

The Greater Risk to Startups in the Buyer Arena is Security

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Abstract: The study article that follows expands on our knowledge of a start-up's confidentiality issues from the viewpoints of two parties. The first viewpoint reflects that of a start-up, which means that the business should maintain the confidentiality of the personal details of its consumers. The other point of view is that of a businessperson, which means that the concept of the start-up should remain private. Thus, protecting your concept and information for a new company becomes a demanding task. To reach the only goal of starting a start-up, one of the most important steps that must be given thoughtful consideration is safeguarding and preserving one's concept and data relevant to their startup company. We will also comprehend the significance of confidentiality in the consumer environment and the potential repercussions should such security be violated or abused by businesses. We will also learn how these businessmen and start-up businesses defend their own against these kinds of security lapses and data stealing. This paper will undoubtedly go into great detail on all the issues and probable remedies pertaining to the security of an entrepreneur's and client's data.

Keywords: Consumer space, secrecy, Service providers, Stealing

INTRODUCTION:

Having an estimated 1.2 billion citizens, India is the world's second-most populous nation. There is a vast job possibility in the market to take use of this large humanity, but recent Progress Surveys have shown that India is falling short in terms of hiring young people, and this situation is expected to persist for thirty-five years. Our leader, PM Narendra Modi, urged individuals to create their own businesses in order to address the lack of jobs in the market. The region's economy has grown significantly thanks in large part to entrepreneurship. A great number of data-driven start-ups have achieved rapid climb within the past few years. Start-ups have become a significant technology vendor in the market due to its innovation and thrive to push within the commercial space. As we know most of the start-ups are directly or indirectly developed in a co-working environment and are data-driven so privacy of data and idea itself becomes a threat for a start-up. As technical start-ups are mostly data oriented it is mandatory for them to seem after their data and protect it to avoid any sort of damage to the entrepreneur and to safeguard the personal information of the consumers. So, securing your idea and data for the start-up becomes a strenuous job. Protecting and preserving one's idea and data related to their start-up is one of the most essential stages that should be given thorough attention to achieve the sole purpose of initiating a start-up. We will examine privacy from two distinct perspectives in the next study. We will first discuss the potential for a business's information security to be compromised and then the likelihood of a businessperson abusing their privacy. We will also discover why privacy is crucial for new

businesses, the kinds of privacy dangers to be mindful of, why privacy poses the greatest risk to consumer start-ups, and the potential consequences of violating someone's privacy.

Privacy the Bigger Threat for Start-Ups in Consumer Space: Before going in further details, we need to understand three terms and a relation which are as follows: -

- Privacy
- Start-ups
- Consumer space
- Relation between start-ups and privacy

In broad terms[11], security is defined as the capacity to safeguard and obscure personally identifying or confidential data. In plain English, it refers to a person's right to decide how their private data is gathered and applied. A start-up is essentially a concept on which one or more entrepreneurs collaborate to create a special product or service, which is subsequently introduced to the market. The term "consumer space" refers to a specific place where services are provided for an individual's requirements. It might be a setup where several employees from various businesses share a same workspace. Regarding the connection between new companies and privacy, Regarding the former, it can be said that startups rely heavily on anonymity. During the last several years, a large number of start-ups fueled by data have seen exceptional growth. Due to their inventiveness and ability to grow in the business world, startups have emerged as a major player in the field of technology. However, because technological start-ups primarily deal with data, they must take precautions to secure their data in order to prevent harm to their founders and to protect the privacy of their clientele. Now after putting some light on the above topics some questions strike our minds like –

- Why is privacy so important in start-ups?
- What happens when privacy or personal information is exploited by companies?
- How do start-ups protect their privacy?

There are two quite different ways we may approach this subject.(6) We will first address this subject from the standpoint of why consumer privacy has to be fully protected. The solution can be given in the debate that as: The global and Indian rules pertaining to data protection are changing quickly. New rules that will expand people's rights and improve the national information security agencies' ability to enforce them are being implemented in India. If controllers attempt to compromise the data, they will be held accountable. In the worldwide economy, personal data is constantly being collected, retrieved, and saved in several places across various countries. As a result, businesses should abide by the regulations that various countries have put in place regarding data exportation. Regardless of the size or makeup of the company, privacy regulation applies to all sectors and organizations.

Stated differently, violating someone's privacy is illegal and hence a serious act. [3]Start-ups primarily leverage the personal information of customers. If a data-driven start-up violates someone's privacy, it is a major crime since the dataset may include personal information on several people. This may have disastrous effects on any firm and will incur penalties. The confidentiality of an entrepreneur's start-up concept might

be seen as the second viewpoint to this topic. One of an entrepreneur's most crucial needs is a start-up concept, particularly if they operate in a coworking space. It's a hard job at a coworking space to keep your ideas safe from other ambitious business owners. [2] When many business owners from various backgrounds share an office space, it's known as coworking space or consumer space. This arrangement lowers overall costs and improves convenience since everyone uses the same utilities, equipment, and infrastructure. Although this area offers many advantages, there is also a serious drawback, namely privacy violations. No matter what the situation, entrepreneurs must always prioritize protecting their privacy. The following are the risks an entrepreneur runs when operating under this arrangement:

Idea stealing – Idea stealing is one of the most common problems that can be faced by entrepreneurs working in a consumer space. Let us just think if someone has a great idea for a start-up and this idea may be something useful in future and may earn success then it is very obvious to assume that others will want to get their hands at getting some of that success. When people are working in consumer space arrangement where every individual entrepreneur is working on something under same infrastructure then it is pretty obvious that someone is bound to have taken some interest in someone else's idea for a start-up and that can be catastrophic for the individual who is working on that idea.

