

Thesis Project Portfolio

A New Technological Management System Brings Growth and Success to a Home Services Franchising Company

(Technical Report)

The Techniques that Drive Company Success Around the World

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The Techniques that Drive Company Success Around the World

INTRODUCTION

Today, midway into Quarter 1 of 2022, 7.9 billion people (Census Bureau, 2022) are supporting over 213 million companies (Clark, 2021). A quick analysis into these companies highlight an existing fluctuation of company success between APAC (Asian-Pacific) growth versus American (North American and South American) and EMEA (European, Middle Eastern, and African) growth. These fluctuations give rise to the question of *What balance and techniques are being used by successful companies in different countries to inspire growth and success?*

This quick analysis demonstrates that the world has seen a 25.6% increase in population from 2000-2019 from 6.14 billion to 7.79 billion. If the growth of companies and people were directly correlated, we would expect to see a 25.6% increase in companies as well, however, we have seen a 74.6% increase from 122.37 million to 213.65 million companies. This immediately draws attention to the success and drastic increase of companies. Most alarmingly, all parts of the world are not experiencing the same understanding and growth in company success (Statista, 2022).

The Americas and EMEA constitute roughly 39% of the worldwide population. In 2000, the Americas and EMEA owned and operated roughly 48% of all companies. This is not at all alarming and may even be expected by most, however over the past 20 years a shift has occurred. Today, the Americas and EMEA own and operate roughly 39% of all companies. While some may view this as a win, it should raise queries and concerns as to what the APAC has noticed and learned about operating companies. Just 20 years ago, for every 9 companies in the Americas/EMEA, there were 10 companies in the APAC, but today, for every 6 companies in the Americas/EMEA, there are 10 companies in the APAC.

To better understand the fundamental reason for these fluctuations in success, Harrison, Koppler, and Bar-Lev's STS framework will be utilized. Harrison, Koppler, and Bar-Lev introduced the Interactive Sociotechnical Analysis (ISTA) framework, which highlights how new companies are successful when they understand how social, technical, existing, and new systems all interact.

Companies are qualified as entities producing and/or selling goods and/or services for a positive return. A positive return may consist of currency for profit incentivized companies or of intangible benefits for nonprofit incentivized companies. All companies are spawned from an in-

demand idea. Although companies are plentiful, their success occurs at a rate worse than chance. The failure rate of companies within their first 15 years is argued to fall between 60-80% (Eisenmann, 2021). These failures do not include unavoidable failures caused by natural disasters, worldwide pandemics, or other unforeseeable catastrophes. These failures include companies who are seeking a positive return, yet are unable to accomplish such a return. This forces a stop to all operations.

The 213 million companies that exist today are extremely volatile and may consist of completely different companies tomorrow. There are companies that last no more than a blink of an eye, meanwhile, others have the versatility to remain afloat for centuries. Companies like Coca-Cola, John Deere, Stiftskeller St.Peter (the oldest standing restaurant in Salzburg, Austria), and Sean's Bar (the oldest standing bar in Athlone, Ireland) (Baer and Luce, 2019) withstand years of tumultuous times. These companies have infiltrated into people's lives, defined success, and are practically invincible because of it.

Worldwide changes, failures, and successes are being experienced by companies daily. It is important to understand why these events occur as the engineers, innovators, and consumers of today.

METHODS

To give uniformity in the analysis of all literary sources, Harrison, Koppler, and Bar-Lev's ISTA framework is utilized. Literary sources are used to perform a historical analysis from the early 1900s to the present year of 2022. These sources contain biographies, articles, graphs, and testimonials about companies founded in their respective country. To eliminate outliers and truly flush out the factors for success, company situations that involved inherited success were left untouched in this paper. The companies that are discussed below have been among the 20 most successful companies in that respective country.

