behavior when it comes to waste disposal. By no means are these interventions solely a panacea. There are critical organizational and infrastructure deficits that require attention and investment across Egypt. However, using behaviorally informed interventions extrapolates from international experiences and best practices, and will contribute towards the realization of a more agile and resilient waste management framework in the Country.

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THE IMPACT OF EXECUTIVE LEADERSHIP ON THE CYBERSECURITY IMPLEMENTATION IN ORGANIZATIONS

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ABSTRACT: *Technologies are extensively disrupting every industry where organizations are currently having their missions and objectives enhanced by technologies. However, in parallel to these developments, cyber threats are rapidly evolving due to the increasing adoption of technologies and operational inter-connectivity. This have resulted in cyber risks including industrial cyberespionage, malicious cyber-attacks and data thefts which can negatively impact any organization. Nowadays the presence of a cybersecurity corporate program is critical for the success of any organization. Having a cybersecurity program will allow organizations to protect its data as well as to be best prepared for a cyber-attack. Yet, one of the main challenges that organizations face when dealing with cybersecurity risks are the organization's leadership and executives within the organizations who may lack the understanding of the importance of cybersecurity. The purpose of this study is to explore how leadership is strategically important for organizational success in cybersecurity implementation and investigates whether transformational or transactional leadership allows for a more significant impact to an organization's cybersecurity program. Particularly, the study Investigates from employees' perspective, if transformational leadership would be the most effective leadership style for organizations wanting to successfully implement and/or enhance their cybersecurity. In this respect, two online (anonymous) surveys were deployed to collect insights from over 500 employed participants from 20 different industries in different geographic locations (US, UK, India, Germany, and Australia). The surveys' results are discussed in detail in the study. Regardless of the industry and firm size, the study findings are useful to any organization that might be evaluating its leadership versus its cybersecurity posture, plans, and initiatives.*

KEYWORDS: **leadership, strategy, management, cybersecurity, hacking.**

Technologies are continuously transforming almost every industry and enhancing performance and productivity. Yet, cybersecurity issues continue to rise as organizations adopt and integrate more technologies into its operational chain. Vulnerabilities continues to emerge, and the threat landscape keeps widening. Whether its data theft, ransomware, industrial cyberespionage or a simple unintentional insider data leakage, organizations face cyber risks and threats that can be perpetrated and effectively executed by a determined individual sitting on his computer across a different continent. Furthermore, with minimal safeguards, organizations are helping cyber criminals penetrate their network without realizing it. Accordingly, one of the biggest challenges that organizations face when dealing with cyber risks are the organization's senior executives themselves whom may lack the proper knowledge of what cybersecurity is and how it is a critical component to the organizational success. A lack of concern from any organization towards cybersecurity and data protection issues can result in a delayed or an improperly implemented security measures which can increase the organization's vulnerability to cybercrimes leading to a potential damage to the business. Undoubtedly, leadership styles are significantly related to the mitigation of information security threats in any business. In this regards, transactional and transformational leadership styles were shown to have a significant correlation to the level of concern towards information security issues within a business (Bhattacharya, 2011). In this respect, this research investigates how leadership styles is strategically important for organizational success in cybersecurity program implementation. Particularly, we will observe the differences between transformational leadership versus the transactional leadership styles in terms of their impact on organizations cybersecurity from employees' perspective.

CYBERSECURITY AND BUSINESS

Cybersecurity can be defined as the measures taken for protection against threats and crimes involving the internet, especially those involving the unauthorized access to computer systems and data connected to the internet. In other words, cybersecurity is all about data protection in its electronic (digital) form as well as the processes of implementing necessary technologies for the protection of such data (Buchy, 2016). Any damage to electronically stored data can affect any businesses because data is a key asset that gives any business a competitive advantage (Coss, 2016). That is why computer networks will always be a target of cybercriminals. Furthermore, as networks continue to expand, the dangers of data breaches will only increase. Therefore, a pragmatic cybersecurity approach by any organization is crucial and should be a comprehensive as well as a seamless one, regardless to the size of the organization. More importantly such approach should be fully embraced and supported by the organizational leadership.

With the rise of the internet along with increasing connectivity, a tremendous wave of the technology driven transformation have enabled businesses and individuals to coordinate and integrate activities with channels, customers, and suppliers. Firms were able to closely integrate its globally distributed supply chains and realize a higher value chain transformational value. Additionally, businesses are currently undergoing another wave of technology transformation where technology is not only part of given firm's productivity and value chain, but also an integral part of a product or a service itself where many products now are connected and having embedded processors, software and embedded sensors which is transforming the global competition (Porter & Heppelmann, 2014). Despite the latter, cybercriminals are capitalizing on such technological advancements and its adoption by firms and hence, malicious actors are targeting all types of firms across all industries. That said, organizational boards and executive management should realize that cyberattacks are a persistent threat with a potential devastating effect.

In a global CEO survey that included 1,400 CEO worldwide sharing their organization's growth prospects and the technological impact, the results of the survey showed that cyber threats are among the top concerns of these CEOs and are among the top five threats for their organization (PwC, 2017). Additionally, the survey appears to be in line with another study which included 726 small to large organizations in different industries in 79 countries where it was also found that cyber threats of data breach were ranked the second on the list of business fears (Ross, 2017).

As organizations' reliance on technologies increases, the more are the threats from cyberattacks. In this respect, current threats to organizations' cybersecurity are fueled by the organizational utilization of technologies with weak security level, insiders' mobile malwares, third party products, organizations negligence to properly configure the security settings of new big data tools, usage of outdated security software, lack of encryption, and inadequate security measures and data protection in the organization. Moreover, one of the biggest cyber security threats are inside the organization itself or in other words, the insider threat which can be a critical and in the vulnerability of all organizations. Thus, the dangerous part of insider threats is due to the access and malicious activities that are coming from the organization's trusted systems which may not be detected by many security technologies (van Zadelhoff, 2016). In this regard, it was found that 60% of cyberattacks were conducted by insiders. Additionally, three quarters of these attacks involved malicious intent (IBM, 2016). Furthermore, the situation is amplified as firms and businesses increasingly collect more market and consumers data with the aim of improving operations and generation of business leads. These customer data then are also used for the purpose of marketing strategies and customized promotions (Pavlou, 2011) which may then put customers data at risk should the firm fall into being a victim of a cyberattack. Additionally, cyberespionage and online operations for information theft will continue among competing nations to gain economics advantages. Thus, this is expected to cause real negative economic impact on businesses which are the primary victims of such cyberespionage operations (Lee & Rotoloni, 2015).

Though many organizations are currently adopting more effective cybersecurity measure to protect themselves against cyberattacks and malwares, yet it is important to indicate that cybercriminals are expected to continue shifting their attack tactics to successfully infiltrate organizations and steal data.

Understanding the Cyber Risk

As organizations are realizing the necessity of shifting into the digital world and the interconnectedness and performance enhancements it brings, it is crucial to also realize that risks from cyberattacks are increasing as well. On one hand, in addition to global competitors attempting to steal intellectual property from competitive firms or disrupt other businesses to gain a competitive advantage, cybercriminals are also looking for financial gains. On the other hand, many management executives and companies' boards doubt that their firms can be a victim of cyberattacks. Executives and business stakeholders need to understand that cyber risks are constantly emerging. Some of the potential risks scenarios that businesses can face from cyberattacks includes the loss of critical data, interruption of the business processes, theft, reputational damage, regulatory actions including fines and penalties against the business, loss of confidential information, loss of intellectual property, loss of trade secrets, extortion, legal liability of the directors and officers of the organization, adverse media coverage, high costs of the security response by the organization and more importantly, profits might be impacted. In relation to the latter, it was found that firms that suffered a data breach experienced a negative impact on the firm value and stock prices (Spanos & Angelis, 2016; Pirounias et al., 2014; Goel & Shawky, 2009).

Organizations of all sizes and industries should be well prepared for cyberattacks. However, it was found in study involving 400 organizations in France, Germany, Sweden, Netherlands, and the UK that these organizations lack the proper approach of detecting a cybersecurity breach. In addition to that, reliance on outdated security technologies was putting these organizations at a greater risk (Hill, 2016). Such risk should not only be the concern of the IT departments of organizations, but also the organization's leadership which have a lot to be concerned about with regards to the company's reputation, revenue, and status in relation to organizational cybersecurity posture.

Organizational Leadership

One of the most critical factors that contributes to the overall prosperity and welfare of an organization is its leadership which constitutes a major aspect of the overall management (Northouse, 2013). Leadership is a social influence, where leaders initiate, guide and the result of that is a change. Thus, the product of leadership is a new direction that otherwise would have never been present (Manning & Curtis, 2015). In total absence of leadership or the presence of leadership that cannot adapt to challenges and the changes, the performance in an organization cannot be attained. Therefore, there is a direct connection between the leadership style and the organization's success where an effective leadership results in a successful organization (Popa, 2013). Furthermore, an organization's leader determines organizational culture, change tolerance, employees' motivation and most importantly the organizational values. Moreover, the leader shapes the organization's strategy as well as ensuring its effectiveness and execution (Germano, 2010). This includes ensuring that the organization is properly cyber-secured.

Leaders usually have specific qualities which are usually at an exceptional degree compared to anyone. Such specific qualities which influence the leadership process includes vision, integrity, enthusiasm, self-confidence, emotional stability, charisma, ability to execute, and empathy (Manning & Curtis, 2015). All these qualities apply to any leader regardless to the industry type. In context of our study, leaders who want to ensure the cybersecurity of their organizations should possess three other qualities which are: strategic vision, courage to drive culture, and passion for coordination. Firstly, strategic vision involves resources commitment, distinguishing, prioritizing and appreciating the cyber risks confronting the organization. Secondly, having the courage to drive culture - especially the culture of security – which involves setting up and clearly explaining the cyber risks versus the business demand for the employees to appreciate the risks which then leads to the employees' compliance with organization's leader strategic vision. Finally, the quality of having a passion for coordination is very important for cybersecurity-oriented leaders, since achieving security of organizations requires true leaders who can bring together multiple departments and consolidating all capabilities into one strategy (Chabinsky, 2013).

Transactional Leadership

In the literature of leadership, two main leadership styles exist. Transactional and transformational. A transactional leadership – sometimes referred to as managerial leadership – is a type of leadership style where the leader ensures the compliance of the employees via providing appropriate rewards or punishment. Thus, they rely more on extrinsic motivators. This type of leaders mainly focusses on supervising, organizing, performance and finding faults or deviations in the employees' work. Hence, transactional leaders are looking to keep the business flow the way it is, rather than looking to change the future of the organization (Odumeru & Ogbonna, 2013). The characteristics of transactional leaders can include active or passive management model, where in an active form, the leader monitors, and searches for employees' deviation from the organization's rules and policies then takes correct action. In contrast, the passive form of the transactional leader only interferes if the standards are not met. Additionally, an important trait of transactional leaders may include being "Laissez-Faire" where the leader may avoid responsibilities or making decisions (Robbins & Judge, 2015). In relation to the latter, it is argued that transactional leaders are mainly passive (Gujral, 2013).

Advantages of transactional leaders includes achieving short-term goals and providing a clear structure for organizations that require repetition of tasks. Furthermore, rewards and punishments are well defined for the organization's employees. In contrast, disadvantages of this leadership style are that rewards to the employees are on extrinsic level only. Thus, the creativity and innovation are limited under a transactional leadership. This can be seen also in a study where it was found that there is a negative relation between transactional leadership and innovativeness, especially when the employees are highly emotional (Liu *et al*, 2011). Although transactional leaders are hard workers, tolerant, efficient at managerial functions and clarify well the roles and duties required from employees, however, leading strategic changes requires a different leadership approach (Daft & Benson, 2016). This can be related to the fact that transactional leaders are more occupied and concerned with the current organization's process rather than thinking forwardly (Gujral, 2013). As technological advancements along cyberthreats are constantly evolving, we argue for the importance of transformational leadership rather than a transactional leadership if an organization is to succeed in the era of digital disruption.

Transformational Leadership

Transformational leadership typically includes individuals who uses charm, intelligence, optimism, and other personal characteristics to raise ambitions and transform organizations into new and higher level of performance (Manning & Curtis, 2015). Such leadership can have an extraordinary impact on their employees since transformational leaders inspire their subordinates to surpass their self-interest for the benefit of the organization they are associated with (Robbins & Judge, 2015). Transformational leaders are usually charismatic leaders and have a special ability to enhance creativity and change via recognizing their subordinates' concerns. Moreover, transformational leaders empower their employees and inspire them to believe in their potential and how they can personally impact the organization positively (Daft & Benson, 2016).

The effect of transformational leadership on an organization can be significant with regards to impacting the employees and followers' performance and development. In this regard, a study was conducted to examine such impact and the results suggested that transformational leadership does have a positive effect on the performance as well as the development of individuals (Dvir *et al*, 2002). Accordingly, transformational leadership can be linked with group performance and team building effectiveness due to the leader's skills in in communication, conflict management and cohesion. Furthermore, under this style of leadership, a creativity atmosphere at the organization is provided as well as the opportunity to apply individual's skills in a way that serves the organization as well as the needs of the employees. Furthermore, transformational leaders foster a culture of encouragement and development of common interests between the employees and the organization (Shelton, 2012).

Studies showed that managers in different situations including businesses and military, have found that in comparison to their transactional counterpart; transformational leaders were evaluated as more effective and higher performers (Rubin et al., 2005; Judge & Bono, 2000). Furthermore, some empirical evidence suggested that transformational leadership is strongly related to higher levels of employees' productivity, creativity, work results, satisfaction, and individuals' wellbeing (Odumeru & Ogbonna, 2013). Moreover, under a transformational leadership subordinates are encouraged to be creative which results in more effective organization performance overall (Bosewell & Buchanan, 2007).

Leadership and Cybersecurity

Currently many businesses are revisiting their operational model and adopting a digital business strategy that is encompassing many of its functional and supportive departments in such strategy (Puthiyamadam, 2017). Overall, digital innovation is disrupting businesses and industries worldwide. That said, leadership of organizations needs to prioritize their deployment of using the appropriate technology for their business as well as enhancing the organization's agility and empowering employees' for detecting the needed changes. As digitalization is changing the competitive environment for businesses globally, organization's leadership needs to view the digital opportunities clearly and broadly versus the digital threats (Baculard, 2017). In this regard, cybersecurity may have not been giving the proper attention by organizations' boards and leaders. However, with prevailing high-profile breaches and cyberattacks, businesses need to be always prepared in advance. Organizational leadership should understand and appreciate cyber risks versus the urgent requirement of having a comprehensive cybersecurity program to best manage such cyber risks which can greatly impact all facets of the organization including its supply chain and customers' experiences.

In this respect, implementing a comprehensive cybersecurity program is critically important and essentially needs a radical change to the business operations. That is why the leadership of any organization should be fully engaged in the cybersecurity-business integration and addresses the security of the business operations regularly. With regards to security, the business leader's actions, and behavior influences the rest of the organization. This can be due to the "lead by example" theory where any given organization's employees will give time attention to the organization's security when they find that their leadership giving time and attention to the matter as well. When it comes to an organizational integration and utilization of cybersecurity to mitigate cyber risks, organizations will be more competent only in this only if its leadership treat this matter as a critical issue for the business (Allen, 2009). As the world is progressing towards digitalization, a true leadership should not leave the security of their companies and individuals to chances. An organization's leadership needs to adopt, even if at high costs, the appropriate security measures into their organizations' key infrastructures to ensure optimum security level. Whether in a governmental or a private sector, leaders should always take a proactive approach when taking steps to adapt and adjust to where the environment of cyber has already evolved (Hathaway, 2012).

Having an engaged organizational leadership that ensures that the organization is best protected against cyberthreats is undoubtedly necessary. However, the leadership style can have great influence on the actual execution of properly cyber-securing the organization. In this respect, it was found that a significant relation exists between transactional as well as the transformational leadership styles towards the level of concern of information security issues (Bhattacharya, 2011). Yet, we argue that a transformational leadership style would be best suited for organizations opting to enhance their cybersecurity posture and allows for a more impactful organizational implementation of cybersecurity programs.

With the increasing use of information technologies, digital reliance and digital transformations, organizations are becoming more digitally interconnected (Manyika *et al*, 2016). Thus, cybersecurity has become an ever changing, highly critical and an emerging challenge for organizations. Therefore, in this research, we investigate if transformational leadership would be the most effective leadership for organizations looking to successfully implement and/or enhance their cybersecurity program. We will try to link this to the fact that transformational leaders are defined as ones who work with their subordinates to identify a needed change in an organization, as well as creating the vision to guide through this change and executing the change in tandem with committed members of the organization. In this context, the “change” we are addressing is essentially the one consisting of enhancing the cybersecurity posture of organizations versus the negative business impact if no cybersecurity is in place.

METHDOLOGY

To collect the maximum insights, two online based surveys were designed and deployed. A total of 500 anonymous and completed responses (employed participants) were collected from various western and eastern geographic locations. Both surveys contained the same questions (13 close ended and 3 open ended questions).

Survey 1 demographics

Survey 1 included 350 participants who are all postgraduates and employed. 61.71% were males and 38.29% were females. Table 1 to 3 shows the rest of the participants demographics.

Table 1. Age range of the participants.

Age range	Percentage (%) of participants
18-24	0.86%
25-34	52%
35-44	36.57%
45-54	7.43%
>54	3.14%

Table 2. Income levels of the participants.

Income level	Income level in values (USD)	Percentage (%) of participants
High I	100,000 to 124,999	10.37%
High II	125,000 to 149,999	21.90%
High III	150,000 or more	40.63%
Middle I	50,000 to 74,999	12.68%
Middle II	75,000 to 99,999	14.41%

Table 3. Locations of the participants.

Country	Number of Participants	Percentage (%) of participants
India	275	79.25%
USA	61	17.58%
UK	7	2.02%
Germany	2	0.58%
Australia	2	0.58%

In Survey 1, participants were from diverse industrial backgrounds where 17.58 percent were from the educational industry, 15.58% from data and information services industry, 9.80% from healthcare and social assistance, 7.78% from the software industry, 7.49% from finance and insurance industry, 6.34% from manufacturing, 5.8% from government and public services, 3.5% from telecommunications, 2.3% from retailing industry, 2.3% from scientific and technical services. Remaining participants were from other industries including utilities, broadcasting. real estate, legal services, transportation and warehousing, hotel and food services, mining, construction, agriculture, forestry, fishing or hunting and wholesale.

Survey 2 Demographics

Survey 2 included 150 participants who are all postgraduates and employed. 36.67% were males and 63.33% were females. Table 4 to 6 shows the rest of the participants' demographics.

Table 1. Age range of the participants.

Age range	Percentage (%) of participants
25-34	42%
35-44	32.67%
45-54	16%
>54	9.33%

Table 2. Income levels of the participants.

Income level	Income level in values (USD)	Percentage (%) of participants
High I	100,000 to 124,999	26.67%
High II	125,000 to 149,999	10.67%
High III	150,000 or more	12%
Middle I	50,000 to 74,999	29.33%
Middle II	75,000 to 99,999	21.33%

Table 3. Locations of the participants.

Country	Number of Participants	Percentage (%) of participants
USA	126	84%
UK	24	16%

In Survey 2, participants as well were from diverse industrial backgrounds where 32.67% were from the educational industry, 16% from healthcare and social assistance, 6.67% from data and information services industry, 6% from government and public services, 4% from finance and insurance industry and 2.67% from the construction industry, 2.67% from the legal services industry and 2% from the manufacturing industry. Remaining participants were from different industries including the software industry, telecommunications, retailing industry, scientific and technical services, utilities industry, broadcasting. real estate, transportation and warehousing, hotel and food services, mining, agriculture, forestry, fishing or hunting and wholesale.

In both surveys, participants were provided with a screening question, to ensure that participants have a minimum reasonable knowledge of cybersecurity and business leadership. Participants who did not pass the screening question were automatically excluded from the survey.

RESULTS

In this section, we present the results obtained from survey 1 and 2 which included a total of 500 employed participants with a diverse industries background. Survey 1 had 350 respondents from India, USA, UK, Germany, and Australia, while survey 2 had 150 respondents from the US and the UK. Both surveys had the same 13 closed ended questions which are presented in figures 1 to 22 below as well as the same 3 open ended questions. In survey 1 where its results are shown in figure 1, approximately 176 out of the 350 (50.29%) respondents hear from time to time how businesses are affected by cyberattacks and breaches incidents. While 18.57% of the respondents see that nowadays, cybersecurity a growing concern for any business. 31.14% of the respondents see that businesses should have cybersecurity as their top priority and on top of their agendas. In survey 2, 25.33% of the respondents hear from time to time on how businesses are affected by cyberattacks and breaches incidents. 42% of the respondents see cybersecurity as a growing concern for any business nowadays and 32.67% respondents view that cybersecurity should be on the top priority and agenda of businesses.

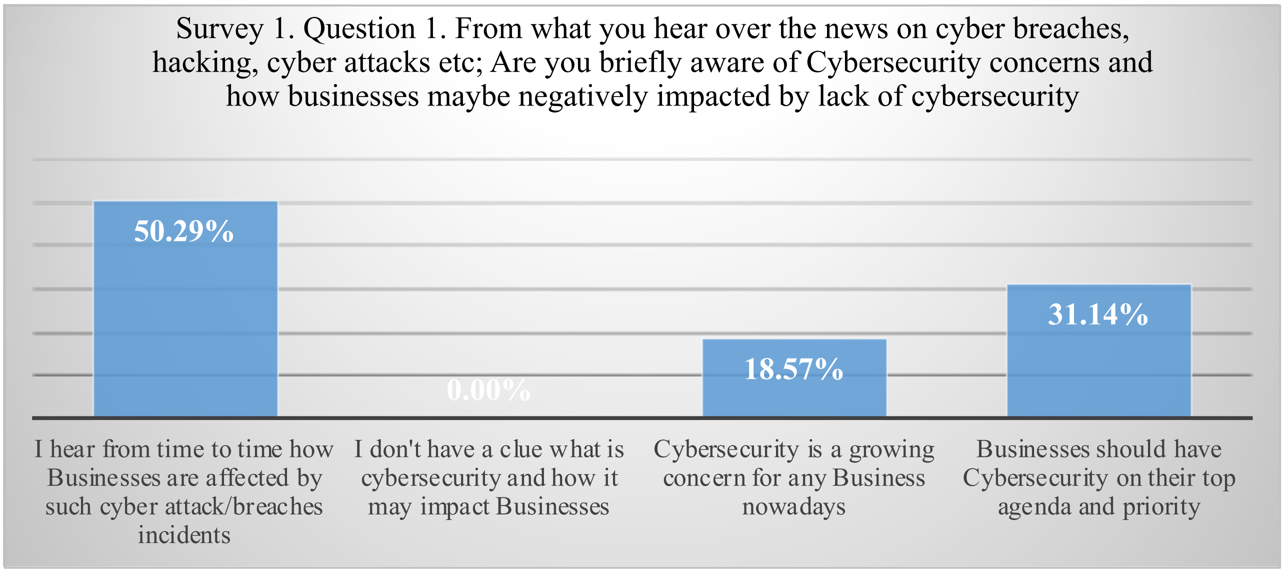


Figure 1. Survey 1. Question 1. Respondents' awareness of cybersecurity and businesses.

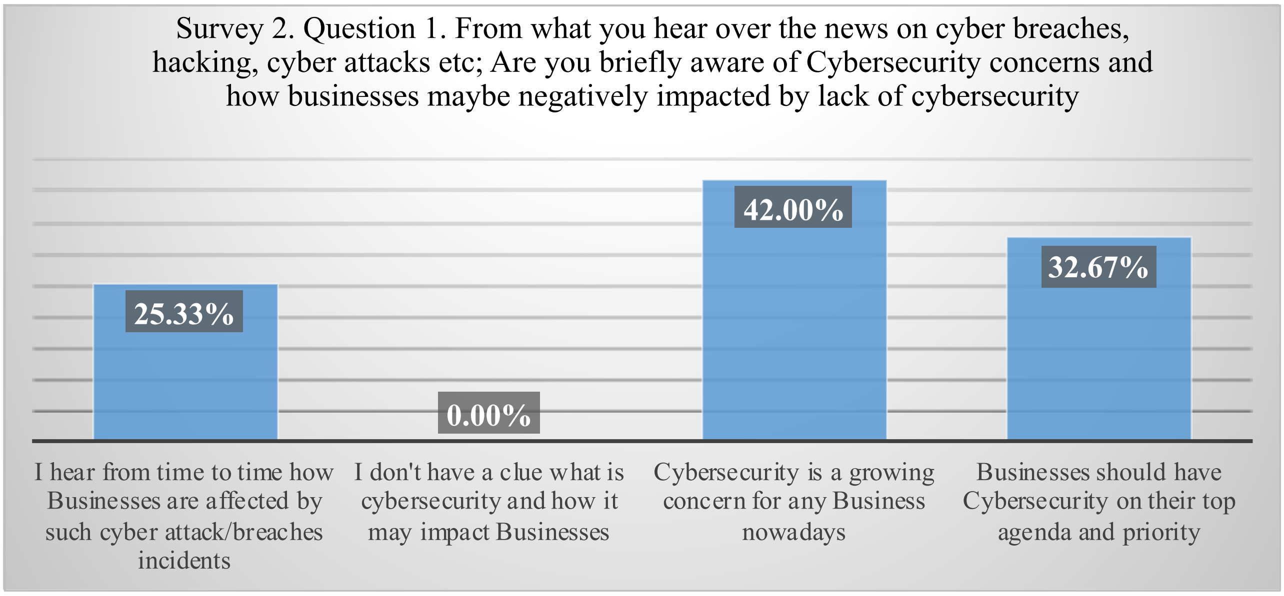


Figure 2. Survey 2. Question 1. Respondents' awareness of cybersecurity and businesses.

Figure 3. shows the results obtained from both surveys regarding whether should cybersecurity be on the top priority of a company and business leaders. In survey 1, approximately 84% of the survey respondents, have chosen "Strongly Agree" that cybersecurity should be on the top priority of a company and business leaders. In survey 2, 76% of the survey respondents "Strongly Agree" regarding the same matter, while 11% have chosen "Slightly Agree" and 11% "Agree", compared 9% and 7% in survey 1, respectively.