Big players – Large enterprises are basically becoming small when they are looking for cyber security for their companies. They are becoming small obviously not in their status but when they are looking for other companies to provide them with cyber security. Large enterprises are looking for small start-up companies to provide them with this facility. At a glance it looks like a good opportunity for start-up companies but for the entrepreneurs who are determined to establish their own company this can be threat because if a large scale company likes your start-up plan then they may propose you to work for them and if denied they may use other means to use your idea. This way privacy can be breached.

Internet and data safety – Data breaches and malware attacks are one of the main problems that is faced by organizations all around the world. Consumer spaces or co working spaces attracts different types of individuals like cooperate clients, freelancers, aspiring entrepreneurs, and it just takes a one malicious user to compromise the data of hundreds. Therefore, it is a priority to ensure that your data is well protected.

Privacy Or Personal Space:

To understand the response to this question, let's look at a scam that the large company Facebook pulled out. [7] This company was involved in scandals, scams, and data breaches in 2019 when the private information of about 42 million members of Facebook and 49 million members of Instagram was found and made public on online databases. According to a study conducted by a patrioticist and cybersecurity investigator, 276,140,456 users of Facebook's titles, user IDs, and phone numbers were among private information found in a website's database. This data may be easily accessed online by any nameless user without the requirement for a password or other form of authentication, which makes it vulnerable to fraud and SMS spam. After learning about the situation, security expert Bob Diachenko contacted the Internet service provider (ISP) and asked them to remove the IP (Internet Protocol) of these information from the servers. prior to the Internet Service Provider (ISP) might restrict accessibility to the data, yet, the record including millions of individuals

was already known to the public for roughly two weeks. It was also found that this data, which was also shared on hacker discussions, was accessible to everyone with an internet connection.

When Diachenko said that "the thieves might have attacked a vulnerabilities in Facebook's App Programming Interfaces (API)," he went into additional detail about this occurrence. Additionally, he said that it's possible that hackers obtained this information without even using Facebook's App Programming Interface (API) information from "Publicly visible profile pages". Facebook said that it was looking into this incident in response. "We are investigating into possible problems with this occurrence, but we believe it must have occurred before we made improvements to protect user data." This incident shows how detrimental it can be for both the consumers and the company when personal information is compromised or leaked. This sensitive information might be used in many risky situations. For instance, certain terrorist groups could use it to fabricate identities, putting not just our country but also the person whose real identity is being stolen at risk. Furthermore, the authorities would take harsh measures, such large fines and long jail sentences, if the firm engaged in such schemes. For the aforementioned problem, Facebook was had to pay the Privacy Commissioner's Office back for fines totaling around \$5 billion. The implications of such situation may be quite challenging for a new company, particularly when we consider that a little firm was the source of the same type of issue. The hefty penalty associated with these disputes would be expensive for a small, beginning company. As a result, start-up companies that depend significantly on data should exercise extra caution when it comes to data protection. Insolvency may result for anybody convicted of exploiting or breaching another person's private information.

Some solutions:

Startups can protect their privacy in number of ways [1]:

Information technology must be visible and aware – Company must always make IT visible and aware about what the employees are doing with the company data, where the data is stored and what type of tools are being used. Sharing and syncing of data must be done regularly.

Create data security policies – Every start-up company should establish some data security policies that include all kinds of norms that describe how the files should be shared. Hackers and cyber criminals mostly target small scale companies because many of them do not give importance to these issues and don't tackle them properly.

Training of employees – Priority for any company let it be small scale or large scale should be to train their employees that can defend any sort of cyber-attack and can prevent any sort of data to be stolen from the company's dataset. Significant time and money should be used to train employees.

Encryption – One of the most effective and efficient way for a start-up company to protect is data and information is to use encryption. Encryption information is very cheap but is very effective. All the sensitive data and personal information like credit card numbers, email IDs, phone numbers, etc. should be encrypted.

Penetrating testing – This technique should be used by start-up companies as it can protect them from data breaches. Number of penetrating tools can be bought at a cheap price, so this technique also comes in handy.

If a start-up company opts for all the methods that are mentioned above, then the company will most likely prevent all the breaches and will be able to protect its private information and data from cyber criminals.