Harrison, Koppler and Bar-Lev's ISTA framework and analysis on technological success highlight how unintended consequences and failure can arise when new systems are introduced into a current system. This framework highlights five levels of interactions that need to be given special attention in order to avoid unintended consequences. These interactions involve (1) the interaction between the new system and existing social system, (2) the interaction between the new system and existing technical/physical systems, (3) the mediated interaction between new

and old social systems, (4) the changing interaction between new and old social systems, and (5) the redesigning interaction between new and old social systems. Each worldwide region's selected companies will be analyzed through the lens of this ISTA framework closely examining its indirect or direct impact on the ISTA five interactions.

The three worldwide regions analyzed in this paper include (1) the Asian-Pacific region (APAC), (2) the European, Middle Eastern, African region (EMEA), and (3) the North and South American region (Americas).

RESULTS

I. The APAC region

JD.com

JD.com, ranked 59th on the Fortune Global 500, is China's largest e-commerce retailer. The success of JD.com's system was able to contribute to the diffusion of Amazon's attempt to integrate into China. (Cebeci, 2020) JD.com's immediate success was due to (1) the redesigning of the interaction between its system and changing social systems due to SARS and (2) the new interactions between its system and existing Chinese social systems.

Richard, the founder of JD.com, recognized old social systems drastically changing due to a SARS outbreak in China around 2003. Pessimistically, China's GDP was anticipating a 1.5% decrease. This encouraged the Chinese government to implement encouraging fiscal and monetary policies for small businesses. These dramatic shifts in the existing social system encouraged Richard and contributed to individuals shopping online, which is JD.com's business model. Thus, due to motivation and timing, Richard took advantage of the SARS outbreak to redesign in-person retail to being pushed online. (watermark)

Additionally, China has undergone extreme shifts of public ownership and private ownership all throughout the 1900s. (Gaur & Augustyn, 2017) These shifts ultimately led to a denationalization that inspired fewer state-owned enterprises. Just before JD.com came to fruition, China had experienced the fewest number of state-owned enterprises at 25.52% paving the way for Richard's private company. (Kobayashi, Baobo, & Sano, 1999) These economic shifts allowed for the interaction between the new and existing systems to coexist.

Tencent

Tencent, China's largest company based on market capitalization, has blossomed due to its ability to completely change interactions between new and old social systems. Since Tencent's founding in 1998, it has spent roughly 50% of its annual revenue on research and development. (MarketCap, 2021) To put this into perspective, most software and computer service companies spend closer to 10% in research and development. This extreme level of investment into research and development allowed Tencent to truly understand systems in place and thrive. (Cantale and Buche, 2018)

Tencent's research exposed trends highlighting the success that mobile gaming would soon have. Because of this, an online gaming site was expanded upon with a mobile option and other services that added value in 2003. (Tencent, 2022) By Tencent's ability to bound off of this discovery and completely reinvent old gaming system mentality, it was able to become the world's largest video game publisher that it is today. This was due to the understanding between Tencent's system and the changing social system around mobile gaming.

Samsung

Samsung, ranked 15th on the Fortune Global 500, has experienced immense success, however, still falls second to the leading company Apple. Positively, Samsung invests more of its sales into research and development than other companies such as apple. Ultimately, this investment contributed to Samsung supplying Apple with the 14 nano Cortex-A9 processing chips used in iPhone 7s paving the way for its largest competitor. (Doke, 2013) Due to Samsung's revolutionary discoveries in the early 2000s, Samsung experienced steady growth until 2013. (Laricchia, 2022) Apple experienced similar growth due to both companies ability to redefine the social system surrounding technology for individuals. However, since 2011, contributing to both Apple and Samsung's more stagnant growth, there has been a negative clash between both systems.