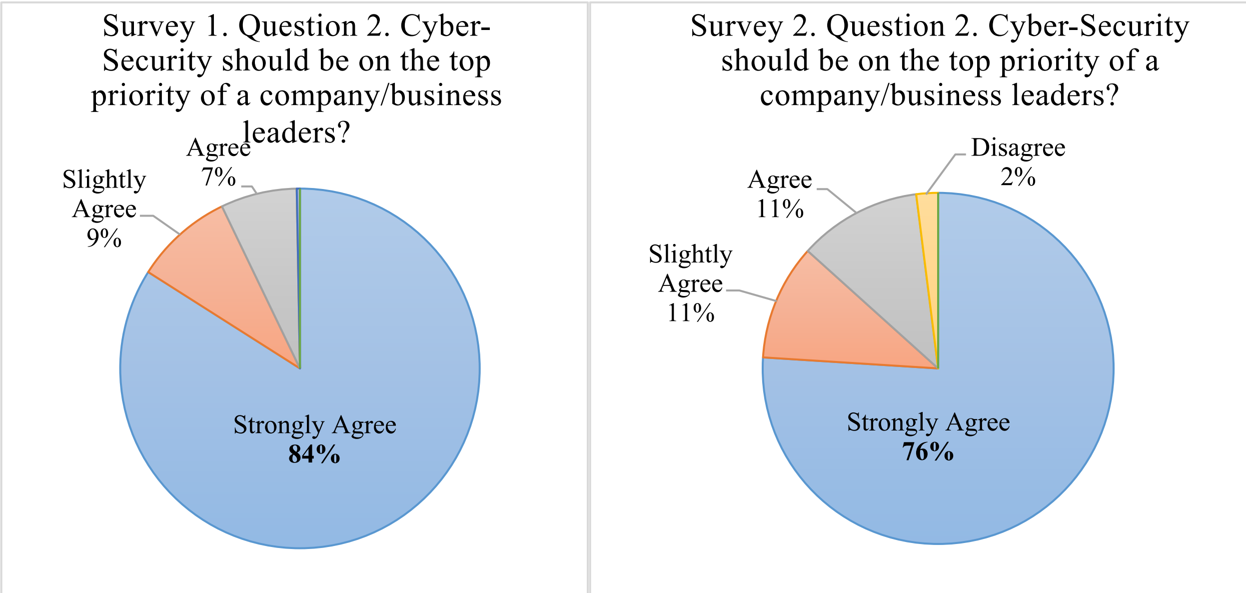


Figure 3. Survey 1 and 2. Question 2. Cybersecurity priority to business leaders.

Figure 4 indicates the results obtained from survey 1 participants who were asked whether they agree that leadership styles of company leaders can impact negatively or positively the cybersecurity and information security measure a company implements to protect itself. 66.29% of the respondents have chosen "Strongly Agree" that leadership styles of companies' leaders can impact the cybersecurity measures a company implements. 18.86% of the respondents have chosen "Slightly Agree". While 14% of the respondents have chosen "Agree".

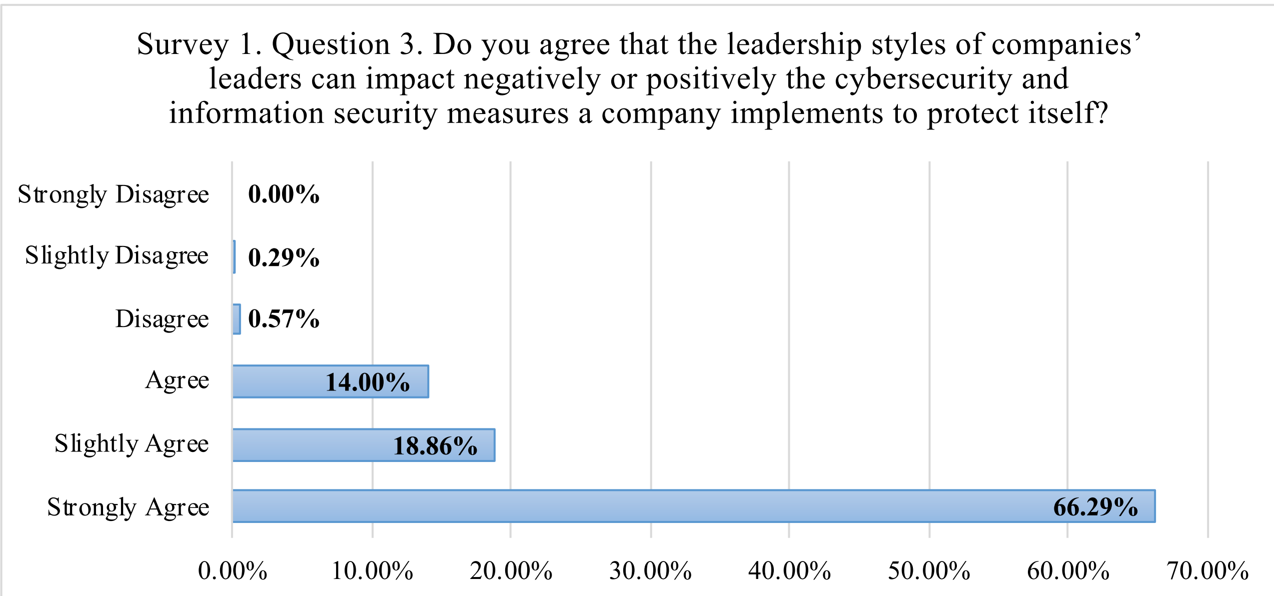


Figure 4. Survey 1. Question 3 results. Leadership style impact on a company's cybersecurity.

In relation to figures 4 and 5, addressed the same question to survey 2 respondents from US and the UK. 55.33% of the respondents have chosen "*Strongly Agree*", while 20.67% "*Slightly Agree*" and 20% have chosen "*Agree*" that leadership styles of companies' leaders can have impact on the cybersecurity measures implemented by the company.

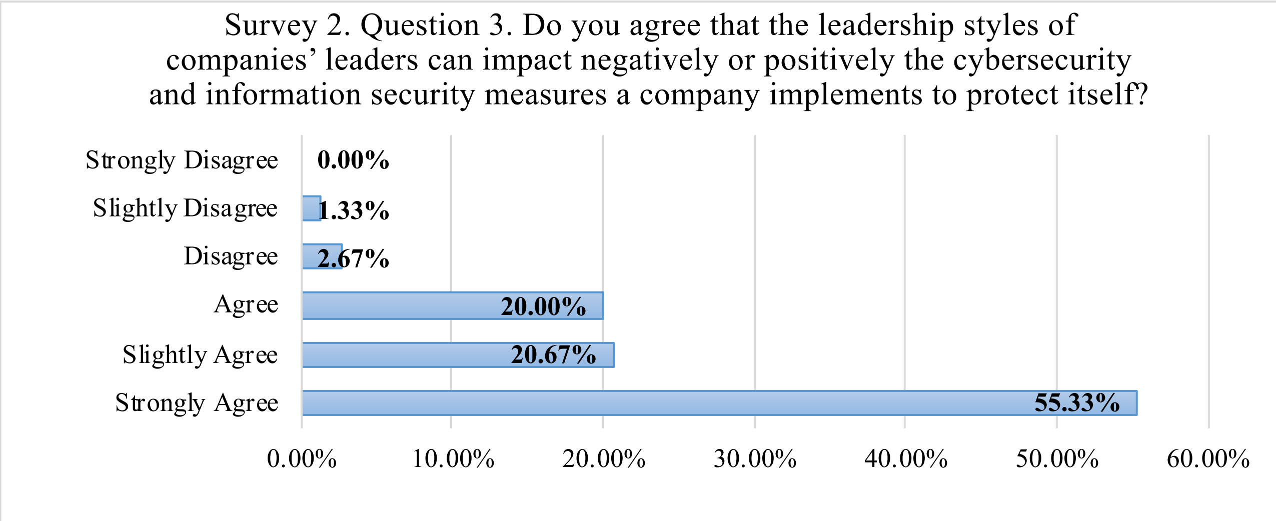


Figure 5. Survey 1. Question 3. Leadership style impact on a company's cybersecurity.

Figure 6 shows that 55.14% of survey 1 respondents had their companies fall into being a victim for cyberattacks and cyber threats of various forms. 8% were not sure if their companies were victims of cyberattacks or not. Figure 7 shows that in survey 2, 42.67% of the respondents had their companies fall into being a victim for cyberattacks and threats of different forms while 16% were not sure.

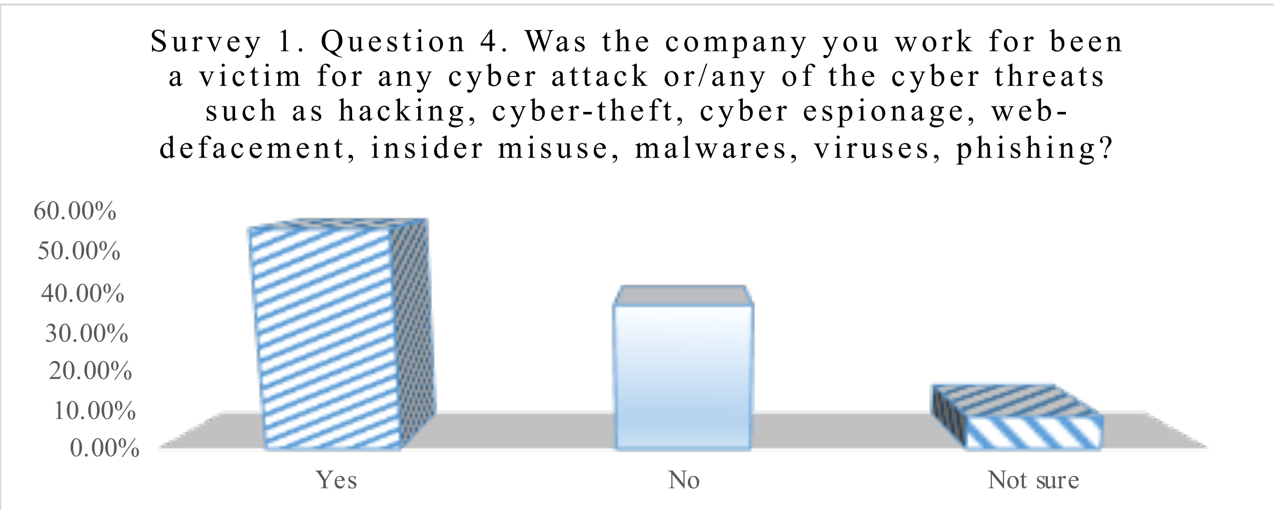


Figure 6. Survey 1. Question 4. Number of victims of cyberattack/threats.

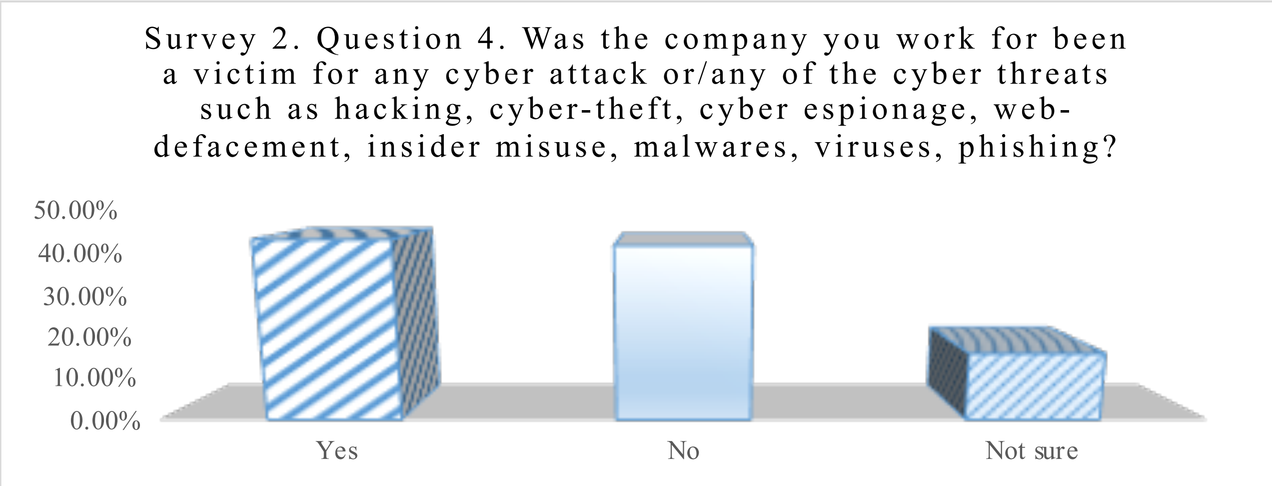


Figure 7. Survey 2. Question 4. Number of victims of cyberattack/threats.

Figures 8 and 9 addressed a question to both surveys participants to understand whether their companies have cybersecurity measures in place to ensure the companies operation and information safety. In survey 1, 89% stated that they have cybersecurity and information security measures in place, while 6% did not have any measures, and 5% were not sure. In survey 2, 80% had cybersecurity measures in place, while 5% did not have any measures and 15% were not sure if they had any cybersecurity measures in place.

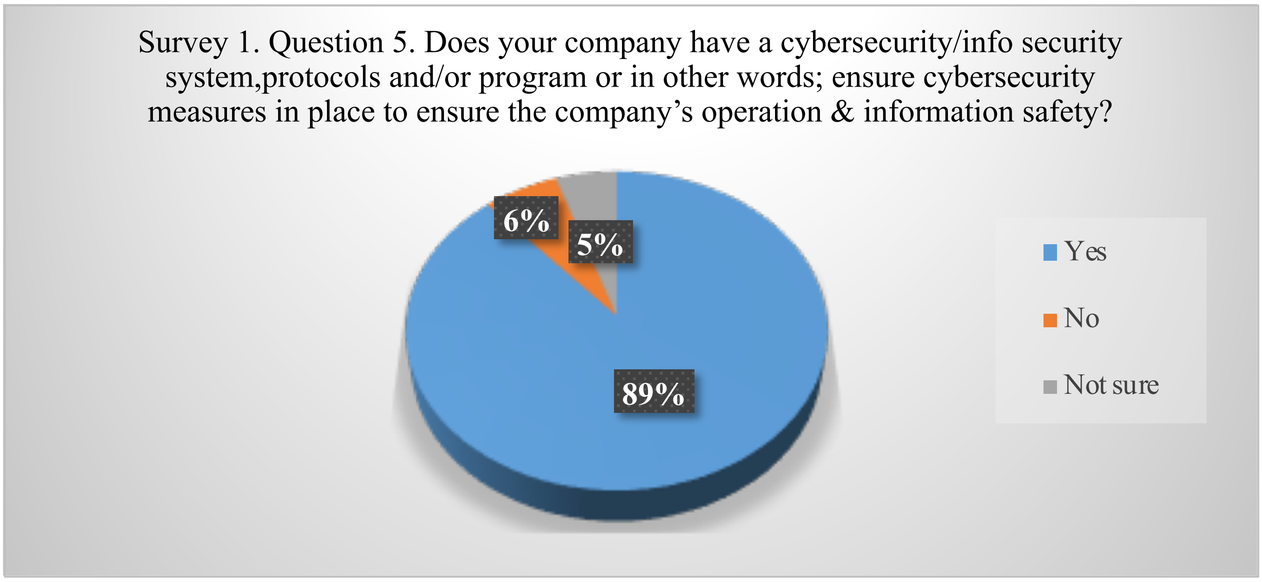


Figure 8. Survey 1. Question 5. Firms with cybersecurity measures in place or not.

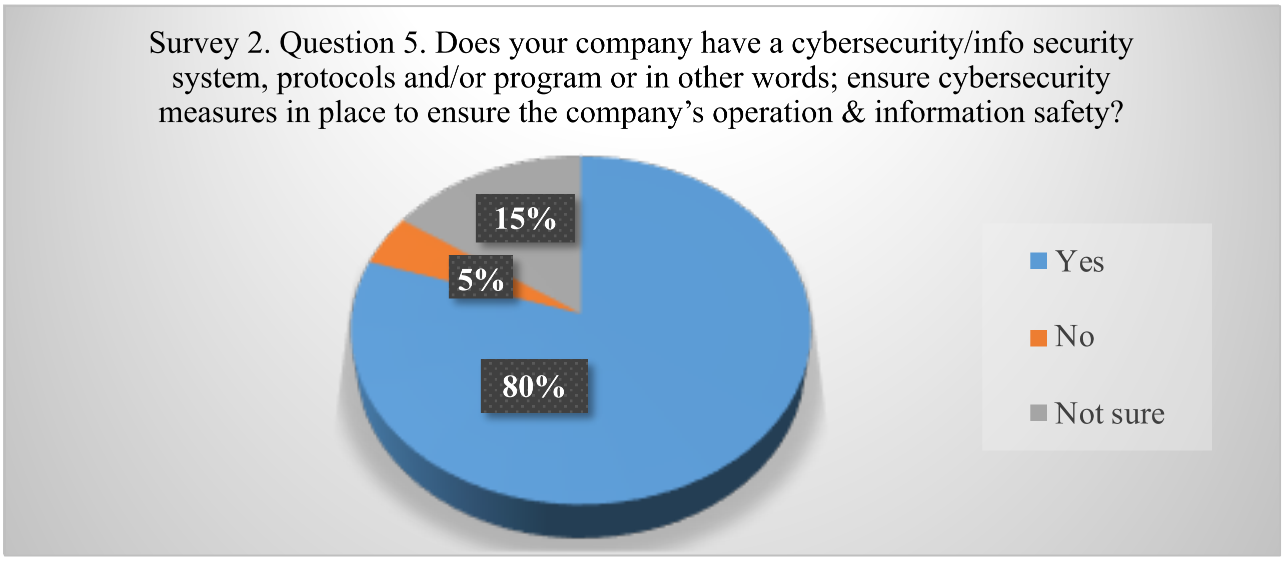


Figure 9. Survey 2. Question 5. Firms with cybersecurity measures in place or not.

Figures 10 and 11, shows the results for both surveys when the respondents were asked to classify their company/business leaders as a transactional or a transformational leader. In survey 1, 59.7% of the respondents classified their current leader as a transformational leader while 40.3% have classified their current leader as a transactional one. In survey 2, the results were very similar, where 60% of the respondents of survey 2 had classified their current business leaders as a transformational leader, while approximately 40% had classified their current leader as a transactional leader.

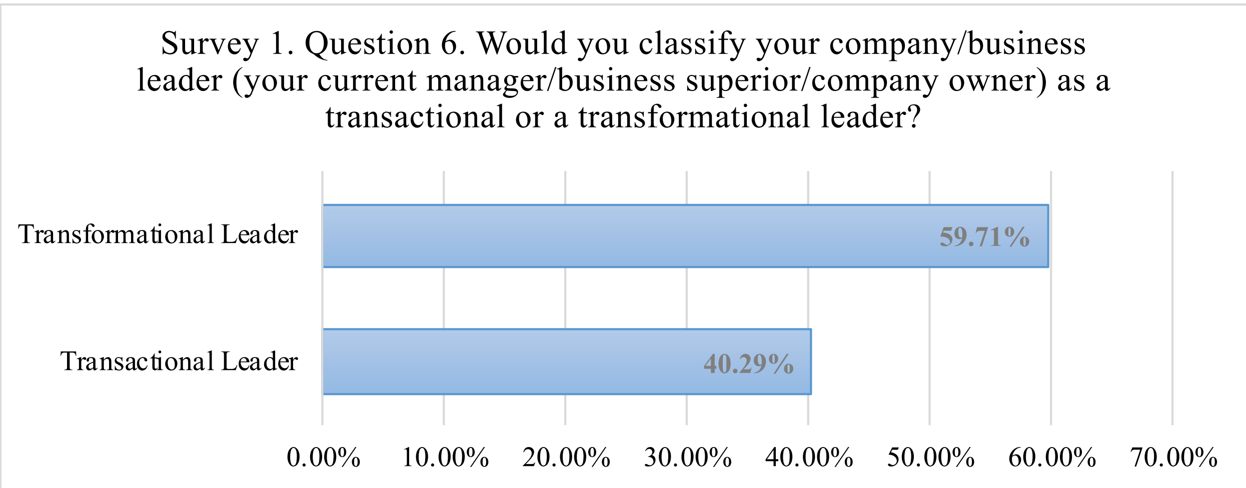


Figure 10. Survey 1. Question 6. Respondents' leadership classification.

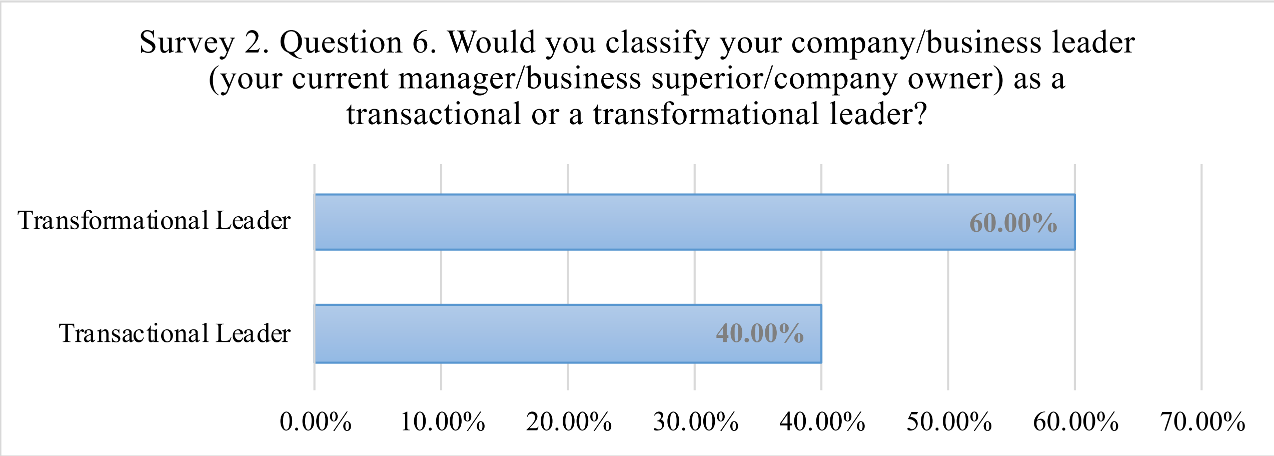
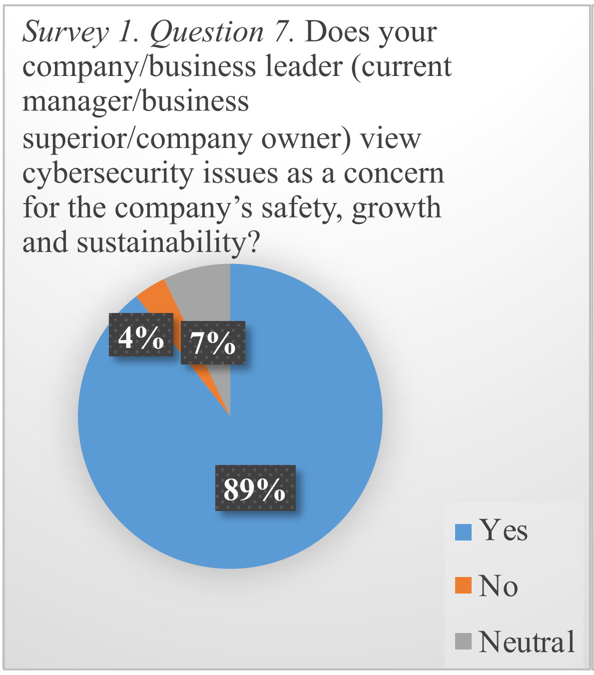


Figure 11. Survey 2. Question 6. Respondents' leadership classification.

Figure 12 shows that 89% of survey 1 respondents sees that their current company leader views cybersecurity issues as a concern for the company's safety, growth, and sustainability. While 4% sees their current business leader not viewing cybersecurity as a concern and 7% were neutral about the cybersecurity concern. In survey 2 represented on the right-hand side of the figure, 72% of the respondents sees that their current business leader views cybersecurity as a concern for the company's safety, growth, and sustainability. 7% viewed their business leader as not having cybersecurity as a concern, while 21% sees their current company's leaders neutral about the cybersecurity concern matter with regards to their companies' growth, safety, and sustainability.



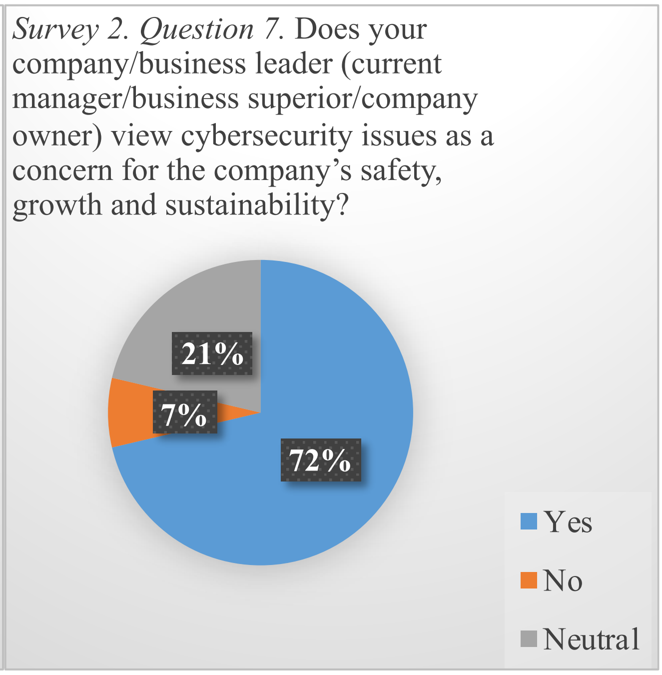


Figure 12. Survey 1 and 2. Question 7. Leadership view on cybersecurity issues and concerns.

Figures 13 and 14 explores the extent of agreement of both survey respondents when asked if the success of cybersecurity and information security measures implemented by a company depends greatly on the leadership influence and support of that company. In survey 1, 68% of the respondents strongly agreed that the success of cybersecurity measures by a company depends on the leadership influence and support while, 18% slightly agreed and 11% agreed. In survey 2, most of the responses were on the agreement side, where 46.6% strongly agreed, 32% slightly agreed, and 18.6% agreed regarding the point that success of the security measures by the company depends greatly on the leadership influence and support.