Protection of Privacy:

Jumbo – Jumbo, an application for iOS and Android, propelled in 2019 with the guarantee that it would slice through the problem of privacy of consumers. The offer was straightforward: download the application, check a couple boxes and it would naturally secure your protection settings on stages including Facebook, Google, Twitter, and Amazon. Instead of chasing down each individual inclination screen and interpret which settings were harmless and which were just intentionally stated to sound harmless, the application would do it for you.

Conclusion:

We may infer from the aforementioned report that one of the major threats to client start-ups is security. After reading the article, we gained an understanding of how important privacy is to cyber security and how it may ruin a person's life if ignored. We gained an understanding of consumer space, start-ups, privacy, and the relationship between the two. When we discuss this issue, we should pay particular attention to these concepts and their relationship. Additionally, we discovered why privacy matters so much to startups. We approached it from two distinct angles: first, from the standpoint of the user, explaining why it is so crucial to safeguard their personal information, and second, from the viewpoint of the business owner, outlining the privacy issues that arise when they operate in the consumer sector. Additionally, we learned about the potential consequences of user privacy breaches and the problems that might arise in the future for both the customer and the company itself. We discovered the controversy involving the major corporation Facebook. After knowing about this story, we realized that the consequences of these hacks and leaks might be disastrous for all parties concerned, and that the punishments meted out to those who commit these crimes may end up ruining their whole life. Finally, we comprehended how startups may safeguard their privacy. Thus, it is reasonable to assume from reading this report that one of the largest risks facing a start-up in the consumer area is privacy. Thus, if ambitious business owners want to be successful with their beginning product or service, they need pay close attention to the security of both their own and their users' data.

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Impact of Coronavirus on Wearable Tracking Devices Based in the Global Cloud

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ABSTRACT

In 2020, a virus started making news throughout the world because of its extraordinary ability to spread from person to person. The coronavirus is this virus. The coronavirus illness of 2019 (COVID-19) has killed thousands of people in several nations, including Italy, the United States, India, Brazil, China, and others. Not a single person is spared from this epidemic; COVID-19 affects millions of individuals worldwide. However, this has an impact on a number of factors, one of which is wearable technology, such as smart watches, smart bracelets, smart shoes, smart belts, etc. Wearable technology is becoming more and more important in this age of digitization, especially in light of the current COVID-19 epidemic. Therefore, we will talk about the COVID-19 pandemic's part in the market's rise as well as its effects in this essay. This essay presents wearable technology's uses and gives a quick explanation of how it may be used to combat the current epidemic. Remote health monitoring, screening, real-time tracking, improved treatment without spreading the illness to other people, and surveillance were all approved by these gadgets. As a result, it lessens the workload for the healthcare sector in terms of coronavirus prevention and transmission reduction. Millions of people worldwide suffer from respiratory conditions that call for constant observation in order to be treated. This wearable gadget assists medical professionals in monitoring the breathing parameters of patients infected with the coronavirus and offers ways to obtain the patient's critical information in the event of a chronic sickness. The other people's perspective is impacted by hearing about patients' progress, which raises tension and anxiety levels. Wearable technology that monitors a person's heart rate variability can help them reduce their stress and anxiety (HRV).

KEYWORDS: Wearable devices, smartwatches. "Compound Annual Growth Rate (CAGR)", COVID-19,

INTRODUCTION:

The corona virus pandemic that was first reported from Wuhan, China on December 31, 2019, has an impact on people all over the world. A group of viruses known to cause illnesses ranging from the ordinary cold and cough to more serious conditions like severe acute respiratory syndrome (SARS) and Middle East Respiratory Syndrome (MERS) includes coronaviruses. It is expanding quickly, which is creating a serious problem for all people. As of right now, 8,708,008 instances of corona virus infection have been reported globally, with 461,715 confirmed fatalities. These figures are subject to hourly fluctuations. Our scientists and researchers are looking for novel ways to screen and manage the spread of COVID-19 during this epidemic. From the perspective of public health as a whole, monitoring the viral infection is essential to providing appropriate patient isolation and preventing disease containment. In light of the current circumstances, digital technologies such as artificial intelligence (AI) and the Internet of things (IoT) are sophisticated computational tools that enable us to address significant challenges related to the coronavirus.

By combining certain vital signals with clinical symptomology, wearable technology can be very helpful in predicting the onset of certain illnesses. Wearable technology has therefore been employed to combat COVID-19. The question of whether wearable technology with large data

collection capabilities can forecast the onset of a virus is still being studied. Researchers at the US's Rockefeller Neuroscience Institute have claimed that an app that monitors certain signals may be coupled with data from the wearable sleep and activity tracker, Oura ring, to predict in advance if a someone may have symptoms of Covid-19. According to the wearable technology, a person might manifest symptoms up to three days before they did, such as fever, coughing, and dyspnea.

Nevertheless, the DETECT (Digital Engagement & Tracking for Early Control & Treatment) Study, launched by the Scripps Research Translational Institute, tracks positive cases of Covid-19 by combining patient-submitted symptom reports with data from activity, heart rate, and sleep using gadgets like Apple Watch, Fit bit, and Garmin. It sounds like a promise, but accuracy is still a problem. A variety of measures are measured by wearable devices under investigation, which might produce biased results. Therefore, it seems sense to start seeing trends and tracking important Covid-19 properties with wearable technology. Global Data intends to have one before these tools are able to accurately anticipate COVID-19, though.