Both companies have not found a way to quietly and comfortably coexist as market leaders. This consequence is due to the lack of an interaction between each system, but rather an over attempt to take over one another's systems. This has led to an extreme patent war between the two companies since 2011. (Kastrenakes, 2018) This war can be considered an unintended consequence that arose due to the imbalance between Samsung's and coexisting systems. (Zohni, 2018)

II. The EMEA region

SAP

SAP, now the most valuable brand represented from Germany, encompasses many of the qualities required to build a company from the ground up. Starting with 5 former IBM employees, the background and network initially in place was crucial to the success SAP was able to grow (D1 Technologies, 2019). The founders constructed SAP from time commitment, late nights, and over the weekends (SAP, 2022). With this external network and commitment, SAP was built upon IBM servers and disk operating systems [DOS]. SAP did a really good job creating a system that brought multifaceted benefits to other companies. Because of the founders' attentiveness to new discoveries, they were able to shift the company from DOS to OS, which was being emulated in IBM to mirror the discovery of CP/M (Kidall, 2021).

SAP is a technological example highlighting how success can be created by utilizing pre-existing systems. SAP took ideas from IBM, expanded upon them, and created a new successful system. This highlights how success can be derived from utilizing other systems as stepping stones rather than competition.

BP

BP, ranked 18th on the Fortune Global 500, has partaken in the extreme wealth and success seen in the oil business. Since 1901, and William D'Arcy's, the founder of BP, gamble with finding oil, BP has grown and remained a market leader. (BP, 2022) BP's system and business model success is heavily dependent on social system trends. For instance, after a catastrophic spill of 3.19 million barrels into the Gulf of Mexico, BP experienced a peak decline in annual revenue at 35.07%. (Macrotrends, 2021)

It is of no surprise the strong interaction that exists between the social system and BP's success. BP was brought to its success by the creation of the social system involving cars and modern electricity, but it also deviates from success when the social system is more concerned with oil spills and clean energy. To remain successful, BP will need to learn how to remain in touch with today's social system and its evolving expectations. This may include adopting more clean energy principles or explicitly counteracting oil spills.

Volkswagen

Volkswagen, ranked 10th on the Fortune Global 500, was founded in Germany and rose to be the largest car maker worldwide. Volkswagen has successfully risen to the top of the leaderboard by integrating into multiple social systems since post WWII. Originating from

Hitler's regime, Volkswagen had to adjust to extreme changes in social expectations. To accomplish commercial recovery and international success, Volkswagen integrated into Switzerland, Belgium, Luxembourg, Sweden, Denmark, and Norway by the 1950s. Today, Volkswagen delivers and exists worldwide. China, for instance, consists of 40% of Volkswagen's delivery requests. (Carlier, 2021)

Overall, Volkswagen has experienced a century of changing social systems. With the ability to adjust successfully, they have been able to integrate into multiple social systems and understand the worldwide market.

III. The Americas

Wal-Mart

Sam Walton (Vance and Scott, 1995), the founder of Wal-Mart, grew the largest retailer today. This accomplishment was due to the perfection of utilizing market systems (Block, 2015). Sam Walton's success has undoubtedly been immense and impactful on billions of lives. With such success, however, consequences are blossoming. These consequences may not be obvious to everyone, but to small businesses and their experience with a 2.7% deduced rate of employment when a Wal-Mart is opened nearby, the consequences are noticed and impactful (Neumark and Ciccarella, 2007).

Wal-Mart was able to recognize a need for cheaper products, which demonstrates the social system that was created by Wal-Mart around a cheaper, more accessible lifestyle. This explains the immense success that Wal-Mart has seen. However, the unintended consequence that arose from this impacts the group of smaller companies today and their inability to compete with such an overpowering force. For success to flourish, Wal-Mart must coexist with smaller social systems rather than overpower such systems.

Amazon

Amazon, ranked 2nd on the Fortune Global 500, has mastered interactions between people, other companies, and changing social trends. Amazon was initiated due to recognized change occurring in social systems and the internet. Bezos, the founder, saw the Internet was growing at a rate of 2300% in 1995 and knew this changing system was a chance for success. (Saqd, Nuraddin & Hama, 2018) To augment this success, Amazon has focused on the developing interaction between the company and its customers. This attention continuously

brought to Amazon's coexistence with today's social system has brought it the success seen today.