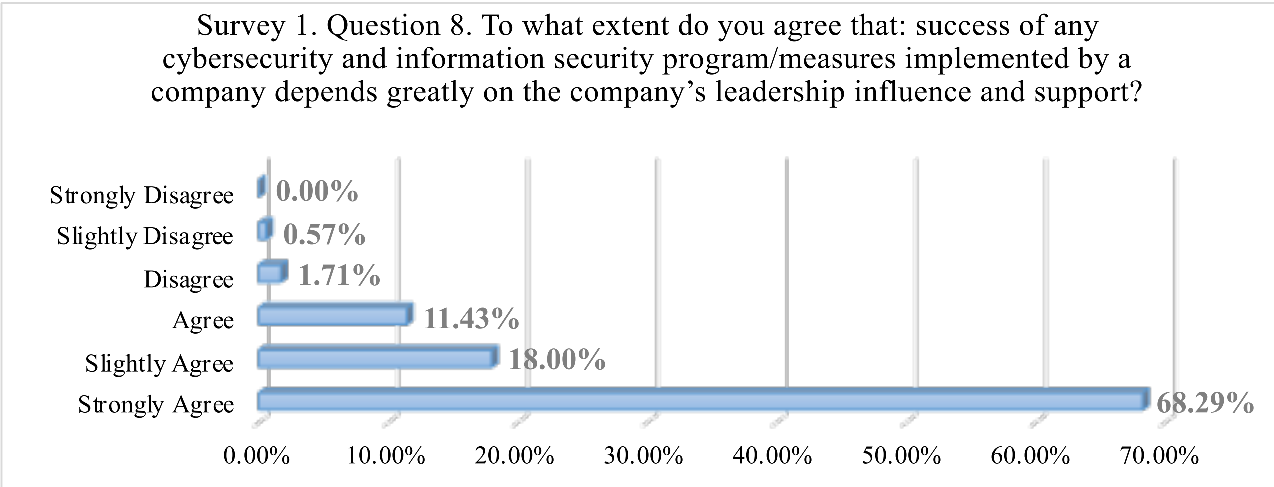


Figure 13. Survey 1. Question 8. Cybersecurity dependence on Leadership influence and support

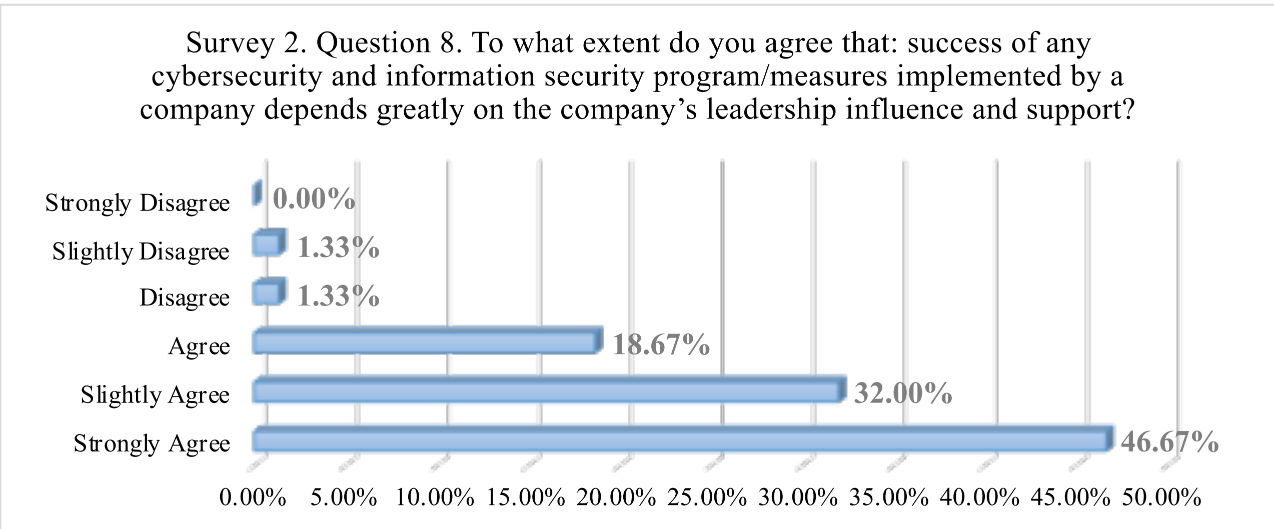


Figure 14. Survey 2. Question 8. Cybersecurity dependence on Leadership influence and support

In reflection to above mentioned figures 13 and 14, respondents of both surveys where asked whether they agree that their company/business leader should take the lead and initiatives to ensure that the company is well protected against cyber threats and attacks. Results of both surveys in this regard is presented in below figures 18 and 19, where in figure 15 representing survey 1, shows that almost 97% of survey 1 participants agree that the company's leader should take the lead when it comes to ensuring that the company is well protected against cyber-attacks. Figure 16 shows the results for survey 2 where 87% of respondents agreed that the company's/ business leader should take the lead to ensure that the company is best protected against cyber threats and attacks.

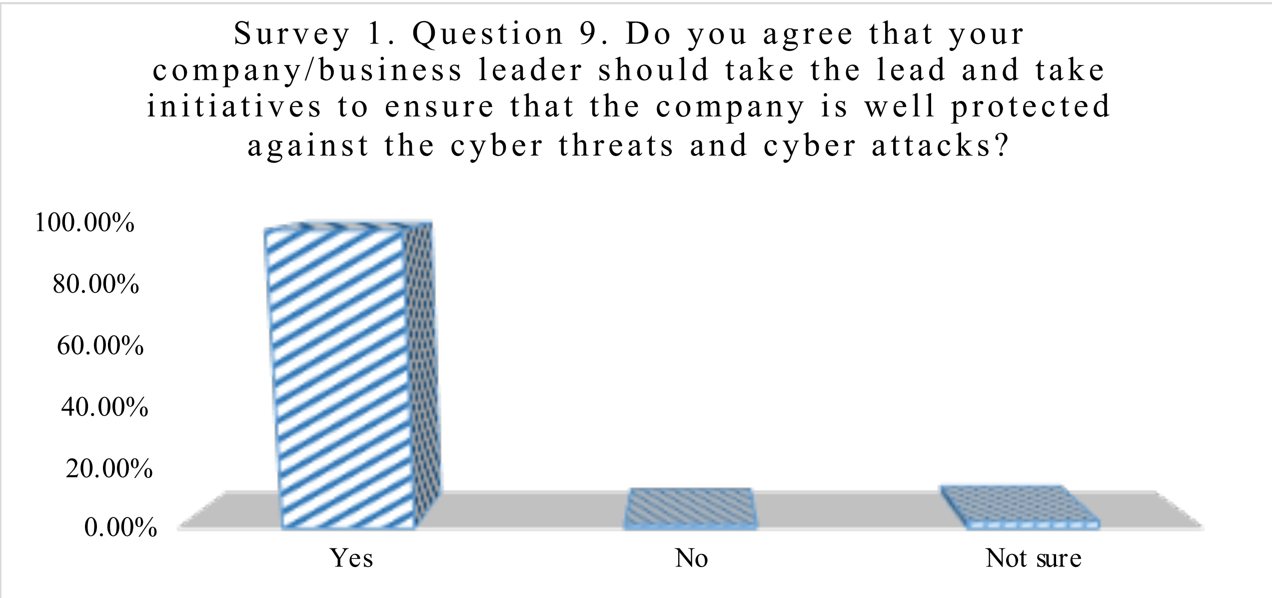


Figure 15. Survey 1. Question 9. Should the business leader take the lead?

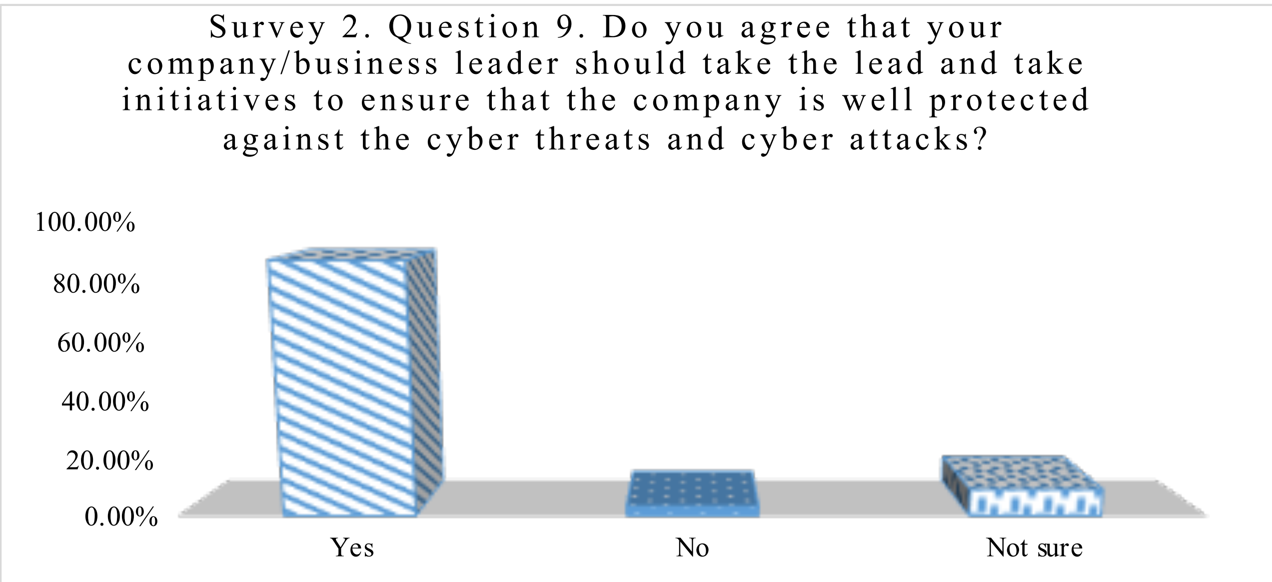


Figure 16. Survey 2. Question 9. Should the business leader take the lead?

Figures 17 and 18 presents the results obtained from the respondents whom where asked which style of leadership they prefer to have their current business leader to adopt when facing emerging cybersecurity issues that may face the company/business. In survey 1, 78% of the 350 respondent prefers transformational leadership while in survey 2, 77.3% of the 150 respondents prefers also transformational leadership style for their current leader to adopt when facing emerging cybersecurity issues to their company and business.

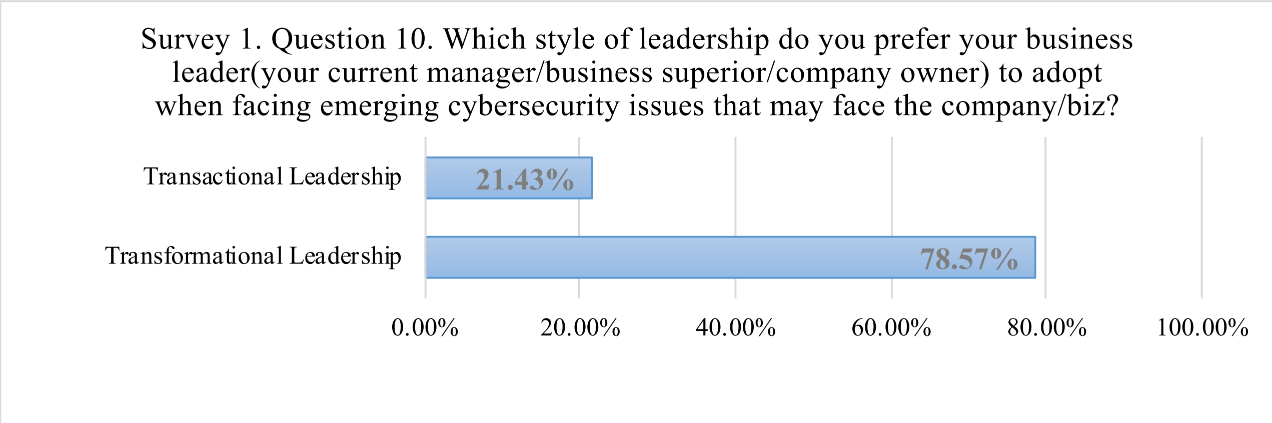


Figure 17. Survey 1. Question 10. Leadership style preference.

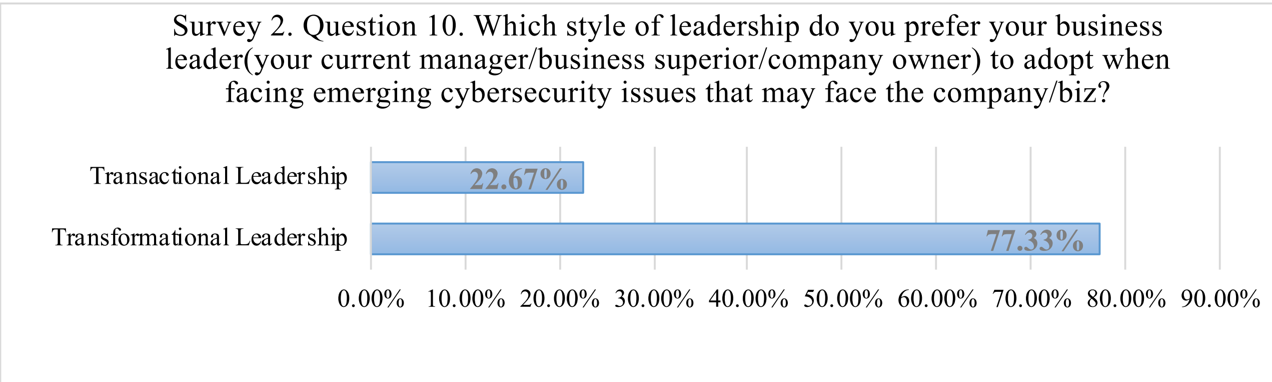


Figure 18. Survey 2. Question 10. Leadership style preference.

Respondents from both surveys were then asked if they agree that having transformational leadership is strategically important for the company and organizational success in cybersecurity program implementation. Figures 19 and 20 below shows the results for both survey 1 and 2.

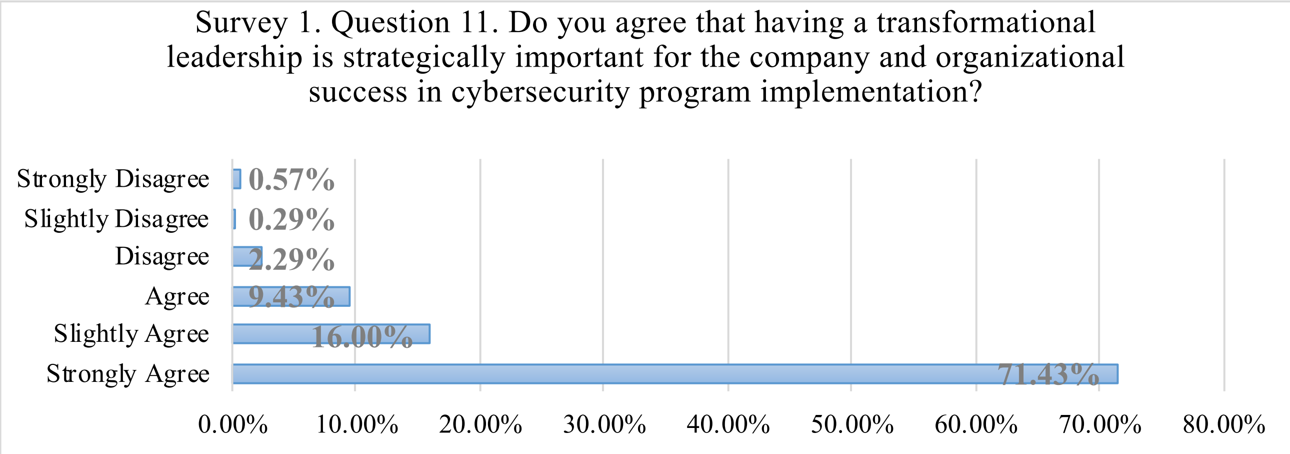


Figure 19. Survey 1. Question 11. Transformational leadership and its strategic importance cybersecurity

Figure 19 above shows that 71.4% of survey 1 participants strongly agree that having transformational leadership is strategically important for the company and organizational success in cybersecurity program implementation. 16% slightly agreed and 9.4% agreed. While Figure 20 below, shows that 58% of survey 2 respondents strongly agree that having transformational leadership is strategically important for the company and organizational success in cybersecurity program implementation. 20.6% slightly agree and 17.3% agree.

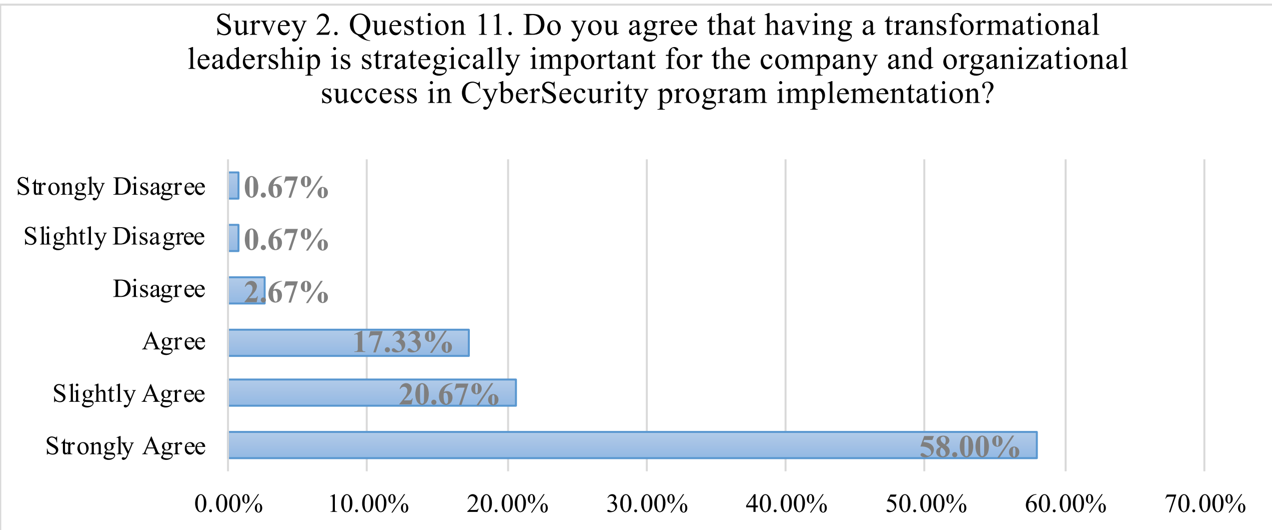


Figure 20. Survey 2. Question 11. Is transformational leadership strategically important for organizations cybersecurity?

Respondents were then asked which leadership style they would adopt themselves if given the chance to lead the company they are working for now and enhance the cybersecurity posture of their company. In figure 21, 71.4% of survey 1 respondents would choose to adopt a transformational leadership style, while 28.6% would choose transactional leadership style. In figure 22, results of survey 2 were rather similar to survey 1, where 76.6% of survey 2 respondents have chosen to adopt a transformational leadership style if they were to lead and enhance the cybersecurity posture of the company they work for. 23% have chosen to adopt a transactional leadership style.

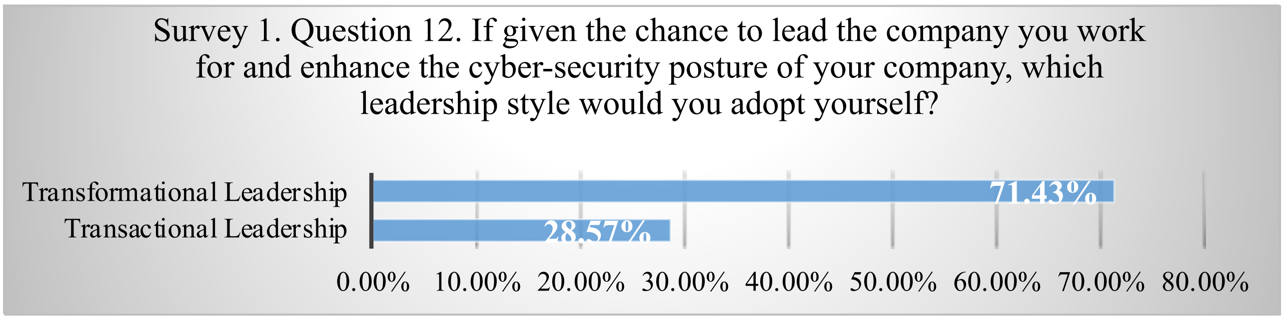


Figure 21. Survey 1. Question 13. Respondents' choices of leadership style

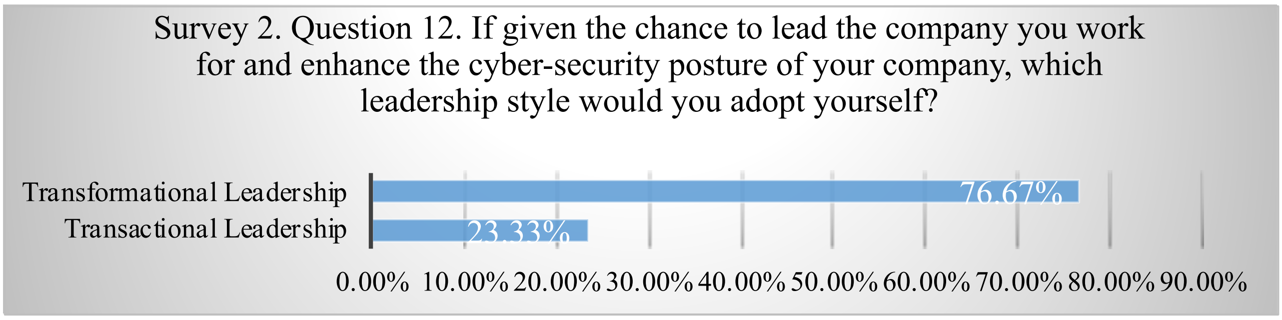


Figure 22. Survey 2. Question 13. Respondents' choices of leadership style

Results Analysis - Open Ended Questions

Respondents of both surveys were then asked to provide short answers for 3 open ended questions. The aim of such questions was to explore trends and maximum insights from the respondents regarding why and why not transformational or transactional leadership would be a best fit for an organization opting for a cybersecurity program. In both surveys several key insights were obtained from most answers provided.

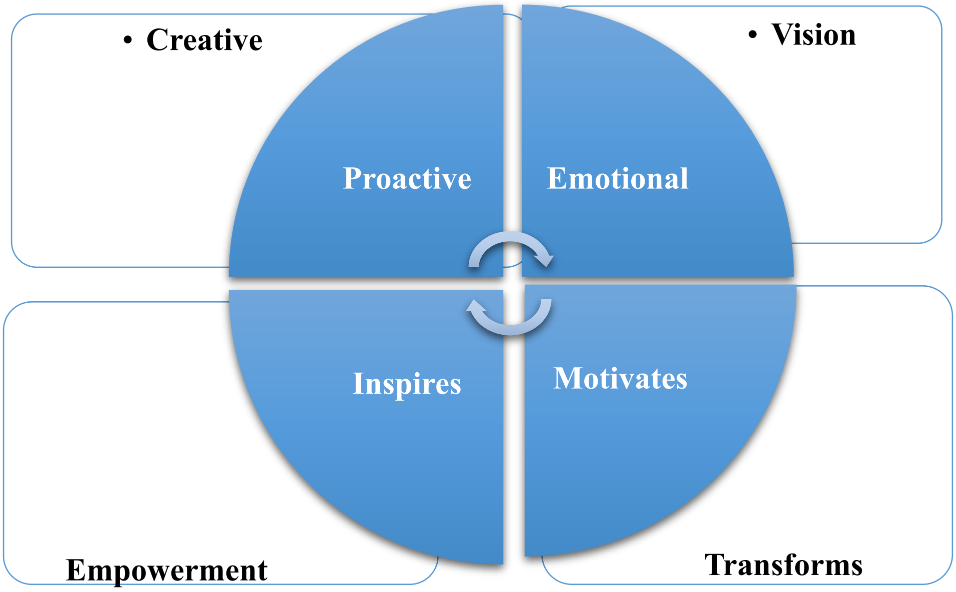


Figure 23. Keywords appearing in many of the survey respondents' answers for short answer question one.

Figure 23 above shows 8 of the most appearing keywords in most of the respondents' answers in question one, where the participants were asked if a transformational leadership style would be the optimum style for the purpose of building and ensuring the cybersecurity measures of a business against emerging and future cyber threats. Important keywords and insights were obtained from the answers provided. Majority of respondents stated that when it comes to building and ensuring cybersecurity measures, transformational leaders are proactive leaders and future thinkers with long term vision, which we can understand as the proactive element that transformational leader can show and apply to lead to install preventive measures against cyberattack damages as well as establishing a sense of security and prevention against attacks among employees. Additionally, many respondents stated that transformational leaders are creative, have vision and create learning opportunities for all staff allowing them to tackle and solve security problems more efficiently. Also, several respondents stated that such type of leaders are more "hands on staff" which allows the leader and the employees to identify the needed changes to cope with cyberattacks.

Another important insight is that transformational leaders work on relationship building with their employees. This is an essential component of a security strategy since one of the biggest threats in cybersecurity is the human element and that behind every piece of data is a human actor. This can facilitate an individual cybersecurity awareness as well as the creation of a collective culture of security inside the organization. Moreover, respondents stated that the emotional approach transformational leaders adopt with their employees can change the mindset of the subordinates and develop the integrity and the loyalty of the employees when it comes to ensuring the cybersecurity of the organization. Other respondents implied that transformational leaders get the employees on board with an organization's security mission which can make it more successful and effective. In this regard, other respondents stated because of the transformational leader involving the employees, that the employees become more committed and proactive themselves when it comes to ensuring that the organization is best protected against cyber threats.

In question two, respondents were asked if a transactional leadership would be optimal for a business that wants to build/ensure its cybersecurity measures against emerging cyber threats. A first insight obtained from the results was that transactional leaders are more data driven and oriented, as well as strict leaders who reinforce rules and discipline which benefits the organization in establishing its cybersecurity processes and procedures. Many answers stated that transactional leaders focus on current and short-term issues which would enable the organization to tackle and deal with present cyber threats immediately. Some respondents expressed that transactional leaders' set clear cybersecurity standards, rules, and expectations to their employees. Contrasting with the latter statements and despite the aim of the question, other respondents answered by stating that transactional leaders would not be as effective as transformational leaders and transactional leadership may not view cybersecurity as a direct factor to the business growth, as well as dealing with the issue based on a short-term planning or in other words, not being proactive, while cybersecurity threats are ever changing and needs a proactive and visionary approach.