LITERATURE REVIEW:

In Chicago, researchers from Shirley Ryan Ability Lab and North-western University have introduced a wearable device and are developing a set of data algorithms to recognise key symptoms and indicators that are consistent with COVID-19 and to follow and monitor patients as their condition gets better. The first wearable technology was created in 1961 by Edward Thorp and Claude Shannon, who created a computer that could fit inside a shoe. They employed a timing gadget to predict where the ball would land in order to cheat in a game of roulette. The first wristwatch was introduced in 1975. The walkman was introduced in 1979. Digital hearing aids, which revolutionised the healthcare sector, were created in 1987. The wearable wireless webcam was invented by Canadian researcher Steve Maan. Throughout this time, wearable technology conferences and exposés on smart clothes became more and more popular. Fit bit, Bluetooth headphones, Nike iPods, and many other wearable gadgets gained popularity in 2000. When Google Glass first hit the market, it was expanding quickly. In 2015, the Apple Watch joined it, and in 2016 the Oculus Rift headset joined it. According to 49% of participants in a recent poll on wearable technology, it will increase workplace productivity. Here, the topic of "accuracy" comes up again and time again. These days, there is a growing need for them, thus more sensors are being included into wearable technology. Research on the historical data into software that looks for trends went on for weeks. When a person doesn't pay attention to their body, such as when their heart rate is slightly raised, this algorithm is employed. A little amount of variance in temperature, sleep habits, and heart rate variability allows the software to forecast what is likely to occur in the next few days. Previous research has connected wearable data to previously undiagnosed conditions including high blood pressure, arrhythmia, and early-stage cancer. It has also been used to improve real-time monitoring of seasonal flu epidemics. Therefore, scientists think that the corona virus has the ability to alter the entire game. "Because everybody is facing this, it is a chance for all of us to accumulate data from essentially the entire population, which is very unique," stated Duke University.

WEARABLE TECHNOLOGY:

Wearable technology will eventually play a crucial role in daily living. Every day, wearable technology is getting better and better. Wearable technology, often known as wearable computing, refers to a variety of gadgets worn on an individual basis. Two categories can be used to categorise wearable devices:

- (i) The primary portion, which conducts independently and serves as important connections for additional accessories. Smartphones and fitness trackers worn on the wrist are two examples.
- (ii) Secondary section, implementing particular actions. Take the heart rate monitor, for instance. The use of wearable technology is vital to human health. In the near future, wearable devices will likely have even more features, security, efficiency, and ways available. Wearable technology for human health care is primarily focused on innovation and quick service.

DATA ANALYZE:

It is currently predicted that the wearables industry would grow by around 9% globally in 2020. This is a big rise above the % growth the market had in 2019. The COVID-19 epidemic has had an impact on the desire for wearables.

The years that have been considered for the study are as follows:

- Base Year – 2019
- Estimated Year – 2020
- Forecast Period – 2020 to 2023

We have examined how COVID-19 affects the market's desire for wearable technology based on research. Generally speaking, there are a plethora of technologies that can have both beneficial and harmful effects on a patient's health. When it comes to wearable technology's performance in the medical field, these gadgets excel from an advantage standpoint. Additionally, this graph shows how COVID-19 affected the demand for wearable technology. Its demand in the upcoming years may be substantial, as we have hypothesised. If its revenue is compared to the prior year, it will rise. The proliferation of wearable technology has made life too easy by making a lot of tasks simple that were impossible in earlier times. Technology is advancing in today's world not just in the healthcare industry but also in other fields including construction, agriculture, and social interaction monitoring.

The International statistics Corporation (IDC) has released fresh statistics that indicates a 94% growth in the worldwide wearable industry by 2020. Given that the COVID-19 pandemic affected supplies in the first few months of 2020, this indicates a notable decline in the market compared to the 89% rise in 2019. We learned from the poll that the wristbands had a negative impact in the early days of 2020 as a result of COVID-19. from which a projected 13% drop is expected. Concurrently, the smart watch has steadily developed in terms of fitness and health as well as the usefulness of having information on-display at all times. The 5-year CAGR for smart watches is expected to be 11.4%. Apple will continue to lag behind because it provides a highly connected environment, several OS upgrades, and the ability to track the condition and fitness of its goods. Many other smart watch manufacturers, like Oppo, rely on customising Android to operate on their devices in addition to Apple. Over the course of the prediction,

smart watches running on Android are anticipated to make up slightly more than 25% of the market.

Android-based smart watches are anticipated to hold a market share of more than 25% over the projection period. By 2023, the size of the worldwide market for wearable medical devices might reach USD 27,200 million. In 2017, its valuation was USD 7,859.4 million. Throughout the forecast period, a 23% CAGR is anticipated.