When creating a system as large as Amazon's, there are bound to be unintended consequences on the sidelines. Individuals, families, companies, and the 65% of the US that visits Amazon once per month (Bradley, 2017) have experienced the unintended consequences created by Amazon's system. Amazon's Alexa has been sold over 100 million times leading to mishap purchases and invasions of privacy. Amazon's swift journey to the top of cloud computing using AWS has led to countless data breaches and unauthorized employees to data. Amazon's size has prevented countries like the UK from collecting correct tax revenues. (Porlando, 2020) This list continues on how Amazon's system has unintentionally impacted existing social systems in negative ways.

CVS Health

CVS Health, ranked 4th on the Fortune Global 500, is not in the business of surviving, but rather growing. Since 1963, CVS Health has successfully molded into the current social system. Initially, CVS Health was only selling health and beauty products, but as time progressed, it adapted to being in shopping malls, launching PharmaCare (which has transformed into the CVS pharmacy seen today), and just recently acquiring health insurance companies, which have allowed CVS Health to provide health coverage to those who are less fortunate. (CVS, 2022) Again, this company's immense success has proceeded its understanding of the needs and changes from societal social systems, but due to the sheer size that CVS Health has grown to, there have been resultant unintended consequences.

CVS Health's unintended consequences stem from the lack of a structured system against individuals and the drugs offered at CVS. For instance, many people fail to realize that the third leading cause of death in America is medical errors, which CVS Health has been a major contributor too. (Stoller, 2020) Additionally, CVS Health is continually attempting to reduce drug costs, which may be attributing to unethical attempts to drug preparation. (Langley, 2018)

ANALYSIS

After analyzing the APAC, EMEA, and Americas region and taking a close look at successful companies corresponding to each region, *what balance and techniques are being used by successful companies in different countries to inspire growth and success?* can be approached

from a more educated stand point. First, it should be noted that the companies mentioned in this paper touch on a fraction of a fraction of a percent of all companies today, therefore, it is difficult to grasp how smaller and medium companies are gaining success today. Secondly, it should be noted how many factors are impacting a company's success, which makes it difficult to grasp the larger political, social, and economic factors at play.

As stated in the introduction, the APAC region has experienced a spike in its success over the last 20 years. This success is not due to a secret recipe of success. This success is due to changing systems within the APAC region. The APAC region has undergone years of governments encouraging state-owned businesses, however, as seen with the companies in the APAC region, success flourishes when state-owned businesses are fewer and entrepreneurs are given the space to succeed.

Across all regions, the most effective technique that derives success is the understanding between a company and its surrounding social system. All companies above were most successful when learning and conforming to the surrounding social system. When deliberately going against the social system or other existing systems, direct consequences and failure resulted. As Harrison, Koppler, and Bar-Lev explain, a company that does not understand the interactions of its systems with other technical, physical, and social systems will experience unintended consequences.

CONCLUSION

With over 213 million companies today, it is vital for entrepreneurs, consumers, engineers, and innovators to understand what is the driving force behind a successful company. After analyzing some of the most successful companies today, it can be shown that success is dependent on a company's interpretation and interaction between the social system that it is in.

The APAC demonstrated how important fewer state-owned organizations need to exist to enable privately owned companies to exist. The EMEA demonstrated how vital it is to adapt to the current social system and use other systems as a stepping stool rather than a competitor. And lastly, the Americas region demonstrated how significant unintended consequences can be if not enough attention is paid to the existing social system. Today, the APAC, EMEA, and Americas region have an exact ratio of the region's number of companies to the region's population. This is the first time in history that this has been experienced. If this ratio remains, it is due to a

universal understanding that companies must concede to social expectations. If this ratio shifts, it is due to a region disregarding some existing system. If a smaller company is struggling, it is due to a clash between the social system and company's system. If a larger company is flourishing, it is due to a successful coexistence between the social system and company's system. Companies are the backbone of society today, or rather society is the backbone of companies today.

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