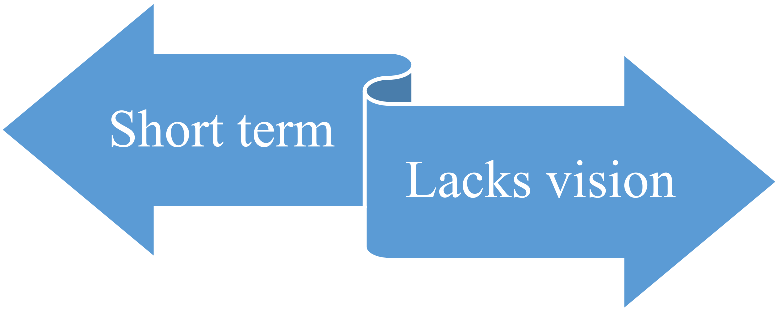


Figure 24. keywords appearing in many answers for short answer question three: Why transactional leadership would not be the optimum style for cybersecurity?

In question 3, respondents were asked why transactional leadership the optimal style for a business that would not be wants to build/ensure its cybersecurity measures against emerging cyber threats. Figure 24 above indicates two key terms that appeared mostly in respondents' answers. The first key word appearing in many respondents' answers was "short-term" and indicating that transactional leaders focus only on short term issues without having a future vision which can be an obstacle when preparing for newly emerging cyber threats and attacks. Additionally, other respondents stated that transactional leaders work through predefined rules and guidelines and therefore such leadership may fail when it comes to cybersecurity due to cyber threats are yet emerging and new aspects of cybersecurity are developing and needs to be anticipated proactively by the organization in order to protect against new cyberattacks and therefore, having a transformational leadership would be better due to being proactive, flexible, having long term vision which anticipates future cyber threats. We can see in respondents answers another trend that establishing cybersecurity in an organization is considered as a long-term process and should involve all employees as stated by several respondents, and therefore, transactional leaders would not be the optimal person for the purpose of cybersecurity due to their short-term focus and nonflexible working style.

DISCUSSION

In the previous section, we presented the results obtained from two surveys which included a total of 500 participants with different backgrounds and from various industries. Having participants from a wide variety of industry backgrounds was important for our purpose in collecting the maximum insights concerning employees' perspective on cybersecurity and how they view their organization's leadership. Especially that regardless of the industry type, all organizations are at risk of cyberattacks since many businesses nowadays operate with much reliance on internet, software(s), emails, and technologies to perform effectively and deliver its products and services to customers (Porcelli, 2017). Participants were asked if they agree to the fact that cybersecurity should be on the top priority of a company's leaders. In both surveys the majority agreed with the statement. This can be related to the fact that cyberattacks is known to be a persistent business risk for any organization operating nowadays. Moreover, our results agree with other work showing that as companies are adapting a wide array of technologies, cybersecurity should be an essential imperative and it must be the top priority of any business or organization (Sherwood, 2016).

In addition to the above, in both surveys most respondents stated that their company have cybersecurity measures in place to protect the company. Yet approximately 51.4% of the total number of 500 participants in both surveys had their companies being a victim of cyberattacks and threats. Not to mention, that 10.6% were not sure. These findings are of no surprise, since we can read in many articles that cyberattacks are on the rise and only getting worse, along with the increase in cyber espionage on different industries (Verizon, 2017). In addition, cyber criminality is only expected to increase as organizations expand their services to online platforms as well as adopting new technological advancements which at the end increases the organizations' vulnerability to cyberattacks (Gabel, 2015). That said, having just standard security measures is not enough, organizations should take more of a proactive approach when it comes to their organization's cybersecurity and ensuring that they are best protected from cyber threats. Adopting a proactive cybersecurity approach not only better prepares the organizations against possible cyberattacks, but it also increases the security effectiveness of the organization.

In relation to abovementioned, most of our survey respondents agreed that the leadership style of a company's leader can impact negatively or positively the cybersecurity measures a company implements to protect itself. Accordingly, more than 95% of both survey respondents agreed that the success of any cybersecurity program implemented by a company depends greatly on the company's leadership influence and support. Furthermore, our surveys indicate that most respondents agreed that their company's leader should take the lead and initiatives to ensure that the firm is well protected against cyber threats and attacks. The latter insight might be matching to another finding in a 2016 IBM report that surveyed more than 700 executives from various countries across different industries. Among the report findings that 61% of cyber secured organizations had regularly the topic of cybersecurity discussed in the organization's senior management meetings with an important emphasis on the essentiality of collaboration of the organization's senior management when it comes to cybersecurity planning (Veltsos, 2016; IBM, 2016).

Most of the survey respondents described their current company leader as a transformational leader and 40% described their leader as a transactional leader. Furthermore, in both surveys most respondents indicated that their current company leaders view cybersecurity issues as a concern for the company's safety and growth. In addition, most respondents of our surveys agree that having a transformational leadership in place is strategically important for the company and organizational success in cybersecurity program implementation. Furthermore, most of the respondents prefers that their current business leader adopt a transformational leadership style when their firms' faces' emerging cybersecurity issues. The same insight is confirmed by the responses of most respondents who indicated that they would choose transformational leadership style to adopt if given the chance to lead the company they work for and enhance its cybersecurity posture.

Our assumption that on importance of a transformational leadership for organizational cybersecurity is strongly supported by the insights obtained from the 2 surveys. However, to gain more insights, the 500 participants were asked direct open-ended questions with regards to when building and/or ensuring the cybersecurity measures of a business, why and why not would transformational leadership style be the most suitable for this purpose. Most responses indicated that transformational leadership would be the optimum leadership style due to being proactive, creative, visionary, emotional, empowering, motivating, transforming, and inspiring. The "proactive" term specifically appeared in many of the answers. The previously described qualities are argued to be essential requirements for a leader facing new cyber threats. This particular finding appears to be in line with findings of a report by the economist intelligence unit and oracle, where it was indicated that having a proactive leadership can dramatically reduce cyber risks an organization faces (Economist Intelligence Unit, 2016) linking this to the fact that an organization's senior leadership have the authority to mobilize all parts of the organizations for proper responses to cyber threats as well as the necessary budgets to ensure the success of a proactive organizational cybersecurity strategy. In this respect, the proactive involvement of an organization's leadership is a clear indicator of the cybersecurity success within a given organization.

With regards to why transactional leadership may not be the optimum style for the purpose of ensuring the success of an organization's cybersecurity program, most of the answers included that such type of leaders is short term focused, adhere to predefined rules, are not flexible, and lacks long term vision. These qualities are argued to hinder the extent of a cybersecurity program since the landscape of cybersecurity is ever changing (Eidam, 2016). Thus, this mostly requires visionary and proactive leadership style.

CONCLUSION

We explored thoroughly and discussed, why cybersecurity is critically important for the success of any organization as well as the negative impact with regards to its lack thereof. Furthermore, we addressed and explored why and whether having a transformational leadership is strategically important for organizations wanting to develop or enhance its cybersecurity program. Overall, an average of 97% of the survey participants agrees that the leadership of the organization can negatively or positively impact the cybersecurity measures a company takes to protect itself from cyber threats and attacks. Moreover, an average of 92% agrees that the leader of the organization should take the lead and initiative to ensure that the firm is well protected from cyber threats. Our assumption concerning the strategic importance of transformational over transactional leadership was strongly supported by our 500 participants survey as presented in the results and discussion section. This can be seen in both surveys results, but most importantly, that around 95% of the survey participants agreed that having transformational leadership is strategically important for a company wanting to implement a cybersecurity program. Furthermore, 78% of the survey respondents prefers to see their current business leader adopting a transformational leadership style when facing emerging cybersecurity issues. In addition to that, if given the chance to lead their company and enhance its cybersecurity posture, around 72% of the participants have chosen transformational leadership style to undertake. Many of them have related this in their answers to the open-ended questions to the fact that transformational leaders are more of a visionary and more proactive when tackling cybersecurity issues which can be further be argued that these qualities are essential when tackling emerging cyber threats.

Regardless of its size or industry type, this study findings might be useful to any organization evaluating its leadership versus its cybersecurity posture, plans and initiatives. This includes assessing the cyber risks the organization might be facing versus the level of proactive response and action the organization's leadership is undertaking to tackle such emerging and arising cybersecurity issues as well as mitigating the cyber risks involved.

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AGILITY, HRM AND ATLASSIAN

Delini Jayatilaka

ABSTRACT: *This paper on Agility, HRM and Atlassian is about Human Resource Management (HRM) practices in Agile Organizations, and what strategic changes companies must make in its HRM people processes to support high performances in an Agile environment. It includes a case study on Atlassian (NASDAQ ticker: TEAM), a global (Australian) Cloud technology enterprise software company, which is both an Agile organization that makes software to help other firms become Agile, and one that uses Agility in its own HRM processes. The essay examines the impact of Agility by describing the origins, concept, and philosophy of Agility, and defines 3 specific HRM processes of recruitment, selection and hiring, performance management, and organizational design and development, including other HR processes of appraisals, coaching, compensation and managing teams. Then it describes how these HRM people processes fit into and operate within an Agile organization, so strategic changes can be made to achieve high performance to transform the company, enabling a continuous strategic advantage over its competitors and the marketplace. The paper concludes with the impact of agility on HR processes and the "Future of Work".*

KEYWORDS: agility, Atlassian, recruitment and selection, performance management, organizational design and development.

According to Klaus Schwab, the founder of the World Economic Forum, the "scale, scope and complexity" of the 4th Industrial Revolution will be a "transformation, unlike anything humankind has experienced before" (Schwab, 2019). Most industries in most countries are either in the midst of or on the verge of disruption, and "a fusion of technologies" is "blurring the lines between the physical, digital and biological spheres" (*Ibid*).

Because of the unprecedented global disruption of the 4th Industrial Revolution, "organizations are going to have to learn how to navigate the unknown and seize the world" (Tilman & Jacoby, 2019). "All organizations, both public and private, will need to make a concerted and ongoing investment in the knowledge, capabilities, processes and cultures that foster a distinctive and all too rare organizational quality – agility" (*Ibid*).

Tilman and Jacoby (2019) argue that "agility is the capacity to detect, assess, and respond to" (all kinds and types of) "environmental changes in ways that are purposeful, decisive, and grounded in the will to win". Also, "agile organizations must possess both strategic and tactical agility" to transform themselves in order "to thrive in the years ahead" (*Ibid*).

For organizations to thrive and prosper, and maintain their revenue and profitability, they will have to examine and transform everything about themselves – their business model and business strategy, how they focus on their customers, what products and services they can offer to their customers that are of continued high value – all with a customer experience that continues to delight their customers; and their employees are the actual people who will have to make it happen. According to Deloitte, the people processes illustrated in Table 1 below is one of the critical areas that will transform a firm from a classic one to a future Agile firm (Deloitte, 2017).

Table 1: Enterprise Agility Spectrum - Classic Characteristics vs Agile Characteristics

Classic Characteristics	Enterprise Agility Spectrum	Agile Characteristics
Profit driven	Culture	Purpose and value driven
Customer focus primary in customer-facing teams		Customer is the beat of our collective hearts
Limited agility and risk taking		Fast feedback loops enabled by focus and discipline
Hierarchical driven with low trust		Empowered teams with high trust
"Hero" reliance on individuals	People	Trust and empowered teams
Lacking ability to change		Ability to continuously adapt and learn
"No" and fixed mindset		"Could-do" and growth mindset
Command and control leadership style	Leadership and Governance	Servant and visual leadership
Hesitation to experiment		Driving meaningful change with courage and impact
Risk and decision-making avoidance		Bold "whole of organization" considerations and choices
Inside-out perspective dominates	Strategy	Continuously monitoring potential challenge / disruption
Traditional strategic planning		"Rolling" dynamic strategy
Strategy is created "at the top"		Strategy is created more collectively
Work organized in silo`s	Structure, Policy, and process	Work organized in value streams
Slow, considered, top-down decision-making		Iterative, balanced, distributed choices
Little / no customer involvement in pilots / prototyping		Co-creation with customers
Clear organizational boundaries	Ecosystem	Community-based ecosystems from across org
Limited (strategic) partnerships		Actively participating in various ecosystems
Siloed partnerships to deliver solutions with an ecosystem		Generating value through partner collaboration across org
Pace layered architecture / Two speed IT	Technology	Right speed IT
Monolithic core systems for premises		Cloud based, integrated services
Formalized waterfall demand and supply		Continuous delivery
Application driven		Data and insights driven

Source: Deloitte Consulting Pty Ltd

So the key to agility, or the making of an agile environment to transform a company to an agile one, are its employees – the actual "doers" – who are at the heart of any strategic changes that all firms need to make to transform themselves; and the Strategic Human Resources Management systems and people processes that use agility to help transform both HRM and its people processes to then create, guide, and transform the company itself.

In light of all of that above, in a disruptive world of the 4th Industrial Revolution, with other macro drivers also changing the economy and business – continued globalization, technology digitization of their industry, extreme climate change, rapid social and political changes in many countries and economies globally; this research paper explores the main research topic of what strategic changes agile organizations need to make in three specific HRM people processes – selection and recruitment, performance management, and organizational development – to support high performance in agile environments.

TOPIC AND APPROACH

The title of "Agility, HRM and Atlassian", consists of the main research topic of Human Resource Management (HRM) practices in agile organizations – and what strategic changes companies must make in people processes to support high performance in agile environments". It will examine the impact of agility on the following three specific HRM processes – recruitment and selection, performance management and organizational design. The research uses secondary sources – books, journals, magazines, newspaper articles, research papers, interviews, case studies, google scholar searches, and websites – on HRM processes and agile companies and pose the following detailed research questions to help flesh out, illuminate, and answer the main research topic:

RQ1: What is the origin of the concept and definition of agility?

RQ2: What are the definitions of Human Resource Management, Strategic Human Resources Management and HRM processes?

RQ3: What is an agile organization and how do HRM processes fit into one?

RQ4: What are the 3 specific definitions and descriptions of HRM the processes of recruitment and selection, performance management, and organizational design and development?

RQ5: How do the three HR Processes fit into and operate within an agile organization?

RQ6: What are the strategic changes an agile firm must make in the three selected HRM processes to support high performance?

RQ7: What is the impact of agility on the three specific HRM processes?

RQ8: Case study on Atlassian (Nasdaq ticker: TEAM), a world-leading innovative Australian software company, which is both an Agile company that makes software to help other firms to become Agile, and one that uses Agility in its own HRM processes

CONTEXT SETTING AND BACKGROUND - DEFINITIONS AGILITY AND HRM

To set the context and background for this research topic, we first provide definitions for foundational terms and concepts used throughout this research paper – agility, strategic agility, human resource management (HRM), and strategic human resource and the three selected HRM processes - recruitment and selection, performance management and organizational development – so we can have a consistent and clear understanding of these concepts in relation to how agile firms use, deploy and adapt HRM processes to create a competitive advantage for their business.

Other core HR People processes (besides the three HRM processes mentioned above) that is part of the overall HRM framework:

- Strategic workforce planning
- Compensation and benefits
- Talent management and development;
- Training and development
- Leadership development
- Employee lifecycle management including HR administration
- HR development and HR process management

Agility – Origins and Definition

The dictionary definition of the word, 'agility' is the "power of moving quickly and easily or nimbleness", and the "ability to think and draw conclusions quickly and intellectual acuity" (dictionary.com, 2020). In the 1950s sociologist Talcott Parson created a systems theory of organizations, called the AGIL scheme, from where the concept of 'agility' has evolved from. This systems-thinking theorizes that there are four functional requisites or imperatives of any system of action: adaptation (A), goal attainment (G), integration (I), and latent pattern maintenance (L) (Murphy, 2005).

Later in the 1990s, agility was taken up by software and technology developers to promote a fast, innovative, non-linear, non-sequential systems methodology to create new software and technology; that was further developed to innovate and transform IT firms, and which now has evolved further to transform a company into an agile firm for the business to gain a competitive business advantage.

"Agile management is now a vast global movement that is transforming the world of work. Most remarkably, the five largest organizations on the planet in terms of market capitalization – Amazon, Apple, Facebook, Google, and Microsoft – are recognizably agile" (Denning, 2019). Further, a recent Deloitte survey of more than 10,000 business and HR leaders across 140 countries found that 94% of the respondents surveyed thought that "agility and collaboration" is critical to their organization's success (Deloitte, 2019).

Definition of Strategic Agility

"Strategic agility enables entire organizations to move with the speed of relevance: to detect and assess major trends and environmental changes and dynamically adapt their strategic visions, business models, human capital and campaign plans" (Tilman & Jacoby, 2019).

Human Resource Management Definition

"Human Resource Management (HRM) is a term that describes formal systems devised for the management of people within an organization. Essentially, the purpose of HRM is to maximize the productivity of an organization by optimizing the effectiveness of its employees" (Inc, 2020). As Edward L. Gubman observed in the Journal of Business Strategy, "the basic mission of human resources will always be to acquire, develop, and retain talent; align the workforce with the business; and be an excellent contributor to the business. Those three challenges will never change" (*Ibid*).

Strategic Human Resource Management (SHRM) Definition

"Strategic Human Resource Management (SHRM) is about aligning and linking all HR processes, procedures and initiatives with the strategic objectives of the organization" (HRM Handbook, 2020). According to Kaufman, SHRM is "the choice, alignment, and integration of an organization's HRM system so that its human capital resources most effectively contribute to strategic business objectives" (Kaufman, 2015; Armstrong, 2019).

Selected three HRM Processes and other core HR Processes

All HRM processes are integral to the survival and success of HR (Human Resource) strategies and no single process can work in isolation, including the 3 selected processes of Recruitment and Selection, Performance Management, and Organizational Development. There must be a high level of consistency and cohesiveness between all the HRM processes for each process to work well individual and for HRM to work holistically.

Recruitment, Selection (and Hiring) Definition

- Recruitment – to attract suitable qualified applicants to the job role;
- Selection – to short list candidates based on their education, experience, expertise, skills, abilities, attitude, and aptitude to the role;
- Hiring – an interview and decision-making process to select the final candidate and the on-boarding process of a candidate once they are offered the job and then accepted it (Management Study Guide, 2020).

Performance Management Definition

To help the organization train, motivate and reward workers, and ensure organizational goals are met with efficiency. Within an agile firm, this process includes individual employees and whole teams, divisions, as well as product service business lines or customer centric processes – with a focus to deliver excellence and all towards enhancing or adding value to them (*Ibid*).

Organization Development Definition

Commonly known to be the practice of changing people and organizations for positive growth, that can include training, coaching, talent management, team building, career development and leadership development (AHRI, 2020).

Other Relevant HRM Processes Definition

- Training, Learning and Development – processes that work on an employee once onboard to develop their skills and abilities for the role and future within the firm;
- Pay – Employee Remuneration and Benefits Administration – this process involves salaries and wages, incentives, fringe benefits and perks to motivate and enhance employees, teams, and divisions;
- Labor and Employee Relations – the laws, regulations and rules governing employee relations within a firm, industry sector, and country;
- Employee health and safety – employer-employee conflict management, quality of work life, worker compensation, worker wellness and assistance programs including counseling for occupational stress – that are critical to employee retention apart from pay (Management Study Guide, 2020).

STRATEGIC CHANGES AGILE FIRMS MUST MAKE TO HRM PROPLE PROCESSES TO EMBRACE AGILITY

"Agile organizations treat disruption and adversity as opportunities. They grab the initiative and turn the environment into a critical supporter of their vision" (Anthony, 2016). However, organizations that fail to transform and just maintain the status quo, often do not last. "The disparity between those that thrive and those that stumble grows when the pace of change accelerates" (*Ibid*).

"The average tenure of a firm on the S&P 500 index has shortened from 33 years in 1965 to 20 years in 1990" and is expected to shrink further, with new analysis suggesting that "nearly half of today's index may turn over in the next ten years" (Anthony, 2016). So, the strategic changes that an Agile firm or any kind of firm must make to continue to stay relevant is to embrace Agility around its key tenets – primacy of the customer, small, structured work teams, and the organization as a network regardless of what the organization structure looks like on a page.

The Primacy of the Customer

"Truly Agile organizations practitioners are obsessed with delivering value to customers" because "globalization, deregulation, and new technology, and the Internet" provide the "customer with choices, reliable information about those choices and the ability to connect with other customers" (Denning, 2018). "So, firms can't just do enough to get by" (*Ibid*).

In true "Agile organizations, everyone is passionately obsessed with delivering more value to customers", and "the firm adjusts everything – goals, values, principles processes, systems, practices, data structures, incentives – to generate continuous new value for customers and to ruthlessly eliminate anything that does not contribute" (Denning, 2018). "Everyone in the organization has a clear line of sight to the ultimate customer and can see how their work is adding value to that customer or not", including HR (*Ibid*).

Small Structured Agile Work Teams

"Agile practitioners share a mindset that work" is "done by small autonomous cross-functional teams working in short cycles on relatively small tasks and getting continuous feedback from the ultimate customer or end user" (Denning, 2018). The organization descales complex problems into small pieces that can be handled by small teams, the "work unit becomes the team, rather than the individual, working in short cycles", where "teams can change direction easily" (*Ibid*).

"Big annual plans of the kind cherished by HR departments become constraints rather than enablers", and "getting the best talent" to "collaborate and innovate easily rapidly becomes a top business priority". "Annual performance cycles of the kind administered by HR departments feel like relics from some bygone" (Denning, 2018).

Organization as a Network

"Agile practitioners at all levels view the organization as a fluid and transparent network of players that are collaborating towards a common goal of delighting customers" (Denning, 2018). "Communications flow easily in all directions. Ideas can come from anywhere, so these organizations become a "steady state machine" and "an organic living network of high- performance teams" (*Ibid*).

"Managers recognize that competence resides throughout the organization", that is "obsessed with delivering more value to customers", and "Agile teams take initiative on their own and interact with other Agile teams to solve common problems." "This is a different world from traditional HR systems that, as business school professor John Kotter writes, "ask most people, usually benignly, to be quiet, take orders, and do their jobs in a repetitive way (Denning, 2018). "Such systems get in the way of the new strategic priority: continuously generating fresh value for customers" (*Ibid*).

HR As Agile Business Partner

Finally, in the most important aspect of an Agile environment, HR fully embraces the same Agile principles as the business and becomes a true Agile partner to the business, by "obsessively delivering value to external customers, setting aside anything that does not contribute to that goal, descaling work for small autonomous cross-functional teams, and operating as part of a fluid network, rather than a top-down bureaucracy" (Denning, 2018).

IMPACT OF AGILITY ON SELECTION & RECRUITMENT, PERFORMANCE MANAGEMENT, ORGANIZATION DEVELOPMENT

Impact of Agility on Selection and Recruitment

"With the improvements in the economy since the Great Recession, recruiting and hiring have become more urgent – and more agile. Companies are also relying more heavily on technology to find and track candidates who are well suited to an agile work environment. GE, IBM, and Cisco are working with the vendor Ascendify to create software that does just this. The IT recruiting company HackerRank offers an online tool for the same purpose" (Capellini & Travis, 2018).

LinkedIn, together with the software tool, Workforce, work together to automate the entire process from helping companies find suitable candidates within LinkedIn, to using workflow to automate the process of scheduling, reviewing and interviewing candidates, to hiring them and providing seamless on-boarding services to ensure candidates who get hired, can work from day one, that they have their PC, security, desks, and orientation all organized. An example is how Guggenheim Partners uses both these systems to identify potential candidates to eventually hire them.

Impact of Agility on Performance Management

"High performance" in Agile environments and Agile firms "operate as empowered networks, coordinated through culture, information systems, and talent mobility" (Deloitte; 2017). Here, "companies are focused on redesigning the organization itself, with nearly half actively studying and developing new models. Many organizations are designing and building this new organization" (*Ibid*).

The Agile firms utilize high-performance work systems that are defined as "a set or bundle of human resource management practices related to selection, training, performance, compensation and information sharing that are designed to attract, retain and motivate employees" (Messersmith & Guthrie, 2010). According to Capellini and Tavis in their Harvard Business Review article in 2018 titled, "HR Goes Agile", key performance areas for Agility to exert considerable impact includes performance appraisals, coaching, teams, and compensation. Below is a summary of their findings as part of their research into Agility and HR.

Impact of Agility on Appraisals for Performance Management

Many organizations have switched to frequent performance assessments, often conducted project by project. This change has spread to several industries – big pharma (Pfizer), investing (Oppenheimer Funds), and consulting (big four) (Capellini & Tavis, 2018). Overall, the focus is on "delivering more immediate feedback throughout the year so that teams can become nimbler, "course-correct" mistakes, improve performance, and learn through iteration—all key agile principles" (*Ibid*).

Impact of Agility on Coaching for Performance Management

The companies that most effectively adopt HR agile talent practices invest in sharpening managers' coaching skills. Supervisors at Cigna go through "coach" training designed for busy managers (*Ibid*).

Impact of Agility on Teams for Performance Management

"Traditional HR focused on individuals – their goals, their performance, their needs. But now that so many companies are organizing their work project by project, their management and talent systems are becoming more team focused" (*Ibid*).

"Groups are creating, executing, and revising their goals and tasks with scrums – at the team level, in the moment, to adapt quickly to new information as it comes in. They are also taking it upon themselves to track their own progress, identify obstacles, assess their leadership, and generate insights about how to improve performance" (*Ibid*).

Impact of Agility on Compensation for Performance Management

"Pay is changing". Research and practice have shown that compensation works best as a motivator when it comes as soon as possible after the desired behavior. Instant rewards reinforce instant feedback in a powerful way. Annual merit-based raises are less effective, because too much time goes by." (*Ibid*).

For example, "Patagonia has eliminated annual raises for its knowledge workers" and "instead the company adjusts wages for each job frequently according where market rates are going, and increases can be allocated when employees take more difficult projects or go above and beyond in other ways" (Ibid). The company retains a budget for the top 1% of individual contributors, and supervisors can make a case for any contribution that merits that designation, including contributions to teams. (*Ibid*).