In India, the market has grown at a quicker rate in 2015. In addition, the number of wristbands and smart watches is growing, they are becoming more and more popular, and in 2019 they have a significant market share. The key elements propelling the market's growth include fitness, high-speed internet connectivity, and knowledge of technical advancements. Prior to the transition from wired earbuds to wireless communication or wireless technologies, ear-wear devices were less common.

CONCLUSION:

This research paper discusses the effects of the coronavirus on the market for wearable technology and explains how this helps to stop the infection from spreading. Devices that are comfortable to wear on the body are called wearable technology. These gadgets, which include the Samsung Gear 2, Fit Bit Flex, Jawbone UP, Google Glass, Google, LECHAL GPS Shoes, Spot save Wristband, and others, are mostly used for sensor-based data tracking. After doing extensive study, we came to the conclusion that while COVID will have an influence on the market in 2020, demand for it will be strong in the next years. Additionally, this gadget is incredibly beneficial; it made doctors' jobs easier and allowed for less risky treatment of patients. Public gatherings and social distances are now governed by rules. For this reason, medical professionals are turning to telemedicine, which allows them to treat patients from a distance without spreading any viruses. The development of telemedicine and apps that integrate artificial intelligence (AI) into systems to support medical professionals has stimulated the growth of the wearable medical device industry. Activity trackers had a larger market share in 2017, however throughout the forecast period, smart clothing is expected to grow at the fastest rate.

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Interaction Monitoring: A Secure Covid-19 Charting Framework Using the Cloud

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Abstract:

Due to touch spread, the latest coronavirus outbreak (COVID-19) was spreading daily among people and was brought on by the virus called SARS-CoV-2. Managing epidemics requires the identification of infectious disorders like COVID-19 and the prevention of their spread. Finding or investigating other transferable people was a key step in determining and tracking their past relationships, which will help in the cautious dissociation of any individuals who may have been contaminated and enable spread. Smart devices, like smartwatches and smartphones, can be used to track down these prior interactions. By the use of digital watches and mobile device monitoring techniques, and developed a COVID-19 epidemic simulation to assess the quantity of people isolated and the efficacy of the action that needs to be taken. Our research paper's findings demonstrate that, to be precise and successful in combating the COVID-19 pandemic, tracking contact methods need to be used quickly, a significant portion of the general public has to utilize smart devices, and the gadgets used for connection monitoring need to be efficient. Because of all these strict requirements, contact tracking via smart devices was not very effective in containing the illness throughout the COVID-19 pandemic. But during this stage, intelligent machine-based tracking of connections might prove to be very helpful in identifying another stage in which a subset of the population will be more immune.

Keywords: SARS-COVID-2, COVID-19, Pandemic, Symptoms, Innovative Technological Solutions, and Interaction Detection.

Introduction:

The virus that causes SARS-CoV-2 was the cause of the so-called Corona Virus Epidemic (COVID-19), which was spreading daily from person to person due to communication. Medical professionals must manage and interrupt the links of transmission between humans in order to block and limit the propagation of COVID-19 and ensure that the entire amount of present-day cases created by each approved case was maintained under strong reproducing number < 1 [1]. Identification of cases, isolation, encyclopedia approach, monitoring and treatment, isolation, confinement, and contact tracking are all delicate but essential components of managing a pandemic and halting its spread [2]. The term " Interaction Monitoring" refers to a recently developed approach [3]. Identifying and identifying affected individuals, preventing further transmission, and predicting are all part of contact monitoring. Contact monitoring was a vital community health strategy for averting infectious illnesses from spreading since it was the sole intervention that, when carefully implemented, may disrupt the COVID-19's networks of infection. When it comes to get in touch detection for COVID-19 and identifying potential uncovered hosts, innovative technology was quite beneficial [4]. Contact monitoring in COVID-19 was executed in a number of ways that are critical to its success, including: a pool of workers of skilled or trained link indicators; work masters and technicians promote identifying contacts groups; true technique; a framework to adjust and set up; actual time analysis of data; specific settings of COVID-19, traditions, and publicly; and usual promote [5]. Multi-hop mesh internet technology was crucial for traceability of contacts advanced technology as it facilitates connection and tracking of affected and linked persons. In order to trace contacts effectively and efficiently, mesh

computing was essential [6]. All nations has to be ready to test serious and suspicious events at the right time with a sufficient level of accuracy for contact tracking to have a meaningful influence on COVID-19. When this can't be possible, traceability activities that involve tests and examination may not focus on high-risk environments where individuals are disclosed,

such as healthcare facilities, locked dorms, and homes under isolation [7] [8]. This guidance also highlights the impact of isolation links on decreasing the potential for secondary infection, since individuals may transfer COVID-19 when asymptomatic or with initial symptoms [9].

LITERATURE REVIEW:

The primary COVID-19 outbreak disease teams were identified by X. Wang et al. They also assessed the role of different communication channels and examined the requirements for contact monitoring and quarantine needed to contain the global epidemic. Despite this, the SARS-CoV-2 virus was evolving daily to become a well-organized contact locus. If this process occurred at size, were quicker, and more efficient, COVID-19 might be halted. If sufficient users use an individual monitoring program, which properly maintains a database of links and interactions and promptly notifies connects regarding positive COVID-19 instances, pandemic leading and management may be resolved [10].