Impact of Agility on Organizational Development

Organization Development must "change to bring new skills into organizations more quickly" (Capellini & Tavis, 2018). "Newer approaches use data analysis to identify the skills required for particular jobs and for advancement and then suggest to individual employees what kinds of training and future jobs make sense for them" (Ibid).

IBM uses AI (Artificial Intelligence) to generate advice, starting with employees' profiles, prior and current roles, expected career trajectory, and training programs completed. (Capellini & Tavis, 2018). IBM created special training for agile environments with animated simulations and built a series of "personas" to illustrate useful behaviors, such as offering constructive criticism" (Ibid). According to McGown (2020), a well-known HR contributor in LinkedIn, "in accelerated change, a company must continuously reinvent itself. To do so, it must have a stabilizing and guiding operating system, in other words, culture. It must also have ever expanding capabilities, in other words, capacity".

An example of this is "when Amazon hires; they famously hire for cultural fit and learning agility because they know that whatever they are hiring you to do, it will likely change in a matter of months, so they want to know how you handle change, uncertainty, failure, and problem framing. (Capellini & Tavis, 2018). Another example of culture within Organization Development is Google (Business Insider, 2013). "It has established a culture in which failures are perceived as a natural coming along only when one tries hard enough. Senior managers serve as role models also in this respect" (Grottenthaler, 2014).

Agility and Organizational Development is important in building the Organization of the Future, as it borne out of the Deloitte (2017) survey on this topic, where "fully 88 percent of Deloitte's survey respondents believe that building the new organization of the future is an important or very important issue"; "yet only 11 percent of respondents believe they understand how to build the organization of the future".

Figure 1 below illustrates the percentage rating for this survey across countries globally where it is foremost in the minds of many employees.

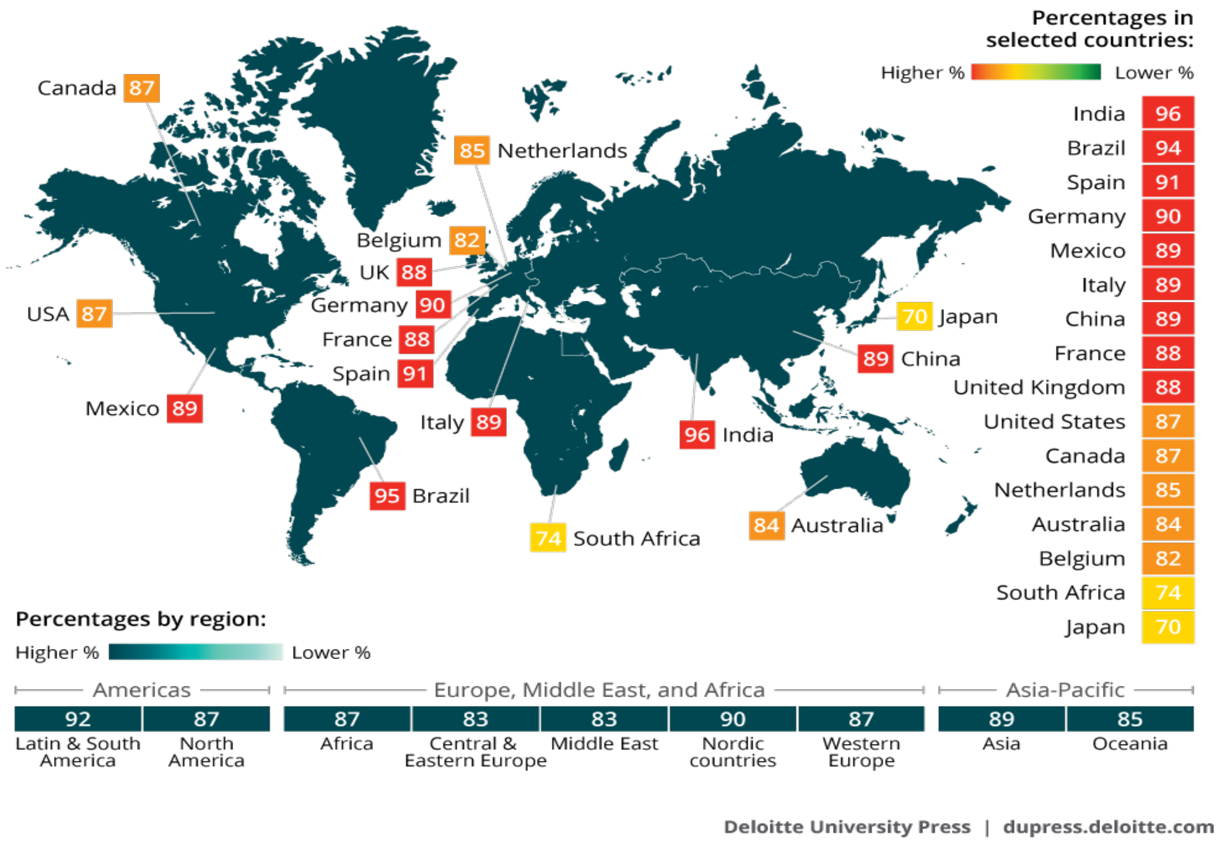

Figure 1: Organizations of the Future Rating.
Source: Deloitte's Global Human Capital Trend Report 2017.

CASE STUDY: ATLASSIAN – AN AGILE COMPANY WITH AGILE HRM PROCESSES

Background on Atlassian (Nasdaq ticker: TEAM)

Atlassian, a uniquely Australian technology firm, that is mostly unknown outside of Australia and the enterprise software sector, is a quiet behemoth in the cloud software world. The firm, founded by 2 Australians who met at the University of New South Wales in the 1990s, Michael Cannon-Brooks and Scott Farquhar, creates unique enterprise software based in the Cloud, to help make and transform other firms that use its software into Agile companies.

The company which listed on the American NASDAQ Index, known to be the "go to" stock exchange of US Silicon Valley technology firms, listed late 2015 initially at a price of USD 27.67 a share, is now priced at USD 191.23 (Aug 28, 2020) and worth over USD 47 billion in market capitalization.

Besides its founders, the staff and investors who benefited from the continued success of Atlassian have also helped foster an innovative and dynamic force in the city of Sydney with an innovation approach by investing in other people's ideas and technology, thereby adding economic multiples of Atlassian's impact to the city and country economy.

While there are many financial accolades for the Sydney based enterprise Cloud software firm and what the young, brilliant, and geeky software founder entrepreneurs have created; the most interesting and surprising thing about this firm is that it is continually re-creating itself, and the Agility software products and services it delivers.

Atlassian Use of Agility in its own HRM processes

Atlassian not only just creates Agility software helping to create, track, maintain software development and technology that other firms create and use, but increasingly makes Agility enterprise cloud software products for other industry sectors, and specifically to assist other firms to start their journey to transforms themselves to an Agile environment and eventually an Agile firm.

Atlassian also uses Agility processes in its own HRM people processes. How it does this is by deliberately encouraging its employees to spend a part of their working hours on their own ideas and projects related to the firm's business. At Atlassian this is called ShipIt Day and combines the targets of living creativity, focusing on the personal, being radical and having fun at work. (Birkinshaw & Duke, 2013).

To further illustrate the myriad of ways Atlassian uses Agility, below is a summarized interview from Dominic Price, whose job function and title is "Work Futurist" for the firm, is tasked by its co-founder and current CEO of the firm, Scott Farquhar, to continuously improve the firm's HRM processes, as well as other ways of thinking and tackling the future of work within the firm for the benefit of its employees and other stakeholders and the firm's strategic competitive advantage.

Dominic Price, Work Futurist, Atlassian, summarized interview

"I don't know what my job will look like in a year's time" so says Dominic Price, Work Futurist for Atlassian (Dorney, 2019). He says Agility and the future of work is being driven by the business fear of "becoming the next Blockbuster or Kodak", that is extinct, bankrupt or a small shadow of its former self, "in a world where technology upends entire industries and makes switching to more exciting competitors effortless" (*Ibid*).

Price says, "the way you avoid becoming a relic is by being agile enough to change", and "you accomplish that by being agile all the way from flagship product to job design", and "thinking of it this way - the only role that can never be automated or made redundant by technology change is the one that is completely adaptable and free to change" (*Ibid*).

So, in the next section are the strategic changes that Atlassian has implemented to create, maintain, and support an Agile environment as an Agile company by changing the 'Work' within the firm. Price says, "the way you interact with colleagues, your role itself – they should be different – because it is imperative for businesses and society at large", and that Agility is more like a philosophy, instead of a policy (*Ibid*).

"The whole point of the role is, how can we understand more about the future of work? So that is distributed teams, the construct of nine-to-fivers, knowledge workers, cognitive diversity – all the things that make up that future workforce. And instead of trying to predict what is going to happen, how can we build practices today to get there?" (*Ibid*).

Perhaps the best way to think of his role is to remember that it did not exist three years ago. Price describes its invention as a "roll of the dice" and a "three-to-six-month experiment" the company was not sure it would work and that it "bears little resemblance" to its initial conception (*Ibid*).

Useful Friction, Workforce Diversity, Different Teamwork, Agile Philosophy

Atlassian, and Price, its Work Futurist describe unique things that the firm does to practice Agility, which is described below in separate headings.

Useful Friction

Atlassian utilizes the concept of "Useful Friction" theory in action – beginning with a workplace practice and tracking back to how it is supported. A useful example is the Atlassian practice of Price calls "friction" or "sparring". "How do you argue like you're right, but listen like you're wrong?" (Dorney, 2019).

Price says, "It's where you've got two different mindsets rubbing up against each other. And if you are in a trusted environment, if you are in a psychologically safe environment, that friction creates value. We do not look for agreement, we do not look for consensus. Collaboration is a structured, heated debate and argument. When external people see it, it looks like we're arguing" (*Ibid*).

Price says, "It's not based on hierarchy, it's not based on power or tenure. It is based on your unique perspective and your unique experience. We then work on, how do you argue like you are right, but listen like you are wrong? So yes, put your point forward with passion, and gusto, and energy. But then once you have put your point forward, close your mouth," and "open your ears and listen" (*Ibid*).

Diversity in its workforce and diversity in its approach and thinking

To maximize the effective of this, Atlassian fosters diversity (it is a company value, and a report it released last year on the topic was very well received) (Dorney, 2019). Price says, "we use the power of storytelling. So, when we have that diversity, debate, the argument, and something wonderful happens, we blog about it internally. We have got a very open culture around storytelling, but we do not just tell the stories of what went well. We tell the stories that went south as well" (Ibid). "When you experiment with that process, the practice becomes a default. The positive story reinforces behavior" (Ibid).

Different approach to Teamwork

"Getting more science around teamwork, as it is harder to pull out than the science behind individuals and looking into how teamwork changes for organizations as they scale up – important information for a company that has gone from 600 to 3,000 staff" in 4 years during his tenure. In conclusion, at Atlassian, their Agility approach is that there is a workplace practice (sparring) that is born out of and maximized by a company policy (diversity) and grown through a recognition program (storytelling) (Dorney, 2019).

Adopting an Agile Philosophy

Price talks about the difference between a company that wants to institute an agile policy and one that adopts an agility philosophy. Each organization should look at models that exemplify what they want to be, says Price, but it then needs to build in its own way (Dorney, 2019). "This is a really hard one to get your head around: there isn't an end state. And it is funny because most organizations, certainly a heritage organization that have been around for a while, work on long term plans. And in a time where the business world was going through a low rate of change, having a 10-year plan made sense. In a modern environment with the rate of innovation and change we have now, 10-year plans are a waste of time" (*Ibid*).

Leading through Volatility

Price teaches evolution over transformation and tells leaders, "The new way of leading is leading your organization through volatility; so how do you manage that? Not with large 24-month programs, but with a mission that you believe in, a long-term mission and vision. And then lots more projects and teams and activity. And learning along the way" (Dorney, 2019).

Human future – the future of work

Price says, "My sense is our education system – and community, work and economic systems – have trained humans to be like robots for the last 60 years. And we need to quit thinking like that" (Dorney, 2019). Price says, "the advantage of solving things with agile philosophies is that it fits with how our society is currently structured. It's not a total solution right now – it's still very skewed to well-paid knowledge workers – but it is a solution that is already being actioned" (*Ibid*).

He quotes renowned Stanford professor Hayagreeva Rao, who asked an audience of HR leaders, "Instead of thinking about eight hours work, imagine that you're borrowing the person from their life for eight hours a day. And your job is to give them back in a better state than you took them in the morning. How would you treat that person?" (Dorney, 2019).

CONCLUSION: THE IMPACT OF AGILITY ON HR PROCESSES AND THE FUTURE OF WORK

The unprecedented disruptive technology forces at work in the 4th Industrial Revolution, and the impact on companies having to be agile and transform into agile companies using Agility, will bring unimaginable impacts to HRM and HRM People Processes including the HRM processes examined in this paper – Recruitment and Selection, Performance Management, and Organizational Development.

The scale and breath of uncertainty will not only disrupt Agile companies continually, but how business and work are being conducted, and will change the future of work. The pace and scale of change will continue to accelerate bringing about turmoil to governments, economies, and society at large; so, it is important that every Agile firm continually makes strategic changes to its business and HRM so the firm can thrive and prosper.

HRM can and should play an important part of this Agility framework and approach; helping to partner with the business to not only support it but help it tackle the accelerated change and disruption. HR taking ownership of driving an Agile agenda and approach of the key processes of recruitment and selection, performance management and organizational development will be of enormous value to the Agile firm, as it will help keep staff motivated and innovating. This will in turn allow the business to be "ahead of the curve" so its workforce can weather the disruption and thrive to take advantage of the many exciting and huge opportunities that this disruption will bring.

However, as things stand, according to the Deloitte Survey of the EU Workforce of 2016 across 10 key European economies, surprisingly the EU is falling behind and is unprepared for this huge disruption. The Deloitte survey of more than 15,000 European workers highlights that the workers realize that the disruption is happening now and that strategic changes will need to be made with an Agile approach including reforming of HR processes so they can thrive in the future of work.

Some of the key findings are:

- "Emerging technology – Automation, Artificial Intelligence, robotics – are reshaping the world of work and revolutionizing business models, tools, tasks and delivery models and workers see the transformation happening increasingly in the workplace";
- "Employers and workers require the necessary digital and soft skills to take advantage of the new opportunities they are expected to face";
- Almost half the population of the European Union are lacking basic digital skills;
- One-third of European citizens reportedly have almost no digital skills at all;
- Approximately 40% of employers are struggling to fill their job vacancies due a lack of skills, while 30% of graduates did not acquire competencies at university.

In conclusion, while the future is disruptive and uncertain, Agile firms who innovate with the Agility approach and make strategic changes to its HRM and its processes will thrive and prosper as the firm will attract top talent to create a significant strategic competitive advantage.

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ARE YOU THE REAL DEAL? THE ART AND SCIENCE OF HUMAN CAPITAL DUE DILIGENCE

Katheryne E. Walker & Konstantinos Biginas

ABSTRACT: *The acquisition of profitable assets is an accepted financial premise of corporations and organizations alike. To maintain a clear and logical process during this acquisition process, the practice of due diligence is paramount. Due diligence protects organizations from faulty decision-making which may lead to large and non-recoupable financial losses. Considering the significance this function plays in a corporation's profitability in acquiring tangible assets, it seems equitable to apply this concept to the acquisition of human capital – the acquisition of talent assets. With this philosophy in mind, this research project was undertaken.*

Determining whether an acquisition is the "real deal" requires a matrixed process which ferrets out inconsistencies among the tangibles and intangibles, the technical and soft skills, the art, and science, of human capital decision-making. Given that the human capital acquisition process regularly involves front-line non-HR managers, the outcome of this research project was to create a due diligence tool for non-HR hiring managers to use during the acquisition process. By delineating the good hire value constructs managers bring to the table, one can develop not only the matrix itself but the cultural values behind those items.

Establishing a working definition of human capital due diligence for purposes of this paper was the first research objective. Operating with a consistent vernacular was necessary to begin assessing the impacts of good and bad outcomes. Secondly, analysis was done on the costs of bad hires and the benefits of good hires. There is a plethora of quantifiable literature on the financial costs of a bad hire. Conversely, there was a lack of such data on good hires. It became evident that "good" was better defined by the absence of "bad". This became the gap in the literature which the research objectives focused on – how does one calculate and assess a good acquisition as a stand-alone measure? In search of a solid due diligence tool to use in pursuit of good talent acquisitions, the final outcomes of this project were developed.

The research methods encompassed both quantitative and qualitative methods. A survey was developed for a specific group of hiring managers to use intra-organizationally. A sample pool was then chosen to participate in interview screenings. The purpose of the subsequent pool was to validate the outcomes of the survey itself. These hiring managers were chosen because they had post-hire data as well and could round out the talent acquisition questions with real time data. Additionally, interviews were conducted with two baseball scouts whose jobs require them *to assess talent – at huge financial costs. The purpose for looping in an additional industry was to examine whether their struggles with human capital are like those in the other industry. And indeed, as the findings of this research paper will assert, they are. Human capital acquisition is both technical and soft skill based. Success is measured not only through quantifiable financial data but also by the impact of the talent as a human. Creating an innovative tool for non-HR managers/individuals to use in assessing what is seen and what is not seen is meant to provide a way forward in human capital acquisition.*

There are a few outcomes in this research study, but mostly importantly, is a proposed matrix which address both the art and the science of the human capital due diligence process. However, it became clear that the tool itself is, indeed, just a tool. A tool to be used in the hands of skilled people. It is the skill of the practitioners and their organizations which drive the clarity and consistency required to make good decisions and thereby hiring the good for their organizations. The results of the surveys, interviews, and literature coincided around the concept of integrity – in simple terms, the inside matches the outside. If one can determine through a solid due diligence tool that the external matches the internal – the work product matches the person – one can be relatively confident that what is being presented is real – the real deal.

Investing in the person of the process, the hiring manager, is a primary recommendation for further research because of this research project. Proposed areas of acquisition specialist development include calibration around the "good", becoming excellent decision-makers, mitigating bias through team interviews, acceptance of diverse opinions as profitable in every manner, standardizing the questions for organizationally meaningful data, and the impact of the "values" of the CEO on the hiring managers. Additionally, it is recommended to extend this project to the HR community to determine if the responses are the same as well as to a few other industries/regions.

This research paper concludes with a clear understanding that human capital assets are indeed a primary financial asset. Elevating the importance of the non-HR hiring managers to that of expert acquisition specialists can only make an organization more profitable throughout the reporting line. Human capital is an investment that replicates itself. Changing the conversation from avoiding the bad to seeing the organizational good is a proposed way forward in conducting human capital due diligence.

KEYWORDS: human capital, due diligence, acquisition, decision making.

Purpose of the Study

The purpose of this research project is to create a due diligence tool for non-HR hiring managers to use in assessing and acquiring a company's greatest investment and its greatest asset – quality human beings. The significance of proper due diligence and the connection to profitable investments is widely understood in asset acquisition. Companies also need to apply this same important due diligence practice when considering their human capital investments. While current studies provide data around costs of a bad hire, components of a good hire and various proven interview techniques, there seems to be a gap in the concept and execution of applied human capital due diligence during the interview process. In search of a tool like financial due diligence which could be used for identifying good human capital investments, this research concept was developed. Based on this premise, the research will lead to an interview due diligence construct for acquiring human capital assets.

Background

This research study will begin with an examination of the significance of due diligence during the corporate acquisition process. Analyzing the various principles set forth by two publicly recognized acquisition organizations, KPMG, and Warren Buffet's Berkshire Hathaway, combined with a common working definition, will establish the foundational understanding of the term "due diligence" as it will be used in this paper. Drawing on the practices of financial due diligence during the acquisition process, this research will attempt to overlay similar principles as an interview framework for non-HR hiring practitioners.

The importance of hiring quality individuals is the single most significant financial decision for any company. There are currently many studies on the impact of a bad hire which are now common knowledge among Human Resource leaders: Gallup (2016), the SHRM Human Capital Benchmarking Report (2016-2017), Korn Ferry (2018) among others. A McKinsey Quarterly report from 2007 discusses the total cost of "jerks (TCJ)". In this article Robert Sutton states, "Management had calculated the extra costs generated by a star salesperson – the assistants he burned through, the overtime costs, the legal costs, his anger-management training, and so on – and found that the extra cost of this one jerk for one year was $160,000" (Sutton, 2007). Current benchmark reports confirm the significant financial impact of investing in the wrong person for the job. Harvard Business Review recently published an article by Peter Capelli around the woeful inadequacies in finding the right human investment. He states, "Organizations that don't check to see how well their practices (hiring) predict the quality of their hires are lacking in one of the most consequential aspects of modern business" (Capelli, 2019). Not only are human capital benchmark studies reporting on the pure financial costs, averaging $4129.00/per which is a low average, many are now realizing the broader financial impact of two important overlaying factors: generational and the tight talent market. Gallup's 2016 report on the "State of the American Workforce" identified the Millennial impact on turnover due to poor employee engagement alone on the U.S. economy – estimates totaling $30.5 billion/year (Adkins, 2016). Therefore, the focus of this research on a human capital due diligence approach which recognizes an individual as a legitimate financial "liability or asset" to the company.

Linking the value of soft skills to corporate profitability is regularly reported on and indicates a positive impact on profitability when a "good" CEO is at the helm. The expectation is that this “good” sets the tone for the company in the acquiring of “good” human capital. While Human Resources may control and assist the acquisition process, it is often the non-HR hiring manager who makes the final decision. Therefore, to make a good human capital investment, an organization must have a due diligence process in place to “check-off” those items which define a good investment for their culture.

Aims and Research Objectives

Through data analysis on both “bad” and “good” human capital acquisitions and an assessment of good hire interview parameters, this research study will focus on three key data-gathering points. In addition to studies already conducted by outside sources, this project will include surveys, questionnaires, and talent management data from a local sample group currently in the recruiting process with vacancies at all levels and departments of the organization.

Research Questions

RQ1: What is the purpose/significance of due diligence in corporate asset management?

RQ2: What is the cost of a bad human capital investment (“Bad” Hire) and the benefits of a good human capital investment (“Good” Hire)?

Research Objectives

RO1: To analyze the financial/cultural components of a bad hire and the impact on corporate profitability.

RO2: To assess the components of a good hire and the impact on corporate profitability.

RO3: To establish a correlation between good hires/human capital investments and the interview/due diligence process determiners.

Significance and Relevance

Creating a human capital due diligence tool for the interview acquisition process will be the conclusion of this research project. A gap exists in the current literature on tools for non-HR hiring managers to be successful during the human capital acquisition process. Studies report on the important determiners of a successful hire, how to avoid a bad hire, and how to offer similar approaches to closing the gap between the interview process and post-hire performance. However, the creation of an actual assessment tool encompassing both “art” and “science” of candidate analysis remains undeveloped especially as it concerns the non-HR interviewer. Given the importance of quality human capital, it is expected that Human Resources, the hiring managers, and the organization will profit by recognizing the direct impact of human capital acquisition on increased corporate profitability through the application of a proper due diligence process. In addition, the significant role of the manager underscores the necessity of a tool which calibrates the acquisition process so that it aligns with the corporate culture together with the business outcomes.

Limitations to the Study

Possible limitations to this study will center on the localized small sampling group. Although this study will go through the hiring process of one organization's current vacancies, each one requiring a minimum of three interview rounds encompassing 3-7 participants per process (total of 3-15 individuals per position), it will still be centralized in one organization during a limited timeframe (June-August 2019). The study will incorporate survey responses from individuals outside the industry but will not be conducive to a comprehensive interview process analysis. The sample group will reflect the respective levels of each organization (Vice Presidents to Administrative Staff), age bands, gender and race as reflected in the organization's demographics as well as varied positions. While, working in a limited controlled process will allow for better quality control of the process and original source data collection, it is not of the depth and breadth required for a longitudinal study and will be subject to organizational culture constraint factors.

Although a confined study conducted over a limited time (one organization and two baseball scouts), the data-gathering will provide instant and immediate access to original source implementation, results, and outcomes. However, the study will also be limited by the exact same parameters. The primary limitation surrounds the validity of the sample size. The author recognizes the survey's limited sample pool of 20 participants. The data may be diluted if not all answers are answered by a statistically responsible number of participants. Skipped/incomplete responses will reduce the quality and thereby the validity of the data. As a countermeasure, the number of survey items is approximately 40 questions with the expectation that the small sample pool will be offset by the number of items measured. Another area of possible limitation on the validity of the data is the industry scope. There is only one industry represented in the survey/interviews and two companies (same industry) in the interview only category. The author has purposefully surveyed a sample participant pool composed of a range of organizational functionalities such as Marketing, Public Affairs, Administrative Support.

LITERATURE REVIEW

Theoretical Framework

The Function and Importance of Due Diligence in the Acquisition Process

The role of due diligence in financial asset acquisition management is a long-accepted practice. Approaches to the due diligence process may vary but the underlying function remains the same – risk management and financial profitability. Corporations implement the due diligence process in a customized manner reflecting the philosophy of the CEO and the organization's/company's cultural mandates. In general, due diligence is an investing imperative, and an iterative process. It brings discipline to the investment process and it helps you get the important things right (Toniic, 2019). Two prominent firms with differing strategies, KPMG, and Warren Buffet's Berkshire Hathaway, both seek the same outcome but implement the process in completely different manners. Ultimately, however, whether the process is right or wrong is determined by the outcome – loss or profit.

KPMG's Operational Due Diligence department has a very detailed process for due diligence, "Operational due diligence (ODD) over investment managers has never been more critical.

Recent scandals such as Madoff and Weavering have served to underline the growing importance of ODD in the minds of investors" (KPMG, 2014). In addition, KPMG emphasizes the training of its investment managers and breaks the critical components down into four areas: 1) tone at the top, 2) compliance culture, 3) risk management, and 4) conflicts of interest. With a detailed mapped process for due diligence implementation through manager training, KPMG seeks to create a solid oversight structure for acquisition decision-making.

Bad Human Capital Investments ("Bad" Hires) versus Good Human Capital Investments ("Good" Hires)

The financial implications of poor asset acquisition in an M & A process are easily quantified. Likewise, there is increasing data around the financial implications of hiring/acquiring poor human capital. There many variables attached to poor hiring decisions such as turnover, time-to-fill (TTF), repetitive agency recruiting costs, company hours spent finding a replacement and the unintended consequence of poor morale and disruption leading to more losses of human capital. Similarly, by examining best practices and determiners of a "good" hire acquisition process, the impact of good human capital asset management on corporate profitability is being quantified. Literature around the task of hiring is exhaustive. Determining the diagnostics of a good from bad hire is varied based on the company culture but standardized in outcomes and profitability markers.

The Orsus Group reported on the dilemma of hiring the wrong employee in its article on "The Costs of Hiring the Wrong Employee". In the article, Zappos' CEO is referenced as saying his past bad hires have cost the company millions. This same sentiment is echoed in articles and journals regularly. In fact, there are some articles quoting the Zappos CEO as stating a bad hire cost well over $100 million (Fatemi, 2016).

Similar conclusions are found in Marissa Levin's article on the cultural and bottom-line impact of toxic employees (bad hires). She references a Harvard research study of more than 60,000 employees finding a superstar performer brings in more than $5300 in cost savings to the company. Avoiding a toxic hire or letting one go quickly, delivers $12,500 in cost savings (Levin, 2018). She then identifies the 6 main types of toxic hires – and the determiners are interpersonal. As with Orsus, Levin too, extends the financial burden to soft-skill damage control. Loss of productivity due to uncivil (bad) behavior and the creation of a negative environment by the bad hire equates to financial loss.

There are now extensive studies on the costs of bad hires and by consequence, then, the avoidance of a bad hire. By avoiding a bad hire, an organization can not only save thousands or millions of dollars (usually there is more than one bad hire in the loop) but can reduce the negative impact on the current staff population. Redirecting the current conversation from "avoidance" to a proactive stance on finding good talent is a solution-focused way forward. Applying the principles of due diligence to the hiring pursuit is found in a few people-centric industries, including the public world of sports. The hire is the financial asset.

Empirical Studies

Examine the function and purpose of financial due diligence and determine a working definition as it applies to human capital.

A June 2018 research study on the essential step of operational due diligence in acquiring investments, found six significant markers required in the mergers & acquisition process. There is, however, only one target measure "in the purchase decision process when mergers and acquisition (M&A) practitioners assess whether a target company can realize future performance expectations" (Porsgaard et al., 2018). The authors go on to state the result of neglecting operational insights is a lack of understanding the affects these can have on the final acquisition decision (*Ibid*). Quoting "a study of 1,700 mergers and interviews with deal makers, shows that executives who led high performing mergers conducted effective due diligence (study conducted by Harding & Yale, 2002). Successful deal makers.... avoided the traps of poor due diligence by using a disciplined process. Due diligence is broadly defined as a data collection and analysis process designed to help negotiators to effectively assess potential deals" (Benoliel, 2015). The practice of due diligence serves to assess the potential profitability of future performance as well as mitigate risk to the investor. A good due diligence process ensures a quality examination of the financial facts along with an analysis of risk mitigation factors against possible liabilities. It is described, in essence, as a "detailed risk management assessment" (Abraham, 2010). According to the Corporate Financial Institute, due diligence is a process of verification, investigation, or audit of a potential deal or investment opportunity to confirm all facts, financial information, and to verify anything else that was brought up during an M&A deal or investment process. Due diligence is completed before a deal closes to provide the buyer with an assurance of what they are getting (Corporate Finance Institute, *n.d.*).

The due diligence process established by the Australian government's Department of Foreign Affairs and Trade (2017) states: "The Due Diligence Framework (Framework) is an aid risk management tool to assess a potential delivery partner's ability to deliver in line with the policy and legislative requirements of the Australian aid program… The Framework provides a structured and consistent approach for the identification and assessment of implementing partner risk prior to entering arrangements and providing funding. The Framework formalizes, strengthens and streamlines existing due diligence arrangements and applies to individuals, commercial contractors, private sector entities and civil and non-government organizations" (Dfat.gov.au, 2017).

Governments as well as corporations implement strategies to ensure quality acquisitions. Protecting the investor through a thorough disciplined due diligence process across multiple disciplines creates an outline for a successful acquisition.

The cost of a bad human capital investment ("Bad" Hire) and the benefits of a good human capital investment ("Good" Hire)?

The damage of a poor human capital investment because of poor due diligence is dramatically impacting the financial bottom line. Orsus' article reports, 27% of the U.S. employers surveyed said that just one of these bad hires cost them more than $50,000 (The Orsus Group, *n.d.*). The Society for Human Resources weighing in at a statistic that it could cost the up to five times a bad hire's salary (*Ibid*). Quantifying the financial implications through the HR process is relatively clear and concrete.

Quantifiable data to determine the purely financial costs of a bad hire can be broken down as follows: 1) interviewing expenses, 2) training & orientation of the new hire, 3) Agency fees, 4) terminating the individual, 5) litigation counsel, 5) reposting of the position, 6) time to fill calculations, and 7) turnover impact – which includes the cost of doing the above process from start to finish again. Orsus goes on to comment on not just the financial bottom-line data but the productivity loss costs of a manager now reassigning tasks and/or perhaps not getting tasks done entirely resulting in a decrease in customer-satisfaction leading to a decrease in sales.

Research from Gallup, SHRM, Adecco, McKinsey, and Deloitte (most recently the 2019 Global Trends reports) substantiate the pivotal costs and importance of the talent acquisition process to a company's bottom line. With SHRM reporting a pure average cost per hire of $4,129/per, the data extends to the time to fill and turnover (SHRM, 2016). The 2017 Talent Acquisition report, however, lists the cost as $4,425/per. Recruitment expenses are 15% of HR budgets (SHRM, 2017). These two costs alone are enough to render smaller organizations financially hindered. Gallup's work on the millennial impact for hiring organizations reveals that "21% of millennials say they have changed jobs within the past year.... More than 3x the number of non-millennials and... Gallup estimates the millennial turnover to cost the U.S. economy $30.5 billion annually" (Adkins, 2016). A recent research study undertaken by the Brandon Hall Group, Brandon Hall Research Team (BHG) on behalf of Glassdoor quotes a Harvard study finding found that 80% of companies believe that turnover is the result of a bad hire (BHG, 2015). In addition, they report, most organizations underestimate the cost of a bad hire because a single bad hire can impact an organization in a variety of ways. Although the cost of a hire ranges from a few hundred dollars to a few thousand dollars, the cost of a bad hire can escalate quickly proceeding to reference the Zappos costs which are reported to land near $100 million (*Ibid*).

RESEARCH METHODOLOGY

The researcher will outline in the following pages the different layers of Saunders' research onion and its application to the research project.

The planning and designing stage of a research is most important. The final elements, the core of the research onion, need to be considered in line with other design elements which are contained in the outer and middle layers of the research onion. In a kitchen, generally, the first layer of the onion, after peeling, is thrown away. But in research, the outer layers of the onion form the root and the middle layers the building blocks of the research. They are crucial to the development of an appropriate research design which is coherent the objectives and the research questions. The research design should be such that it can be both justified and explained (Sahay, 2016).

Strategies

Survey

Qualitative analytics on a respondent group composed of hiring managers currently in the hiring process along with a subset of managers of newly hired staff (within the past month). The respondents (test group) will represent different organizational levels (Senior Vice President, Vice President, Associate Vice President, Director, Executive Coordinator) as well as gender, age, and ethnicity representative of the organization's staff. Once participants are identified, they will be given a number and only identified by that number to insure anonymity and data objectivity.

Currently, the survey is expected to include results on 13-15 participants with a length of no more than forty questions. The survey construct will use picklist items, Likert scale responses, and a text box for additional comments. After submission of the questions and the agreed upon construct, the survey will be conducted through and administered by a third party.

Interviews – Quantitative analytics – The Hiring Manager subset (control group)

Once the analytics from the survey have been compiled, interviews with the subset will take place. The interview questions will be developed based on the results of the survey outcomes. The purpose of the quantitative component is to serve as a deeper dive into any anomalies or to offer possible explanations of the survey. Additionally, these interviews may help to assess any unconscious bias made evident through the survey. Analysis of pre-and post-hire experience along with interview quotes will complete this section of the hiring manager data points. There will be 4 - 6 interviewees and all interviews will take place in-person.

Interviews – Qualitative and Quantitative analytics – The Baseball Scouts.

This interview section will compile information from two baseball scouts who invest in human capital decisions for a living. These decisions are worth millions of dollars. The participants will be from two separate teams and represent two different generations. Part of the interview will include, if possible, a walk-through on the respective "hiring" matrices composed of both physical fitness skillsets (pure data) and the interpersonal factor, if any. Additionally, there will be compare/contrast analysis of the two approaches. These interviews will take place by phone.

Action/Applied Research

The research relies primarily on the use of data and outcomes from one company centralized at one headquarters. As a result of the current tight labor market and the impact of incoming generations on the workforce, creating a solution for this company is the driver for this research. Diagnosing the problem within the organization by creating a list of actions from questionnaires surveys and interviews, will lead to a standardized solution to the interviewing process – the development of a human capital due diligence tool for non-HR hiring managers.

Archival Research

Using data sets from current archive documents: employee engagement surveys (last three years 2017-2019), a talent management database, performance reviews, turnover reports (2017-2019) will hopefully round out the "picture" painted by the survey participants. Although, there is data going back many years in the TMD, turnover, and performance reviews, it seems best to restrict the years to stay consistent with the employee engagement data for standardization purposes. The employee engagement metric has been chosen because of the correlation between employee satisfaction (the employee) and contribution (the organization/my work within the organization). According to BlessingWhite engagement analysts' model, a "great day at work" is the intersection of high satisfaction and high contribution – the job and the person doing the job. Highly engaged employees are/were good hires.

Data Collection & Analysis

As previously mentioned, the expected measures of data collection from the determined sample group will be surveys, questionnaires, interviews, internal benchmark data, and the development of a checklist for testing followed by another survey/questionnaire on the effectiveness. Every attempt will be made in sampling to pulse a variety of hiring managers in the following categories: race, gender, level, tenure, and department, providing there is enough depth to ensure anonymity in the responses. The data collection group will be primarily composed of a specific company's staff and their hiring cycle.

Those participating in the study will be contacted individually via email or in-person to preserve anonymity. The actual survey links will be individualized to prevent forwarding or cross-contamination of responses. Analytics will be compiled through the survey website and then converted in Excel spreadsheets and visuals (pie charts, bar graphs, etc.) in whatever form is most appropriate to display the results. At this point in the data analysis, demographic data (race, gender, age, level, etc.) will be evaluated to determine any anomalies and/or trends and patterns which would require further investigation or comment. The survey construct has six categories with three response types. The survey itself does not exceed forty questions – considered a best practice among survey developers and analysts:

1. Picklist Items – 4 items
2. Rank Items – 1
3. Likert Scale Items
4. The Hiring Manager as Individual – 10 items
5. Hiring Manager Perspective on Talent Acquisition Process – 8 items
6. Hiring Manager on Corporate Culture Drivers – 7 items
7. CEO Statements on Most Important Trait to Hire For – 1 item
8. Additional Write-In Response

Sampling Method

The data gathering will incorporate two sampling methods: simple random and stratified. The simple random sampling method was chosen because it is conducive to a simple representative sample of the population and all participants are easily accessible (on-site) and reliably available (shared access to scheduling and email network). A stratified approach will be incorporated because it reflects the organization's scorecard initiative driver of a diverse workforce. In fact, statistical measures are in place to assess a diverse pipeline in recruiting and hiring. Because of the significance to the organization, it is quite important that the data participant pool reflect this same priority and commitment. As mentioned above, there will be sub-groups defined by demographics with the expectation this will provide a more valid statistical sample.

Along with the quantitative data gathered using an on-line survey, qualitative data will be gathered using interviews to complement the statistics. The interviews with a smaller data pool of hiring managers, who also participated in the survey, reflect the above stated sampling methods of simple random and stratified. The secondary hiring manager strata of baseball scout interviews complies with the simple representative sample. Access to the baseball organization's entire hierarchy was not available for this research project. However, by choosing two different individuals from two different organizations along with different generational age bands, an attempt was made to gather qualitative data from broader organizational viewpoints.

Ethics

In any research study, the ethics surrounding the participant, the survey findings, and the roll-out of results is paramount. It is accepted practice to challenge the validity of research if there is an indication of researcher-bias and/or undue financial or reputational influence. The results must stand alone, and the researcher's role is to collect the information in as an objective manner as possible. The research ethics rules defined by Easterby-Smith *et al.* (2008), will be the guiding standard throughout the course of this study and in the rollout of results of this research project.

FINDINGS AND ANALYSIS

The Survey Construct

The survey was conducted with a total pool of 18 respondents and 31 survey items over two weeks. Respondents were contacted via email with 2 accompanying documents: the ethics disclosure and a copy of Easterby-Smith's research ethics rules. The survey itself was implemented through Survey Monkey with the link to the survey embedded in the respondent email. There was a 100% response rate (all 18 respondents) and a 100% completion rate (no answers skipped) both of which substantiate the validity of the analysis. The goal of the survey was to identify those items which hiring managers consider most important during the talent acquisition process and the factors influencing their decision-making.

Figure 1: The demographics of the survey respondents broke down in the following manner:

Level	Number
Senior Vice Presidents	3
Vice Presidents	2
Associate Vice Presidents	4
Director Level and Below	7

Gender	Percentage
Female	50%
Male	50%

Ethnicity	Number
Black (African American)	7
White	11

Since final hiring decisions are made at the more senior level, the respondents properly reflected those levels in the hiring organization's decision-making hierarchy as well as the organization's demographic make-up.

The Survey Findings (Quantitative Data)

The first observations center around the "*most important qualities*" and "*least important qualities*" during the interview process. There is an overwhelming understanding that once the resume/technical skillset has been vetted, all proceeding checklists center on the soft skills of the candidate.

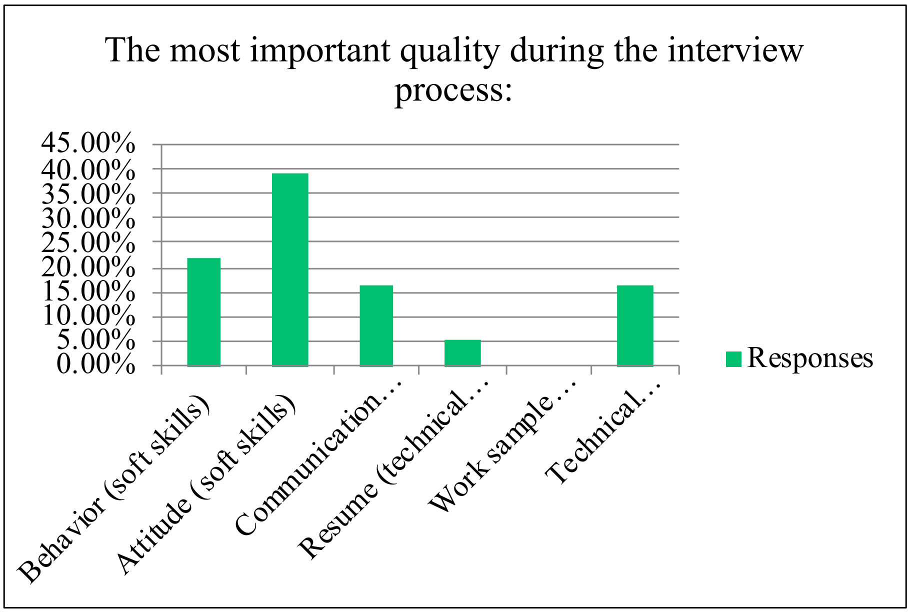

Figure 2: The most important quality during the interview process.

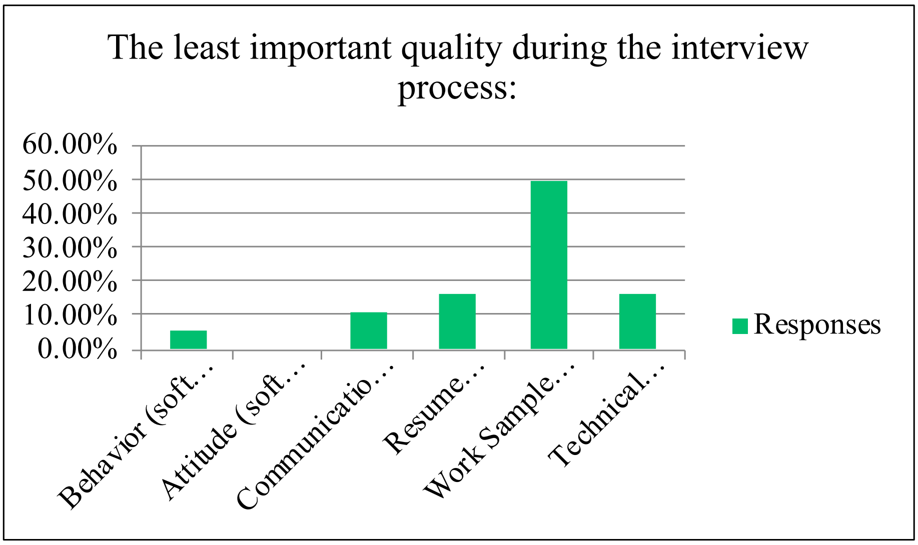

Figure 3: The least important quality during the interview process.

When deciding to proceed with a candidate, there is an overwhelming consensus on the top 3 influencing factors: the interview itself (94%), the cultural fit (72%), and lastly, the resume (61%). This data substantiates the significant role the actual interview plays and the importance of the hiring manager in deciding what type of individual should advance. In addition, during the hiring process (as indicated above), the soft skills of the candidate (attitude, behavior, communication) are the determining factors of success. However, when deciding not to proceed with a candidate, the interview and cultural fit remain the top two deciding factors, but all other categories become almost equally important (the resume, work sample, team members, boss). In the final analysis, respondents were asked to rank soft skills or technical skills for importance in the final hiring decision: soft skills take precedence again (83%).

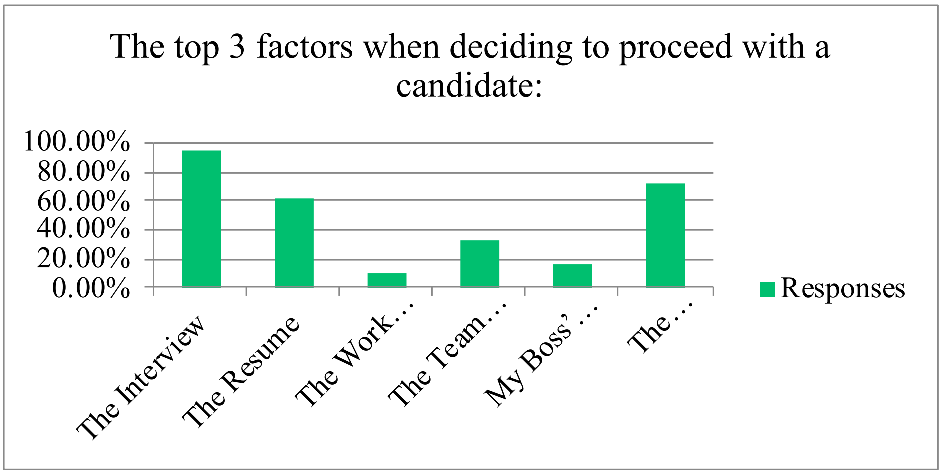

Figure 4: The top 3 factors when deciding not to proceed with a candidate.

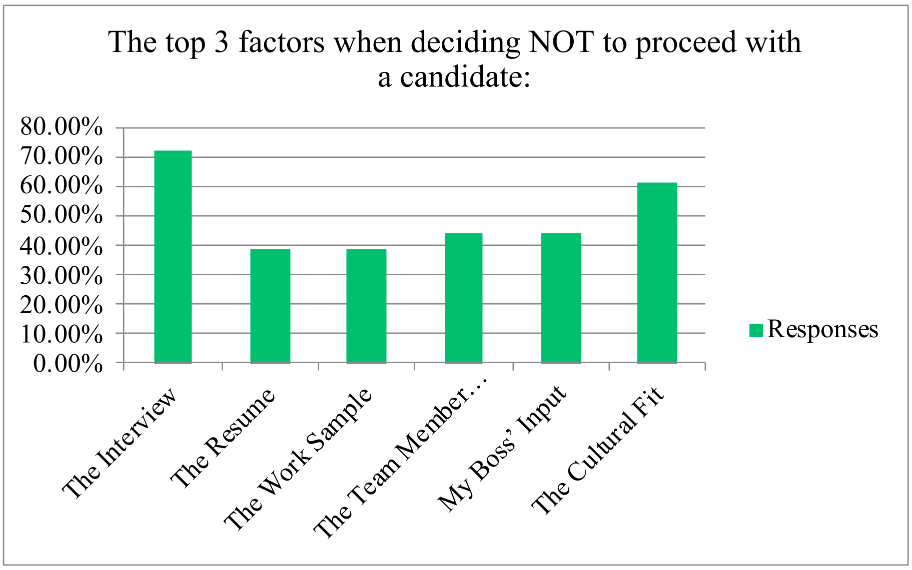

Figure 5: The top 3 factors when deciding NOT to proceed with a candidate.

There appears to be a solid consensus on the interview process as the number one driver towards an acquisition and while that interview is occurring, the soft skills of the talent. Across the question of the hiring manager as individual contributor, there is some interesting data: a consistent favorability score (strongly agree and agree responses) across 8 questions with a conflicted tight pattern on the question of "I rely predominantly on data/technical skills to make talent decisions". And the most telling response is the response to "*I find the candidate selection process to be very easy*" which makes the favorability response to "*I am very clear on the ideal candidate*" incongruous.

These three responses highlight the uncertainty of the hiring managers and point out the significance of a consistent proper due diligence process:

R1: Choosing the right acquisition is not easy as an individual.

R2: Data is the lowest performing consideration with regards to making the final decision as an individual.

R3: And even though I am clear on the ideal, I am conflicted on the actual process success determiners.

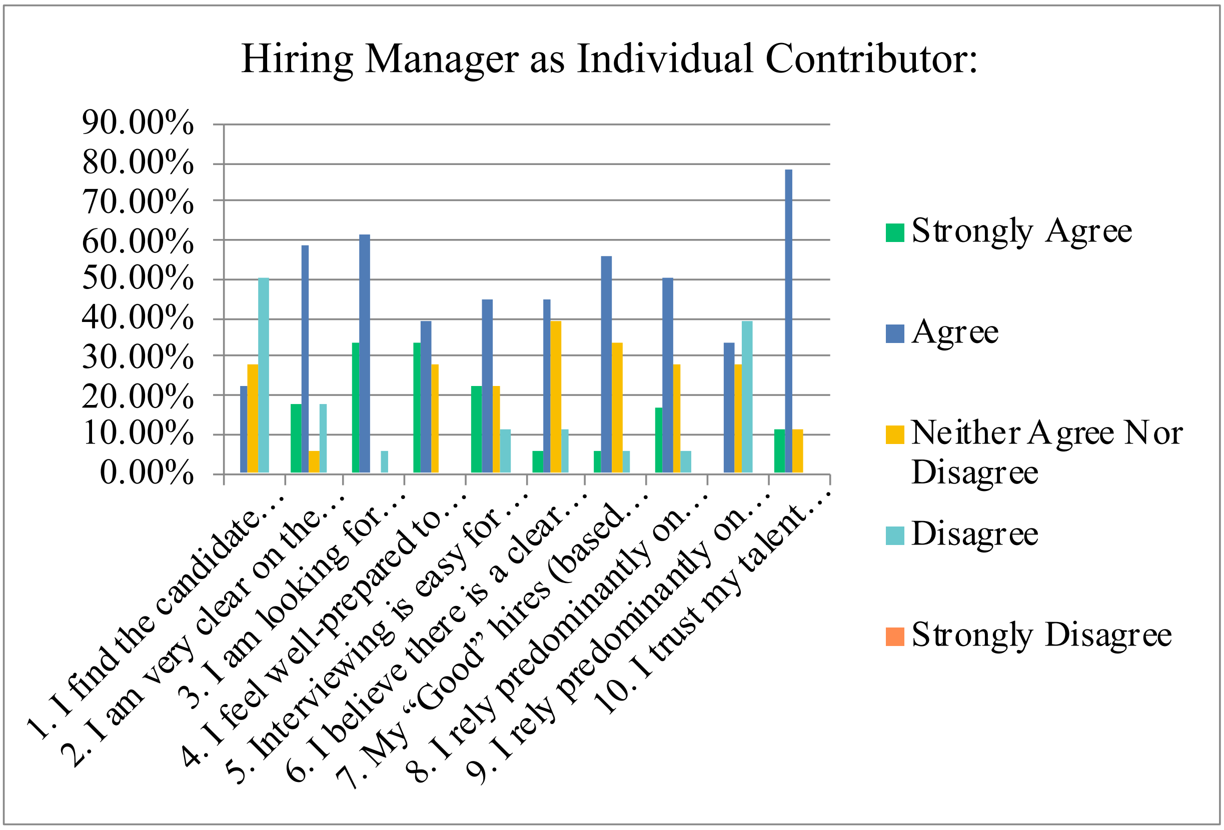

Figure 6: Hiring Manager as Individual Contributor.

*Question 1. I find the candidate selection process to be very easy.

*Question 9. I rely predominantly on data/technical skills to make talent decisions.

The hiring manager uncertainty shows up again in the questions on the manager's perspective surrounding the actual talent acquisition process (Figure 7, Questions 12 and 16). Question 12 states: "*The talent selection process is consistent across my department*" and Question 16 states: "*I have a very detailed process for choosing the best candidate*". Taken in isolation, these responses may not seem a significant, however, all respondents are very clear on what makes a talent worth pursuing, what is most important but cannot clearly rely on the process itself for making those decisions. Consistency and clarity in the process is a concern.