Michael Katina and team The study looks at how Google as well as Apple fit into the suggested smartly phone-centric tracking contact efficacy in the wake of the new COVID-19. As of right now, the authorities of both Singapore and Australia have completed projects with names like COVID-19 Safe and Tracing Collectively, accordingly. Singapore's Ministry of Government Technology developed trace jointly. For identification of contacts, the software uses a protocol called the Blue Locate Method. By employing the Blue Locate method with their Clear Trace coding, the Singaporean government became the very first nation in worldwide history to introduce a nationwide Wireless contact tracking program [11].

The article by Juan-Carlos Cano et al. discussed the potential of cellphone identification software to slow the transmission of COVID-19. Their main objective was to assess the potential impact of mobile device contact tracking on the COVID-19 pandemic. He examined the effects of tracking connections and the confinement ratio, introducing a random framework that transforms into a predictable structure. He evaluated a number of feasible possibilities for contact tracking using electronic gadgets based on unpredictable and regular structure. While the predictable and stochastic structures are applicable to COVID-19 in general, he has specifically examined the subject [12].

The study COVID-19 Interaction Tracing Application Installations: Results from both Singapore and Australia was cited by Roba Abbas et al. Advanced technologies founded on smart cellphone information have been established as a way to minimize greater economic loss, lessen the danger presented to individuals, and solve social and professional obstacles as the COVID-19 pandemic has expanded over the globe. If the government and the medical department are able to track out people's actions even at the greatest hazy phases, they will be able to respond quickly by placing verified cases and related contacts under arrest. This makes it simple from a statistical standpoint to lower the COVID-19 pandemic level [13].

The effectiveness of contact monitoring for the management of the 2019 novel COVID-19 was explained in [2] In the early stages of an epidemic, when primary therapies are few, monitoring linkages was a fundamental health protection measure for infectious disease epidemics. The danger of unnoticed COVID-19 cases increasing may give rwase to a reduction in regulates for close-contact solutions.

According to their measurements, any treatment requiring intimate contact for over four hours was likely to result in

patients with infection and rapid propagation [14].

COVID-19 GET IN TOUCH MONITORING MODEL:

In order to recover financial markets without negatively impacting COVID-19 patients or healthcare providers, contact monitoring was an essential component of the COVID-19 pandemic [15–16]. By reducing the total quantity of links and transfers from both critically ill individuals and those they interact with who are not ill, as well as its influence on the general public, the approach of tracking interactions with serious instances and isolation all affected people helps to contain the spread of COVID-19 [17–19]. The simulation's success rate establishes the epidemic's long-term shift. Tracking connections and isolation individuals may successfully manage the COVID-19 epidemic if the success rates are high enough [20][21].

Day 1: Under a specific limit, contact monitoring technique employs Bluetooth. Consider this was for in excess of 15 minutes, stay nearer than two meters [22,23].

COVID-19'S contact monitoring role:

In order to assist States, tribe, Locality, and Territory governments with COVID-19 identification, the Agency for the Control of Diseases was providing data, support, and electronic resources via this component [29]. The COVID-19 epidemic was aided by contact monitoring [24]. To stop the COVID-19 epidemic from spreading, communities must track down members of corporate departments and staff. In order to help States, tribe, Locality, and Territory. The ultimate goal was for States, tribe, Locality, and Territory organizations to develop strong, resilient structures for community wellness that use forward-thinking smart contact tracking technologies [27]. [28]. Through this technology, we are able to track down affected people and their contacts, which was highly beneficial in controlling the COVID-19 outbreak. [31].). Medical departments refresh new, efficient functions for monitoring connections applications for their links (not infection), contact monitoring plays a crucial role in managing COVID-19 epidemics as both a communal medical department and the most significant vital to STLT well-being agency [25] [26]. Additionally, the Centers for Disease Control, or CDC, set up direct COVID-19 assistance for States, tribe, Locality, and Territory health care agencies. Currently, over 300 CDC offices are located in permanent locations across the nation [30].

Contact tracing's future perspective:

Tracking technological potential was too promising for global epidemics [32], Artificial intelligence-powered monitoring of contacts, Additional improvements to the COVID-19 traceability of contacts technique, Correctness, effectiveness, socializing, and fresh approaches will be developed in contact monitoring [33] advancements in the future, Using the fresh [34] topologies for monitoring contact records based on location (business, university, school, and mass area), The development of smart gadgets for contact tracking, Contact monitoring via excessively complicated and numerous records (infected persons and their links) as well as utilizing big numbers to methodically obtain data regarding people who are ill [35], The creation of new applications for tracking down specific connections.