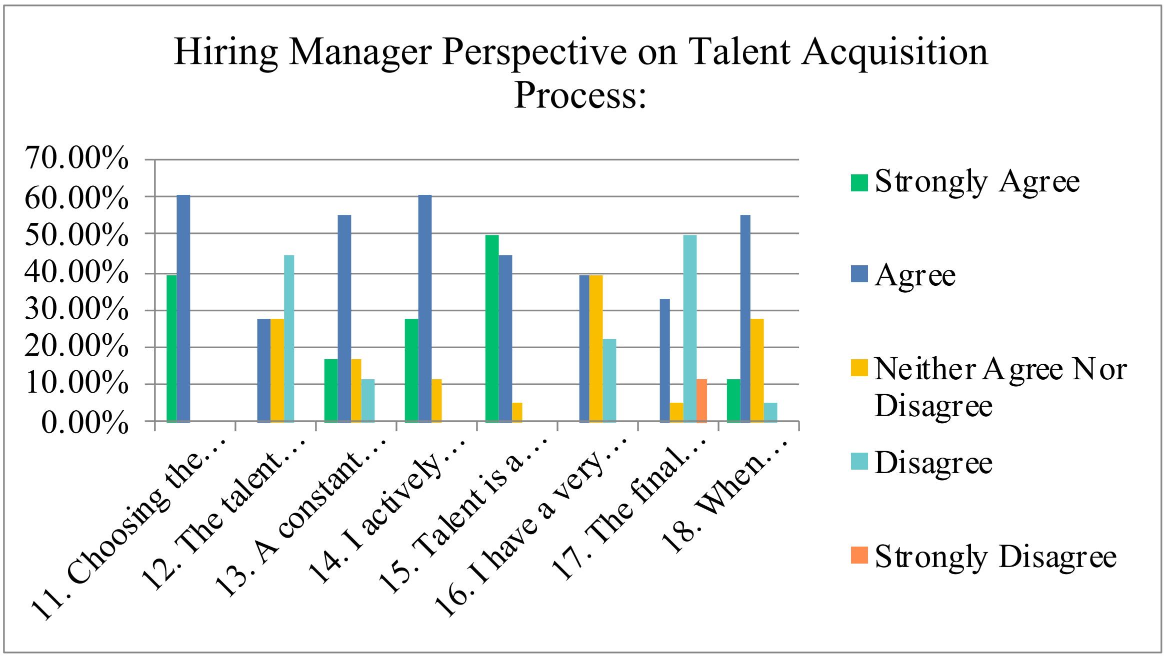

Figure 7: Hiring Manager Perspective on Talent Acquisition Process.

*Question 12. The talent selection process is consistent across my department.
*Question 16. I have a very detailed process for choosing the best candidate.

With Question 19 (Figure 8), begins the analysis of the corporate culture drivers during the talent acquisition process. The purpose of this item was to determine how clear the respondents were on their own culture and whether they could identify it in others. This section was perhaps the most interesting of the survey. Previously, there were clear markers of talent success: soft skills. In fact, culture "fit" was a top ranked factor in choosing to proceed with a candidate. Then the data moved to the actual manager as an individual and the process itself with an indicator that the process itself is not clearly consistent nor detailed. And now, in this section which measures the role of the culture in driving the process, the results show that there is a discrepancy in applying organizational culture itself to the candidate "fit". This is in direct contrast to the outcomes in the Top 3 Factors when deciding to proceed with a candidate: cultural fit was number two with a 72% score (listed above).

These results are at once interesting and confusing. Is it possible to be convinced philosophically that culture fit is a driver but not be clear exactly what that culture is or that the culture has not been properly communicated across the organization? The answer is yes. It appears there is agreement on the broad-brush strokes but not in the detailed understanding of the process or the culture. Questions 22, 23, and 25 demonstrate the lack of clarity around corporate culture. That the perfect candidate for our organization cannot easily been identified and is unclear among the team is problematic and requires further investigation.

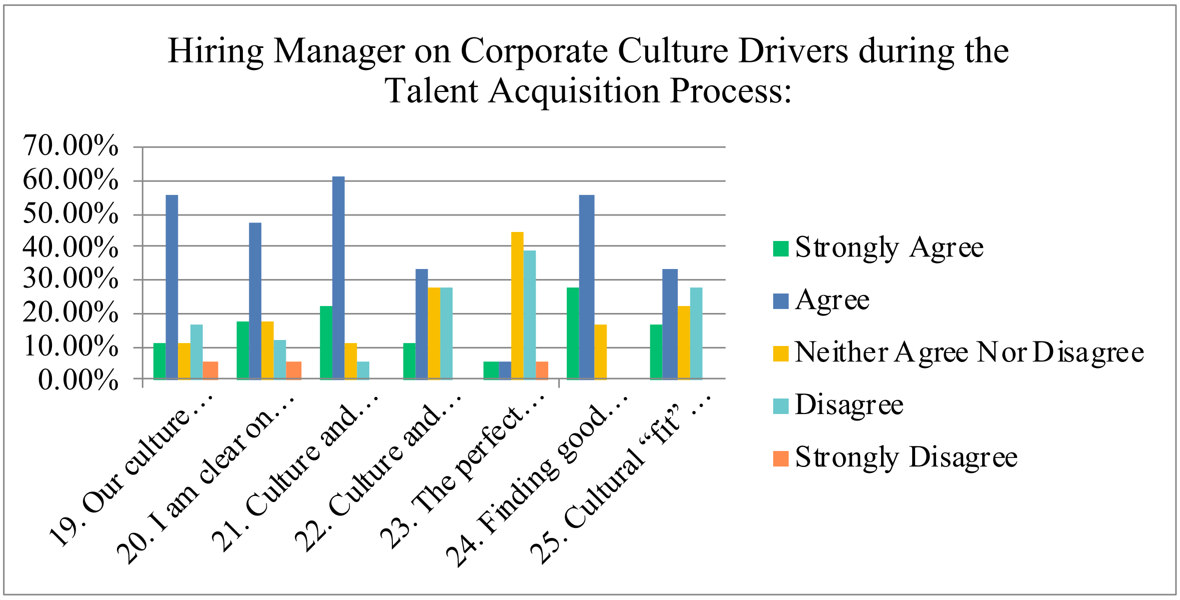

Figure 8: Hiring Manager on Corporate Culture Drivers during the Talent Acquisition Process.

*Question 19. Our culture can be clearly articulated to candidates.
*Question 22. Culture and candidate compatibility is the most important driver for candidate selection.
*Question 23. The perfect candidate for our organization can be easily identified.
*Question 25: Cultural "fit" is clear among the hiring team.

The final survey item listed the most important traits to hire for based on print interviews with nationally/internationally recognized CEOs. While it may seem obvious that respondents would agree with these qualities, which quality is most important was the goal. If a due diligence tool is to be developed, the tool MUST reflect the most important items to the organization when considering acquiring talent. Top favorable traits were integrity (the top choice for Warren Buffett) and team player followed closely by personality, intelligence, and drive.

The Hiring Manager Interviews (Qualitative Data)

The interview control group is a subset of the survey data set. These individuals were interviewed in-person and chosen for participation since they had post-hire performance data. They were each asked five questions along with a completed most recent performance review to corroborate the interview conclusions (See Appendix D for Hiring Manager aggregate responses):

Q1: Did you make a good decision?

Q2: Why? Why not?

Q3: How did you decide? What were the top items on your "checklist"?

Q4: What was/is your deal-breaker? Why?

Q5: Recommendations for the next hiring manager: good/bad

The same demographics mentioned above were taken into consideration to maintain consistency in the research process. All five individuals have made recent hires and there was one consistent response among all five regarding making a good decision "*it's the self-awareness of the manager*" and the top deal-breakers "*attitude/emotional intelligence/team dynamics*". To quote one manager "*skills can be taught, attitude can't*". Another manager stated it this way, "*focus long and hard on the negotiables and non-negotiables*". These sentiments were seconded by the others as well. Indeed, in their experience, they had hired the "real deal" – the person they had met during the process turned out to be exactly what they thought they had seen and "heard".

The reason these comments are meaningful is the repeated emphasis on the manager themselves being self-aware, reflective, able to assess their own and their team's weakness/es in a strategic and non-ego driven manner. Reaffirming the importance of well-trained, thoughtful managers and, in the absence of that quality, a clear consistent cultural practice which provides tools to guide them from A-Z. Since most organizations measure their success by the success of a manager's, it follows then that calibrating the tool by which decisions are made is non-negotiable. The weight of decision-making (and their reputation) resides with the hiring manager.

The Baseball Scout Interviews (Qualitative Data)

The second qualitative data set was composed of baseball scouts. The purpose for choosing this area of sports was the direct financial impact of the human being – the human, as a person, is the financial asset. And while baseball players are hired to perform for the organization's profitability, they are also, themselves, the profit. Athlete's high salaries are well-documented in the media, therefore, the interviews with those responsible for acquiring them. The scouts themselves represented two organizations and two generations (Baby Boomer and Millennial). The Boomer representing decades of personal experience and the Millennial representative – only a few. Both individuals had previously played the sport through the collegiate and minor league systems.

The scouts were interviewed via phone and via email. They were asked the following questions:

Q1: What do you look for in talent?

Q2: Do you follow a very clear selection matrix?

Q3: Are you allowed to deviate from the matrix?

Q4: Does it account for technical skills as well as soft skills?

Q5: Is there a correlation between the matrix and post-hire performance?

Q6: If yes, why? If no, why not?

Perhaps the most interesting finding was the designation of baseball as a sport of "failure". In direct contrast to the usual judgments of using individual success (and therefore the company) as a determiner. The baseball world determines success by the ability to handle failure. Indeed, to quote Scout #1, "*it is the repeated ability of the talent to brush off failure, wake up, get up and do it all over again. It is NOT a success sport*". A Hall of Fame success rate is defined as being successful 3 out of every 10 times. One scout stated that, Nolan Ryan, an American Baseball Hall of Famer won over 300 times but lost over 200 times. This resiliency factor (continuing after regular failures) is the "X" factor in acquiring baseball talent.

When a follow-up question was asked if this failure factor was easy to identify during the selection process, the answer was "not nearly". As in corporate hiring, they are often fooled during the acquisition process because "what is in the "heart" of the talent" simply cannot be measured. A few variables effect the resiliency/failure factor: fame, the pressure of performing before a crowd of 50,000 people, and the high salary equals high expectations. A young person entering the professional leagues may or may not possess the internal fortitude required to perform day in and day out.

Scout #2 begins by listing out the external physical capabilities selected based on a clear matrix of:

- Hit: the ability to make contact with the ball
- Power: the ability to hit the ball for distances
- Run: the ability to steal or any way speed impacts their game
- Defense: the ability to play their position
- Arm: how hard/far can the player throw and is it accurate

Each of these tools is graded on a 20-80 scale with 80 as the absolute best. The major league average is a 50. The Scout measures the trajectory of the player from high school to college to minor leagues using the same rating scale. Consistency over time is an indicator of future performance. It is also worth noting that the organization uses a specific vernacular because it standardizes the way players are evaluated and when comparing in communication to others across the organization, everyone is on the same page. This scout's correlation between the hiring matrix and post-hire performance relies on a consistent grading scale that never changes. If there are inconsistencies, they are evaluated, and additional data is gathered.

Because of the significant financial impact of making poor hire choices, most organizations have instituted vetting practices of home visits (a nod to assessing the talent's character qualities) along with psychological profiles. The baseball organizations also employ a multi-round "interview" process within their regions and confirm the final choices with headquarters. The mental side or "makeup" is done through meetings and background reports. However, beyond the defined physical characteristics/matrix measures of performance, organizations realize the intangibles which significantly override the physical capabilities. In much the same way that the survey findings of non-HR managers showed, once the tangibles are vetted, the intangibles become the final success factor determiners. Field substantiates this when she states, "But hiring is about more than finding the best talent, and the right answer can't always be found on paper, in black and white.... And when it comes to cultural fit, employers just cannot compromise. Many hiring professionals operate with this mentality: a candidate can be trained to do their job well, but a candidate cannot be trained to fit into a company's culture. Companies can help employees adopt new skills, but it's much harder to help them adopt a new personality" (Field, 2019).

Comments to the Outcomes

The first item of note to the above outcomes was the overwhelming importance of soft skills to the acquisition process. The data coincides with current literature regarding focusing not on the "what" but the "how/who". In a world with an ever-escalating change rate, the qualities of the human being are paramount to the organization's success and the respondents all agreed. Secondly, the need for a clear and consistent practice of deciding on candidates is necessary. Not all managers come to the table with the same internal values or experience. This requires a deeper dive into a calibration around decision-making skills and conscious bias. And even more important, if the acquisition tool can build in a consistent approach across the organization (such as multiple rounds of interviews including group input), it can help mitigate personal bias. This topic will be explored more thoroughly in the Recommendations for Further Research section of this paper.

Lastly, and most importantly, was the data surrounding culture. It indicated that the respondents were not clear on the organization's culture. This is indeed problematic and requires further discussion on those cultural markers. However, if the organization itself has no definable organizational values which drive culture, it will continue to be a siloed approach to hiring. This means, each department hires according to its own personality which does not benefit the organization. Hickman, in his article "Check Your Culture: 3 Questions for Managers" states "only 41% of employees say they know what makes their workplace unique. Alignment on 'how things get done around here' starts with managers… Your culture lives or dies day to day through your managers" (Hickman, 2019). Furthermore, Eric Sui states, "a second-level manager who earns $62,000 a year and has been terminated after 2.5 years can cost you $800,000 or more" (Sui, 2019). Sui goes on to write "it has been reported that bad hires result in a -298% ROI on average" (*Ibid*). Sui also references sports teams and their rigorous hiring approach which includes multiple individuals at various stages and levels – all in the pursuit of, as Sui (2019) defines it "rock solid talent".

In a corporation where multiple departments are involved in the hiring process, one should carefully consider that while a candidate may be successful in one department, he/she may not be successful in another. Perhaps the scout comment on a unified "language"/vernacular would be a good first step in communicating cultural objectives. In a clean acquisition process, a "good" acquisition is a "good" acquisition and is successful regardless of the individual implementing the "checklist". A calibrated process is one which is consistent and clearly communicated to those who are doing the actual acquisition across all departments in the organization.

The findings of both the quantitative and qualitative data sets seem to indicate a generalized understanding that the most important and impactful aspect of the acquisition process is the "x" factor: assessing the soft skills (resilience, attitude, behavior). It is the deal-breaker. The ability to develop the proper technical skillset matrix is industry dependent. These are variables which must be defined by the needs of the organization as well as being applied concretely and consistently across regions and departments to establish a valid due diligence vetting construct. Once these external parameters are met, the process of seeing the "good" begins. Avoiding a bad hire is to see and recognize a good one. As individualized as the organizations are, they all rely on the intangible "x" factor to make the final acquisition in the due diligence process. Additionally, as indicated previously, both data sets are localized with a small number of respondents. Although a 100% participation rate helped to mitigate the results, it can be understood to be too limited to draw meaningful conclusions. Conversely, the data sets were from two different industries representing different functions, age, gender, ethnicity, levels, and areas of expertise. These demographic considerations alone help mitigate the limitations of the study.

Considering the gap in both theoretical and empirical literature findings surrounding a tool for a good hire acquisition process, this study substantiates that there is indeed a gap in the good hire acquisition process data and a need to develop one. The missing "data" surrounds the ability to concretely see and assess the talent during the final stages of the acquisition process. The gap in the literature exists because there is a gap, and it is found in the human equation. Identified by the baseball scouts' "x"/ resilience factor and further identified by the corporate data set's lack of cultural consistency drivers, the intangibles are too difficult to predict and, therefore, too difficult to report on with reliability. As referenced above by both Warren Buffett and Google's Laszlo Bock, there are simply no absolute predictors nor a perfect tool for assessing the human of the human talent process. Indeed, it appears that the ability to make the final acquisition relies on the decision-making skills of the acquirer. This critical component, then, must be accounted for when developing the due diligence tool.

CONCLUSION

The final chapter will address the main conclusions of this study, as well as recommendations for further research. In addition, a proposed human capital due diligence tool will be presented.

This research study was initiated to seek a solution to the gap in literature addressing an acquisition tool for non-HR managers for due diligence in the talent acquisition process. The first research question centered on the purpose of due diligence in corporate asset management and established a working definition as a principle for application in the human capital space. After assessing two well-known acquisition firms, a working definition for human diligence was identified as "the care a reasonable person should take before entering into an agreement or a financial transaction with another party" (Chen, 2019). The two very different approaches, KPMG, and Warren Buffet's Berkshire Hathaway, highlighted the need for human capital investors to move into the "both/and" approach of assessing hard technical data as well as the soft data of human characteristics. KPMG has created a service entitled "KPMG – Integrity Due Diligence" (KPMG, 2019). This service identifies the due diligence practitioners as "forensic specialists". The Integrity Due Diligence process is composed of three components: rapid approval (risk assessment), enhanced due diligence, investigative analysis. KPMG goes on to state, "During the pre-onboarding phase, there's only so much you can discover about a third-party entity with surface-level techniques… Before you enter a business relationship with a third-party, we provide you with the right resources and specialized knowledge to be able to assess your third-party environment for reputational and integrity risks" (*Ibid*).

Warren Buffet's comment on acquisitions also iterates the importance of integrity in the due diligence process by "looking them in the eye" and when he states the following regarding human capital, "Somebody once said that in looking for people to hire, you look for three qualities: integrity, intelligence, and energy. "And if you do not have the first, the other two will kill you".

Marcel Schwantes, in his article on Buffett's hiring for integrity, lists the 12 questions one should ask to validate candidate integrity (behavioral interviewing).

The results of the top quality to look for when hiring survey item returned the response of "integrity". This choice further validates that expressed by KPMG and Warren Buffett. The ability to define the non-negotiable of "integrity" will be the responsibility of the organization. Incorporating and clearly communicating these components will establish the foundations of the human capital due diligence process. It is, therefore, clearly incumbent on the hiring organization to define not just the "what" but the "who" of talent: is this person the real deal? Or, as one trainer has stated, "does the audio match the video?".

As this research paper has identified, the roles of both technical and soft skill data are intertwined during the interview process and must be addressed together during the due diligence pursuit. In fact, given that "integrity" is present in both approaches and substantiated in the survey, one may perhaps conclude that integrity is the establishment that both hard and soft data are accommodated and consistent across the process – necessary in presentation and in investigation. With the goal of reputation management and risk mitigation, it may be a profitable consideration for a company/an individual to incorporate into the human capital due diligence process the primary pursuit of integrity: consistency in word and in deed.

The goal of a solid human capital acquisition process is to avoid a bad acquisition. The studies mentioned in this research project clearly establish the significant costs not only in dollar amounts but in the detrimental intangibles of morale, reputation, toxic cultures leading to lost productivity and turnover resulting in financial losses. As a matter of analysis then, it would make sense to focus on the benefits of a good hire – what defines a good hire, how to assess a good hire in advance to avoid the negatives defined above. However, exact measures for a good human capital investment are elusive. There are a few due diligence approaches which are company-culture influenced around the ideal acquisition: types of interview questions/requirements (situational, behavioral, work product, etc.), the cultural fit as defined by each group, requisite matrices defined by headquarters, as well as the role of hard and soft skills. Creating a tool then to mitigate bad investments would appear to be a solid solution to non-HR hiring managers in an organization. However, the literature does not address a good acquisition as a stand-alone measurable concept. It appears to be defined by the avoidance of the "bad".

Indeed, it may be concluded then that avoiding a bad acquisition is defined as being able to "see" the good. Referencing the work of KPMG and comments by Warren Buffett as well as the research findings of this study, there is a correlation between the "good" – identified as "integrity" – and the creation of a human capital due diligence process centered on determiners which seek to assess the integrity of the human investment. The gap in the literature on an innovative tool exists because there is, indeed, a gap. Creating a due diligence construct which is scalable and can be generalized is difficult because of a few variables around calibration: the talent market at that time, the workforce generational composite, corporate culture and values, and the skillset of the actual practitioners. A tool which focuses on both the technical and soft skillsets should have the goal of reconciling both skillsets into the whole. In other words, there should be consistency across the actual person, the technical skillset, the soft skillset and the attitudes and behaviors exhibited as the talent proceeds through the acquisition process. In fact, one may even go so far as to conclude that if all these areas are not consistent, integrity is absent. Accepting integrity as a diligence success measure would require establishing a working understanding of the concept as it applies to an organization's culture. Clarity of what makes talent "good" for an organization will be necessary in developing a tool for those areas which should be evaluated for integrity. Integrity, as a concept, is used in IT for establishing internal consistency and generally as a state of being whole and undivided – what one sees is what one gets. There is no variation in behavior, word, or fact. And, to reiterate the quote of one of the non-HR hiring managers, "I knew I had a made a good hire because they turned out to be exactly what I saw and experienced during the interview process – they were the real deal".

As this research project has contended, the importance of the non-HR hiring manager to the human capital acquisition is paramount and, with the data collected, emphasizes the need for all managers to be trained in a consistent manner in accordance with the organization's culture and values. Human Resources can mitigate the due diligence process for non-HR managers, but the actual day-to-day impact of a company's managers is the point of critical impact. Although companies may make acquisition decisions based on the tangibles of stats, P & Ls, the stock exchange or an analyst's valuation, the real work begins once the interviews start, and the acquirers delve into the "real" inner workings of the acquisition. So, too, the acquisition of human capital requires skilled due diligence practitioners who guide decision-making through the intangible soft science of human capital.

Previously indicated at the outset of this research project, the guiding research questions and objectives were determined. By answering the research question on the significance of the due diligence process, the establishment of a working definition for human capital acquisition was identified and met. Determining the financial implications of a bad human capital investment and the benefits of a good human capital investment research questions were examined, assessed, analyzed, and met. Establishing a correlation between the types of human capital acquisitions (good and bad) and the due diligence process (interviews/hiring) were also met.

Based on the conclusions of the studies in this paper and the research findings, a proposed human capital due diligence tool may embrace the following components with an overarching goal of establishing acquisitional integrity to determine if, indeed, the candidate is the real deal:

- Component #1: Paper: Resume, Work Product
- Component #2: Face & Voice: During the interview process, does the "audio match the video". Are the words and voice consistent with the hard data submitted?
- Component #3: Presentation: As the human goes through the entire process, are the behaviors and attitudes consistent with the Face & Voice and the Paper. What are the human interactions which validate OR give pause to establishing this consistency? For instance, interactions with other staff they may encounter including initial introductions from Receptionist to Administrative Assistants.
- Component #4: The We: Did all participants in the acquisition process "see" and "hear" the same person? If not, why? Calibrating across the team helps mitigates the risk of a bad acquisition and ensures broader corporate values are met. "We" are all trying to determine who the candidate really is.

A good due diligence construct will seek consistency across all measures. The "integrity" construct implies a matching across all categories – the person is the same regardless and the product reflects on the person. At every point, the question of "does it match" should be asked and if this cannot be adequately answered, a pause for further investigation should begin. The goal is to determine the origin of the discrepancy, address it satisfactorily (or not) and move on. When developing the construct, an organization should use any data tools on hand to continually refine trends and patterns identified internally. These tools include performance appraisals, engagement surveys, exit and stay interviews, and participation rates (training, staff events, etc.). Using a variety of sources to determine cultural markers of success will assist in the development of a solid due diligence tool. In addition to HR analytic data streams, it is important to consider the generational/ demographic make-up of the organization. Do these data points affect the implementation of the construct – is it bias-free and does the language communicate across generations as well as "up and down" the chain of command. Defining what is "good" internally will provide clarity on seeing that same "good" externally as it presents itself during the due diligence process. If there is a variation, pause and evaluate why and where that "gap" may be.

Closing the gap on information requires a refined skillset on behalf of the acquisition specialist. Recognizing that the gap exists is a starting point and provides the impetus for further research which will be examined in the following section.

Recommendations for Further Research

The research completed in this study on the art and science of human capital due diligence highlighted the need for further study on adjacent topics. While initially the concept seemed quite one dimensional, it became evident that for all the pieces to work together successfully, further training and assessment in specific areas are needed and would be beneficial to a solid due diligence construct. Below are some research recommendations based on readings conducted during the lifecycle of this project.

Extending the research assumptions and findings to a broader audience

One of the limitations of this study was the localized and comparatively small participant sample. Once the foundations of the human capital due diligence construct are established, the question then becomes do these foundational principles hold across industry sectors and is it scalable? In addition to expanding across sectors and size, it would seem logical to incorporate the role of a cultural "overlay" on integrity components. For instance, not all cultures present and value in the same way. Once implemented, would the construct hold with the intangible and tangible success parameters for each culture.

The impact of CEO values/philosophy on non-HR hiring managers

It may seem like an obvious answer, however, not all CEOs adopt a talent first philosophy. It is also a given that their respective values on hiring are communicated first and foremost through the HR department. This "one step removed" may (or may not) dilute the communication of such values to the actual individual managers. Most organizations rely on the managerial day-to-day experiences to drive what/who the respective departments are hiring for. HR is not necessarily the Subject Matter expert. If so, is the CEO philosophy expressed through to the actual groups doing the interviewing and subsequent hiring. Numerous high-profile CEOs express what they are looking for and how they make decisions around the ideal candidate. Are these values converted into a construct for implementation by not only HR but also by the non-HR practitioner? Fred Kiel's research in his book Return on Character (ROC) identifies four-character qualities which led to higher profit than those without. The ROC matrix is composed of the following: integrity, responsibility, forgiveness, and compassion (Kiel, 2015). Can these same qualities be quantified in a human capital due diligence construct successfully? If one is to consider Kiel's findings as corroboration to the comments of KPMG, Warren Buffet and this project's research, "integrity" is a unifying qualifier for quality leaders and future human capital investments.

This study began with the purpose of defining the need for a due diligence construct in the human capital acquisition process. The research indicates that not only is a human capital construct missing in the wider discussion but an innovative tool for assessing human capital during the process is also not adequately addressed. Gathering survey and interview data from those involved in the process led to the conclusions that most individuals are clear on observing the "good", but they are conflicted on defining that good across the organization's culture in a consistent transparent manner. Owing to the impact of everyone in the process, it became evident that the individuals doing the assessing must be highly trained "interpreters" of seeing and understanding what is good. Creating a solid human capital due diligence tool is based on the concept of integrity: the external matches the internal, there is no variation between hard data, soft data, and the person of the process. Concluding with a proposed due diligence construct, this research project has established the importance of human capital as a financial asset and, by consequence, elevated the role of non-HR hiring managers and their impact on the due diligence process. Human capital is the greatest, and perhaps only, investment which replicates itself. Changing the conversation from avoiding the bad to "the good sees the good and hires the good" is a proposed way forward in constructing human capital due diligence.