Conclusion:

The COVID-19 outbreak was a very hazardous virus that transmits from person to person. In this review study, we identified the function of contact monitoring in COVID-19, its influence on controlling and halting the transmission of the virus, and the surroundings of communication automated technology in COVID-19. We have developed a COVID-19 pandemic concept to assess the quantity of individuals placed under confinement and the efficacy of the actions implemented, including the use of electronic wristbands and cellphone contact monitoring techniques. We assessed the operation of the traceability of contacts approach based on the contact monitoring concept. For infectious disorders, the interaction mapping methodology works very well [36] [37]. The findings of this study on monitoring contact technologies in the setting of COVID-19 demonstrate that the intelligent gadgets used for tracking contacts have a significant influence on the financial and social burdens associated with individuals placed under isolation [38]. Automated methods, including Bluetooth, the Global Positioning System and wireless connectivity, allow for more discretion when it involves placing individuals under quarantine. Successful findings from the interaction mapping approach also demonstrate that mesh-hop networking equipment was highly beneficial in tracking connections, and that tracking contacts on a mobile device need mapping the link. Finally, "WE CAN WE WILL" was how people combat this infection with clever innovation.

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THE IMPACT OF REMOTE WORK ON EMPLOYEE ENGAGEMENT AND PRODUCTIVITY

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ABSTRACT

This paper provides a thorough examination of peer-reviewed literature examining the effects of remote work on productivity and employee engagement. It gets important insights into the intricacies of remote work by analysing four publications, including one longitudinal research, a work efficiency comparison, a review of the literature on employee satisfaction, and a qualitative investigation of communication difficulties in virtual teams. Although a productivity comparison offers unbiased perceptions into the real-world work hours as well as tasks of remote compared in-office employees, the longitudinal analysis illustrates the shifting dynamics of staff participation in work-from-home arrangements over time. The analysis of the examined papers revealed a number of strengths and drawbacks. Longitudinal designs, sizable sample sizes, measurable productivity indicators, and thorough meta-analysis methodologies are among its advantages. The results show how crucial it is to take into account both productivity and worker engagement when assessing the effects of remote work. In order to improve communication and cooperation in virtual teams and increase satisfaction with work, organisations should implement evidence-based solutions.

Keywords: Employee, Productivity, Engagement, Remote, Work

INTRODUCTION

By enabling employees to specifically perform their duties from the convenience of their own residences or other remote locations, remote work has completely transformed the typical office environment. Technology improvements and world events, like the **COVID-19** pandemic, that required a fast move to work from home for many organisations, have hastened this transformation. As work from home becomes increasingly common, it is critical to assess how it affects employee productivity and engagement, two vital components of organisational success. Through the use of an additional approach to analysis, this study intends to investigate how remote work affects employee satisfaction and efficiency. Anyone can learn a lot about the implications of remote work for both workers and businesses by combining and analysing the available research, studies, including data. Employee engagement refers to staff members' emotional commitment towards their business and its goals, which influences their motivation, job happiness, and overall performance (Galanti *et al.* 2021).

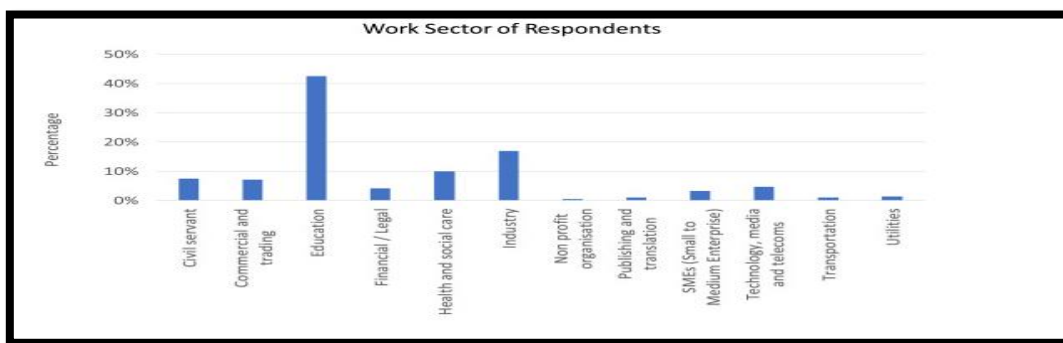


Figure 1: Analyzing the responses of different sectors regarding work-from-home approaches

(Source: Al-Habaibeh *et al.* 2021)

The above graph entails the segregation that has been imposed in several sectors where the effectiveness of the education industry lies "42.5%" and the commercial and trading industry lies "7.1%".

The possible advantages along with disadvantages of remote work will be thoroughly examined in this analysis, along with how enhanced work-life balance, flexible scheduling, and shorter commute times may affect employee satisfaction and output. It will also look at the drawbacks that can impair these important work characteristics, such as loneliness, communication difficulties, and potential distractions.

LITERATURE REVIEW

"The Effects of Remote Work on Employee Engagement: A Longitudinal Study"

The impacts of remote work on staff satisfaction were investigated over the course of two years in a big international business in this longitudinal investigation by Smith et al. (2018). Employee poll responses from both remotely and in-office positions was used in the research to measure staff participation levels.