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THE IMPACT OF PANDEMICS ON CONSUMER PURCHASING OF LUXURY AND FASHION: LESSONS FROM HISTORY

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ABSTRACT: *This article looks at how consumer purchasing of fashion and luxury has adjusted to periods of pandemic. We take as examples the bubonic plague in the Middle Ages, where suffering and surprising wealth of survivors lead to extravagant luxury spending. How, by enforcing social distancing, fashion brought about clear class distinctions as well as protection. How women were in turn protected, hampered and liberated by fashion. And later how the first luxury experiences resulted from the devastation of the 1918-1920 Spanish Influenza, a turning point for the luxury industry. Finally, we consider 21st century fashion distancing extremes and the often-unexpected economic impact of the COVID-19 crisis on fashion and luxury in 2021. There is a lot to be learned from the past.*

KEYWORDS: fashion, luxury, history, material culture, quality of life, pandemic, plague, tuberculosis, Spanish flu, trends, masks, economic future, COVID-19.

When the earliest humans donned clothes of bark and grass to protect against the elements and disease, no doubt each twisted the grass in a way that showed their individuality and social standing, in fact fashion. This paper defines fashion as the prevailing style of clothes, hair, furniture, at a particular time. It expresses the look of the moment and reflects personality and self-worth as well as economic, political and social standing. In passing, it provides protection from the elements and also from contagion. Items such as masks, capes, ruffs, pointed toes and hats and padded shoulders go back a long way.

Luxury is a growing market at the upper end of the scale, offering a state of great comfort and elegance to the fortunate purchaser. Often, a certain level of social status is associated with the possession of luxury products, conferring a high level of exclusivity. We will see how when the pandemic is finally over or before the next wave, the relieved consumer often purchases luxury items as revenge after all that suffering. Hence the term revenge buying.

1 Additional research for this article was provided by Natalia Shemyakina, Art Historian and Master in Fashion & Luxury Business student at EU Business School, Geneva campus.

THE EARLIEST OUTBREAKS

Plagues have always been with us. One of the first recorded occurred in Athens in 430 BC, later sweeping across Europe, infecting the Roman Empire, the Byzantine Empire and with colonisation, the rest of the newly discovered world. In the mid-fourteenth century the Black Death was brought by boat from the East to Europe, entering through Sicily perhaps with the ship's rats. It was at its most virulent between 1347 to 1352 when it is estimated some 25 million people died; between one-third to one-half of the European population.

Geneva records show how more than a century later, in 1454, there were a further 14 recurring episodes in the hundred years until 1550 (Gautier, 1894). Methods of prevention were similar to those of 2020 although before today's nuclear and single households, many lived in close quarters and cramped lodgings. Mortuary notices list the same names on page after page, showing the desolation of families (*Ibid*). Borders remained open, but merchants from infected areas had to fumigate their clothing for 30 days. Money was soaked in vinegar (*Ibid*). Almost totally Christian Europe could only feel that the plague had been sent in punishment for sins. It left behind an undeniable sense of despair and sadness, manifested in many cultural and artistic forms such as paintings and tombs (Medrano-Cabral, 2005).

THE MIDDLE AGES AND THE ESTABLISHMENT OF FASHION CODES

Disease travelled far and wide during the prosperous 13th and 14th centuries, spreading thanks to new methods of transport and economic expansion. In parallel, fashion developed in these same years (McNeil, 2016) when men and women began to dress differently from each other. Johan Huizinga, a Dutch historian, claimed in *The Waning of the Middle Ages* that "no epoch ever witnessed such extravagance of fashion as that extending from 1350 to 1480." He claimed it represented "the decay of overripe forms of civilisation" (Huizinga, 1922).

During a lull in the pandemic, the long, draping, formless garments, like 2020's lounge wear, gave way to tighter, form fitting women's dress (Goldthwaite, 1987). Textiles became finer and richer. In Italy, luxury goods such as silk, wool, cotton and dye previously imported from the Far East were produced by local craftsmen using newly perfected tools and a newly acquired knowledge of colours, fabrics and textiles. Fashion, after years of social distancing served a craving for touch through sensual fabrics and cuts according to French stylist Camille Bidault-Waddington in the Financial Times (2020).

Textiles such as fine wools and tapestries were key to the development of this culture of appearances as it was later termed. By the early 14th century, silk was produced in the Italian towns of Lucca and Venice. England produced wool and was able to import silk from Italy and Spain thanks to the newly developed trade networks across Europe. Traders came through Bruges and Paris, the new epicentres of fashion. Cloths of gold and figured silks without pile were the most expensive. By the mid 14th century new textiles like velvet had reached prominence (Monnas, 2008).

Part of this extravagance could be attributed to the aftermath of the plague and the sizable inheritances of many of the survivors. Where wealth had previously been the prerogative of the aristocracy, it now filtered down to a growing middle class of merchants and tradespeople. One such couple is pictured in Jan van Eyck's 1434 painting, the Arnolfini Portrait at the National Gallery. The much-discussed masterpiece is believed to show the wealthy merchant Arnolfini and his wife. The couple's wealth and social status show in their rich robes and furs without their risking criticism for aping the aristocracy, a serious offence at the time.

This sudden inherited wealth was known as the inheritance effect (Goldthwaite, 1987). It brought about a trend of luxury spending which replaced the previous investment spending in agriculture and construction. The authorities, keen to protect their position, introduced sumptuary laws to control luxury spending. Such laws had come into existence during the Roman Empire and became more widespread in the 12th and 13th centuries. They were established to curtail spending on non essential goods in times of pandemic. Like today, shops were shut down to prevent purchase of non-essentials. Nobility, merchants, liberal professions and trades people were allowed a certain level of spending dependent on their social rank. Surprisingly, the austere,16th century protestant reformer, Jean Calvin, rejected the traditional religious view of aesthetics, when he admitted that "We cannot abstain from things which seem to serve pleasure more than necessity" (Walker, 2004). His view lead, albeit indirectly, to the creation of Geneva's reputed luxury industry. For while Calvin did not forbid artisans from crafting non essential goods he forbade citizens from purchasing. The artisans had to find a new market, and that market had to be outside of Geneva.

Nearly 100 years after Calvin's death and four years after the end of the last plague bout, Geneva's Reformation Chamber (Walker, 1987) began its most severe repression of citizens. For 12 years almost 10 percent of the Geneva population, essentially women, were brought before the courts as "agents of luxury" for wearing clothes, jewellery and apparel considered to be above their station. Denounced by fellow citizens or bourgeois, they were accused of exterior signs of wealth and excessive spending. Clothing requiring too much fabric, decoltés considered too low cut, as well as fabrics like taffeta, damas and silk in colours of fire: violet, yellow, green or "dying blue" (*bleu mourant*) were all punishable under sumptuary law. There were multiple infractions for excessive apparel at ceremonies such as funerals, marriages and baptisms. For example, coats worn by mourners had to be a particular length based on the social class of the wearer. In 1648, one Jacques Genou was denounced for burying his wife in a coffin pulled by a donkey and dressed in clothes above her station (*Ibid*). The moralising tone encountered in today's media is redolent of this type of thinking.

BEAKED MASK IN THE EARLY 17TH CENTURY

The plague was not over in three months nor in two years. Outbreaks continued for centuries. In the early 17th century the plague doctor with the now iconic beaked mask first appears (Rabinovitch-Fox, 2020). Hired to prescribe concoctions and antidotes, write wills and carry out autopsies, plague doctors wore a frightening costume still worn at the Venice carnival and a staple of the Italian Commedia dell'Arte (Artuso, 2015). The costume is reputed to have been developed by Charles de L'Orme, a physician who catered to the medical needs of many European royals during the 17th century, including the French King Louis XIII (Mussap, 2019). First seen in 1619, the costume involved a coat covered in scented wax, breeches connected to boots, a tucked-in shirt, and a hat and gloves made of goat leather. Plague doctors carried a rod that allowed them to poke at victims or keep them at a distance. They wore spectacles and the mask with its nose "half a foot long, shaped like a beak, filled with perfume with only two holes, one on each side near the nostrils, but that can suffice to breathe and carry along with the air one breathes the impression of the [herbs] enclosed further along in the beak" (Mussap, 2019).

CRINOLINES IN THE 19TH CENTURY

By the 19th century, fashion had evolved to ensure a clear class distinction that had arisen from the Industrial Revolution of the early part of the century. Women's virtue became a precious commodity ensuring a suitable marriage. Stiff and voluminous crinoline skirts protected women from smallpox and cholera - and from unwanted male attention. As fashion moved on from crinoline skirts to large hats, hat pins served as a deterrent to potential harassment (Rabinovitch-Fox 2020).

During the Victorian era, tuberculosis, the wasting disease, was romanticized in opera, art and literature. The *Smithsonian magazine* quotes Carolyn Day, assistant professor of history at Furman University in South Carolina (Day, 2016): "Between 1780 and 1850, there is an increasing anesthetization of tuberculosis that becomes entwined with feminine beauty".

The exaggerated pale skin, rosy cheeks and lips as well as extreme thinness inherent to the disease, were seen as an enhancement of feminine beauty. The slim figure was accentuated by low waist corsets and voluminous skirts.

This was to change when Robert Koch (Mullin, 2016) acknowledged that bacteria helped spread the disease. Doctors pointed to the long skirts that vehiculed germs, sweeping them from the street and into homes. *Figure 1* below depicts a cartoon *"The Trailing Skirt: Death Loves a Shining Mark,"* appeared in Puck magazine, showing a symbolic representation of a maid cleaning a long skirt of the germs (Samuel D. Erhart "The Trailing Skirt: Death Loves a Shining Mark" *Puck,* August 9 1900).

Source: The New York Times, 2020.

The 'hygienic dress' movement of the 1880s further pushed for a change in fashion, promoting shorter hems and slimmed down volumes, a movement that was to continue to Coco Chanel in the early 20th century.

FACE MASKS BECOME A GLOBAL PHENOMENON

The late 19th century saw the generalised use of face masks, rather than the limited medical use during the plague. According to "*The History of Surgical Face Masks"* by John L. Spooner, the first mask was used by surgeons to contain the spread of sepsis. In 1897 Johann von Mikulicz Radecki, a polish surgeon, described the surgical mask made out of one layer of gauze. Later in 1898, the masks were made from double layered gauze, and were proven to be efficient if not worn too close to the nose, to avoid the collection of moisture. In 1918, the diphtheria outbreak in the attendance of infected patients was reduced to zero after the wearing of sterilized double thickness gauze (Spooner 1967).

By 1910, according to the *New York Times*, masks were adapted by Chinese authorities. Christos Lynteris, medical anthropologist, claimed that masks became "emblematic of medical modernity. They had a double function — both to stop germs and to transform people into scientifically minded citizens."

The mask became a global phenomenon because of the Spanish influenza in 1918. On 24 October 1918, wearing a mask became mandatory in some states in the U.S. Songs were created to prompt the rule "Obey the laws, and wear the gauze. Protect your jaws from septic paws." In *Figure 2*, photos show families posing in face masks where even the cats are covered (Mail Online, 2020)

Source: Mail Online, 2020.

The media encouraged Americans to wear masks as a contribution to the war effort. In October 1918, the *Seattle Daily Times* headlined "Influenza Veils Set New Fashion: Seattle Women Wearing Fine Mesh with Chiffon Border to Ward Off Malady." These "fashionable" masks were made from dubious material and probably were not very effective. There was also debate within the medical and scientific community about whether multiple-ply gauze masks were effective.

THE GOLDEN AGE OF LUXURY

World War I combined with the Spanish flu epidemic brought about the death of between 25 and 50 million people, especially young men, the disruption of succession in the great landed estates, and the destruction of huge swathes of Europe (McNeal, 2016). In its wake, luxury underwent a new definition, no longer reflecting the opulence of the Belle Époque when all had seemed possible. The fashionable set in the 1920s lived in the moment, for the first time looking to luxury as an experience (*Ibid*) not just possession of objects. Luxury became simple and chic with designer Coco Chanel's use of paste and fake jewellery, for which she became famous (*Ibid*). In the 1920s France's luxury fashion business was composed of three hundred thousand workers, including cutters, fitters, seamstresses, embroiderers, furriers, shoemakers, weavers, spinners, and milliners (Thomas, 2007).

Fashion as spatial barrier

In the late 20th century, fashion was intertwined with ideas of identity and individuality (Quick, 2020). The 1980's saw women's professional access to power underlined by power suits with padded shoulders and masculine cut, worn with high heels. These women wanted to prove that they had arrived and arguably spurred on the democratisation of luxury with their purchases. At the other end of the spectrum, Punks wore spikes and rivets as a deterrent to social contact. In the 2000s giant hoodies and down-filled jackets provided space in the cities, far from the ski slopes for which they were originally intended.

Masks came out of the strictly medical world to become an extension of self (Baronian, 2020) in the 21st century, exposed to the themes of political crisis and global warming as well as the Covid crisis. In 2015, masks were seen on runways and in the celebrity audience to set a challenge. For example, Chinese designer Masha Ma presented a Swarovski-studded mask in her 2015 Paris spring show. Vanessa Friedman, in the New York Times, described how "Gucci made one for Billie Eilish to wear with her all-Gucci look at the Grammys, as part of her message that her body is her own, for her" (Friedman, 2020). Post-apocalyptic fashion appeared with the use of plastic hazmat suits on the Maison Margiela Autumn/ Winter 2018 catwalk (Tregaskes, 2020) and the Gucci Spring/Summer 2020 show presented bags with bullet holders.

The growing air-transmitted pollution became a reason to bring back the mask for protection purposes. Young French designer, Marine Serre produced anti-pollution bicycle masks in 2019. The New York Times quotes her "A mask creates a barrier between you and the world" as piercings did for the Punks. (Friedman, 2020) The masks were later adapted for Paris Fashion Week at the end of February 2020, in collaboration with the Swedish company Airinun as a method to prevent the spread of the virus (*Ibid*). Her runway models were accompanied by giant hounds loaded with symbolism.

In with lounge wear, out with formal wear

During the Covid-19 crisis, a confined population turned its buying power to lounge suits and informal wear, eschewing the no longer necessary suits and ties. The famously anti-sweatpants Vogue editor, Anna Wintour, appeared in an Instagram post wearing track-striped sweatpants at her desk office (Bravo, 2020).

Fashion in a pandemic could be taken to extremes. Dayong Sun, Chinese architect, developed a concept of a wearable shield "*Be a Batman*". Fast Company refers to the architect as an innovative concept of a lightweight carbon fibre skeleton with added protection of a UV light sterilizer of the plastic surface. The design can be taken even further with the addition of a "a tiny mobile space for special needs" (Wilson, 2020).

Sustainability - the new future of the fashion market

In March 2020 it was predicted that the fashion market would face large losses, At the beginning of March, Carlo Cabasa, the head of the National Chamber of Italian Fashion, foresaw failure for the $100 billion-plus fashion industry". (Daily Campus) Marie Owen Thomsen, chief economist at the bank Indosuez, does not see the situation for the fashion industry righting itself before end 2021 in the Tribune de Genève (Radja, 2020). Initially economists had banked on a V shaped schema. As weeks have gone by it is the ever-widening U shaped scenario that has gained credence (*Ibid*).

McKinsey & Co. (2020) conducted a survey on Consumer sentiment toward sustainability in the fashion section and found a silver lining to the crisis. Two-thirds of surveyed consumers state the importance of limiting impact on climate change. Additionally, 88 percent of respondents believe that more attention should be paid to reducing pollution.

In practice, consumers have already begun changing their behaviors. Of those surveyed, 57 percent have made significant changes to their lifestyles to lessen their environmental impact. More than 60 percent report going out of their way to recycle and purchase products in environmentally friendly packaging (see *Figure 3* below).

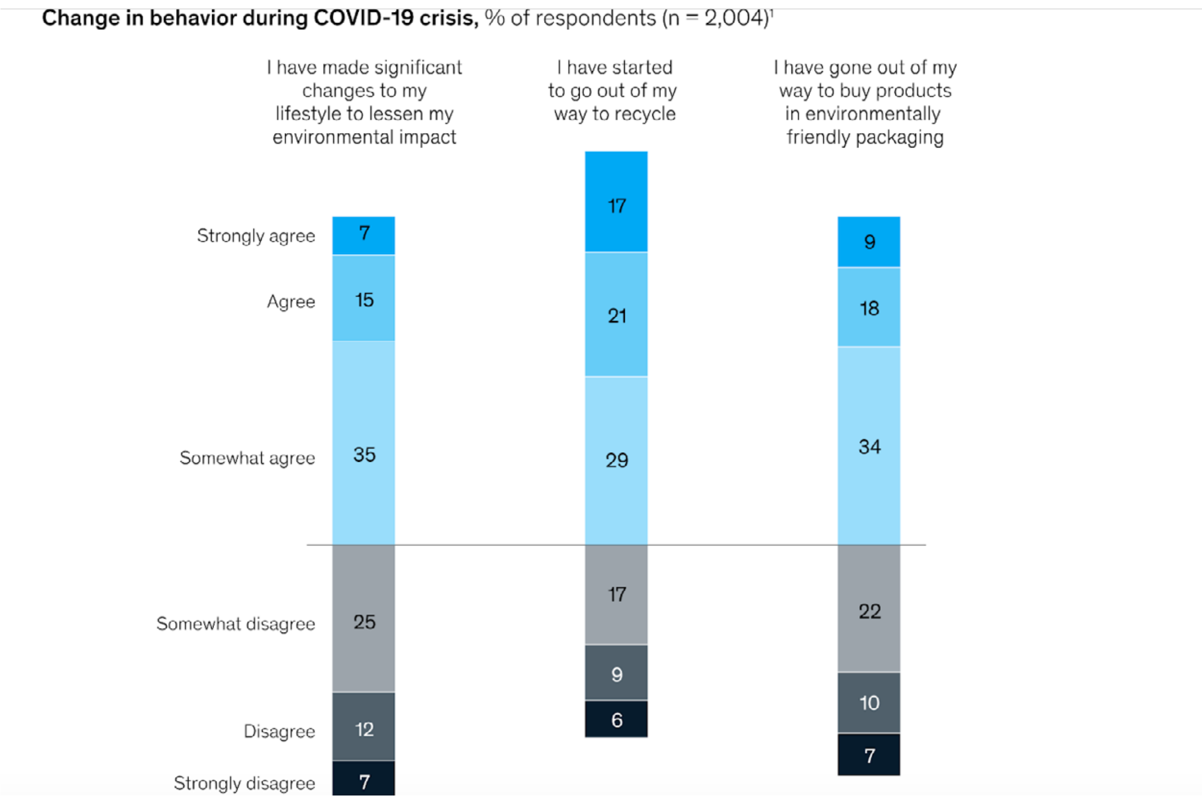

Fig 3. Survey: Consumer sentiment on sustainability in fashion, McKinsey & Co. July 17, 2020 |

THE FUTURE FOR LUXURY FASHION

Fig 4. The S&P Global Luxury Goods Index performance post-financial crisis versus the S&P 500 Index. Source: S&P Global, Luxe Digital.

Luxury has always been quick to spring back from adversity (see Fig 3). While *Business of Fashion* interviews Luca Solca, investment research analyst at Sanford C. Bernstein, calls 2020 a "gap year", many luxury firms, particularly watches manufacturers, had an excellent 2019 which allowed them to wait out 2020 while filling in orders on the waiting list. In some cases, E-commerce has stepped up in place of bricks-and-mortar. The mono-brand-e-commerce channel, unlike wholesale, will allow it to maintain prices. Companies such as Gucci, Louis Vuitton and Hermes have a strong e-commerce presence in comparison to Chanel, giving them a head start in the new times of isolation shopping.

Bain and Company in its luxury forecast for 2021 predicts a rebound of 14% for luxury this year. The biggest success story will be leather goods and cosmetics, particularly skin care. Watches will have growth of some 11% and jewellery 13%. As for distribution channels, physical multi-brand stores – which had already been impacted before the pandemic – will continue to suffer: in light of the sharp drop in shopping tourism, they suffered a 40% decrease in 2020, and are expected to rebound in 2021 by only +8%.

The desire for luxury, particularly after hard times such as those experienced worldwide in 2020 and 2021, remains constant. Revenge buying was evident in Hermes flagship store in Guangzhou, China where shoppers fresh out of confinement spent a record $2.7 million in one day (Elegant, 2020). Latest sales figures have shown that the luxury market has remained buoyant, largely thanks to the Asian market. "The coronavirus has caused nationwide lockdowns, store closures and widespread unemployment, but it is also important to underscore that there are opportunities that come out of this situation." Claims analyst BOF (Business of Fashion) in conversation with McKinsey (BOF, 2021)

The 20th century philosopher, George Santayana said "those who do not learn history are doomed to repeat it" (Santayana, 1905). The historical perspective outlined above, shows the key role fashion and luxury play in our lives as consumers. It provides protection and comfort with an individual twist as it has done for centuries. Even on zoom it allows us to express our individuality, making life more uplifting and enjoyable in the darkest times. For those who appreciate the best, luxury soothes. And there are some positive factors such as how we, as consumers, especially millennials, are seeking sustainability from our fashion purchases. Resale, vintage, second-hand, are all having a moment too as we step into a kinder future.

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BOOK REVIEW

THE FUTURE OF HUMANITY: TERRAFORMING MARS, INTERSTELLAR TRAVEL, IMMORTALITY, AND OUR DESTINY BEYOND

Book by Michio Kaku

Doubleday, 1st Ed. (2018): ISBN-10: 0385542763: ISBN-13: 978-0385542760

Review by Marc Guerrero

Dr. Michio Kaku is a professor of physics at the City University of New York, cofounder of string field theory[1], and an acclaimed author of several science books. He is a practiced and very effective propagator of science for a general audience. In his last book *The Future of Humanity* (2018), Prof. Kaku passionately makes the case that our common future does not necessarily belong in Earth, but in the stars.

Nobody doubts that technology has transformed our lives, and it is ubiquitous - in almost everywhere and in everything. We have invented and developed new technologies to be better off, but it is also obvious that it has both positive as well as negative impacts. Just to mention two clear examples of the pros and cons; the first one, it has changed the *modus operandi* of education and learning methods. Thanks to on-line classes we could go through the Covid-19 pandemic and continue our courses, but presential-tutorial classes were really appreciated in the frame of a successful hybrid model. The second example, when it comes to technology and health care, it also creates both opportunities and challenges. For instance, today - telemedicine can potentially bridge distances by allowing for care and specialised access to remote and undeveloped areas. However, telemedicine cannot undermine the human touch that is very unlikely to occur online.

The fast proliferation of technology is certainly having a profound impact on our lives. The rate of technological change is faster than ever before, but what is harder to comprehend is that this

1 String theory turns the page on the standard description of the universe by replacing all matter and force particles with just one element: Tiny vibrating strings that twist and turn in complicated ways that, from our perspective, look like particles. String field theory (SFT) is a formulation of string theory in the language of quantum field theory.

pace of change is continuously increasing at an exponential rate. Best-selling author, pioneering inventor, and futurist, Ray Kurzweil[2] points out that there is an exponential growth in the rate of exponential growth. With the convergence of exponential technologies—like artificial intelligence (AI), Blockchain, and Internet of Things, combined with nearly unlimited data connectivity and storage—is bringing us to an inflection point. This exponential rate of change is both a cause for excitement and concern. Kurzweil believes, as stated in "The future of Humanity", that by 2045, we will reach "singularity," the point at which robots match or surpass human intelligence. However, it is worth to know that, and he maintains that, instead of taking over, robots will unlock a new world of health and prosperity.

Though no one can predict the future, we can at least familiarize ourselves and keep track of emerging technologies and their impact, and view the future through a lens of solving our biggest challenges. Distant from being fiction, what Prof. Kaku shows us is how technology can change humanity's future, and how this may be closer than we all think. In Prof. Kaku's book it is lucidly described how humanity's call to look towards space currently features a renewed push due to the high levels of private funding, advances in technology and growing public-sector interest. Transformational leaders and firms like Jeff Bezos's Blue Origin, Richard Branson's Virgin Galactic and Elon Musk's SpaceX, are investing massively in space exploration and creating something that we have not witnessed since humans left the leading footprints on the moon, on July 20, 1969.

In year 2021, human civilization is on the verge of living beyond Earth. It is more than an opportunity, it is becoming a necessity: whether we are obligated by global climate change and resource exhaustion, or whether future catastrophes force us to abandon our planet, one day we will have to make space our habitat. It is the story of human development as Prof. Kaku sees it. He argues that *our future lies not on Earth, but within the stars.* But how will this happen?

In "*The future of humanity: Terraforming Mars, Interstellar Travel, Immortality, and Our Destiny Beyond*", world-renowned theoretical physicist, and futurist, Dr. Michio Kaku makes a solid case for how humanity will progressively develop a sustainable civilization in outer space. He describes how science fiction is becoming reality: astonishing developments in robotics, biotechnology, and nanotechnology could enable us to make habitable cities on Mars; neighbouring stars can be accessed by microscopic spaceships sailing through space on laser beams; and technology might allow us to transcend our physical bodies entirely, and maybe even achieve immortality.

The aim of "The future of Humanity" is to spark optimism into what is possible. Prof. Kaku certainly thinks and dreams big. The book is an exhilarating look at the future, but there are continuous references to past writers of science fiction as the visionaries who pointed the way, like Asimov's Foundation series[3], Stapledon's Star Maker[4] and Kip Thorne's Science of Interstellar[5]. Although much will be familiar to those who follow space related technologies, the

2 Raymond Kurzweil was selected as one of the top entrepreneurs by Inc. magazine, which describe him as the "rightful heir" to Thomas Edison.

3 "The Foundation series" is a science fiction series by Isaac Asimov which covers a span of about 550 years.

4 "Star Maker" is a science fiction novel by Olaf Stapledon, published in 1937. The book describes a history of life in the universe.

5 In 2014, Kip Thorne published "The Science of Interstellar" in which he explains the science behind Christopher Nolan's film "Interstellar". Thorne's scientific insights describe the physical laws that govern our universe and the truly astounding phenomena that those laws make possible

book is a remarkable read for a wider public to promote the *why* and *how* of our journey to the stars - and beyond, and the related ethical challenges. The author stimulates the reader into scientific happenings right now, while throwing open windows to imagine where it would lead in a millennium. Do you think we should colonize Mars? Please, do not react before exploring the book.

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- Expected Date of Publication: **November 29, 2021**

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