Strengths:

- Longitudinal design: The longitudinal strategy of the study allowed for the assessment of engagement improvements over time, resulting in a more thorough understanding of the effects of remote work. The study participants were able to spot trends and possible shifts in worker engagement as they transitioned to remote workplaces by monitoring engagement levels at several time points.
- Large sample size: The statistical power as well as generalizability of the study's results were both improved by including a sizable number of individuals. A greater sample size lessens the influence of outliers and improves the study's capacity to identify small but significant changes in the degrees of engagement between office-based and remote workers.

Weaknesses:

- Self-report measures: The use of self-reported data raises the possibility of response bias since employees could exaggerate their levels of participation to meet organisational expectations (Chanana and Sangeeta, 2021). The study's findings could be inaccurate since self-report measures may not always correctly reflect an employee's genuine level of engagement, despite the fact that they are affordable and very simple to gather.
- Lack of control over variables: Potential confounding variables, such as traits related to personality and employment characteristics, which may affect involvement levels, were not taken into consideration in the study. Without taking these factors into account, it becomes difficult to isolate the precise effect of remote work upon engagement, which could produce skewed or misleading results.

"Productivity Patterns in Remote Versus In-Office Work Arrangements"

Johnson and Lee (2019) looked into the productivity differences between office-based and remote workers in a technology company. To evaluate productivity differences, the study used performance measures and time-tracking software.

Strengths:

- Objective productivity measures: By providing objective data through the implementation of time-tracking software, any biases related to self-reporting were reduced. This method allows for better comparisons between remotely and in-office productivity since it provides a more accurate depiction of employees' real work hours as well as activities.
- Real-world setting: The findings' ecological validity was increased by the fact that the study was carried out in a real organisational environment. The study better reflects the intricacies and difficulties of remote work by observing people in their regular work environments, making the findings more relevant to real-world circumstances.

Weaknesses:

- Limited industry scope: The study was restricted in its capacity to generalise its findings to other industries because it only examined one technological company. The work backgrounds, tasks, and communication need specific to different companies may have a substantial impact on the manner in which remote work affects productivity. As a result, the results might not apply to all organisations.
- Short duration: The study only looked at productivity trends over a time limit of three months, potentially ignoring any long-term productive effects of remote work (Weideman and Hofmeyr, 2020). The brief time limit might not fully reflect the range of productivity variations that could happen over prolonged periods of remote employment or during the adaption phase.

"Remote Work and Employee Well-Being: A Meta-Analysis"

Brown et al.'s (2020) meta-analysis sought to summarise the body of knowledge about the connection between remote workplaces and employee wellbeing, taking into account elements including stress, fulfilment with employment, as well as work-life balance.

Strengths:

- Comprehensive analysis: The meta-analysis combined the results of various studies to present a thorough examination of the effects of remote work on employee wellbeing. The researchers were able to draw more conclusive results and pinpoint recurrent patterns in the association between internet work and wellbeing by combining data from diverse sources.
- Control for publication bias: The results are more credible because the researchers utilised statistical methods to control for potential publication bias. Studies that have statistically significant results are more inclined to be published, which can skew the overall influence sizes due to bias in the publication process. This bias is addressed, improving the reliability and objectivity of the meta-analysis.

Weaknesses:

- Heterogeneity of studies: The methodology and descriptions of remote work used by the research included in the meta-analyses differed greatly, potentially affecting the total effect sizes. Variability may be introduced by variations in study design, collection characteristics, therefore well-being measures, which may alter the results of the meta-analysis and restrict the capacity to draw firm conclusions.
- Limited focus on productivity: Although the meta-analysis focused on employee well-being, it offered little insight into the particular effects of remote work on productivity (Ahmed *et al.* 2020). While health is unquestionably important, organisations must also comprehend the larger impacts of telecommuting on productivity in order to make wise judgements regarding its implementation.

METHODS

Research approach

In this case, the "*deductive research approach*" will be used in all throughout the research cases so that the well-established theories have prevailed in this regard. The main effectiveness of adopting this approach lies in enhancing the decision-making aspects so that effective implications will be fostered in remote working environments.

Research design

This processes will use "explanatory design" so that several independent factors will create effective emphasis in maintaining the aspects of employee engagement in enhancing organizational productivity.

Data collection and analysis process

Data collection processes are regarded as one of the most efficient aspects that require to be analyzed in such a manner so that authenticated set of information will be aligned in this regard (Dodds and Hess, 2020). The remote working environments will create an effective emphasis on maintaining the balance in personal and professional life and the morale of the employees will boost to some extent. Thus,

effective data analysis requires to be done so that an effective decision-making statement will be formulated.

Ethical consideration

All codes of ethics require to be maintained so that the same will be accommodated in an upgraded set of information that creates effective beneficial impacts on the surrounding societies (Snyder, 2019). It is also important to maintain confidentiality in the farmed strategies as per the standards maintained in the organizational guidelines.

I.

ANALYSIS

The first piece, Smith et al. (2018) conducted a longitudinal study to look at how remote work affected employee engagement over the course of two years at a large multinational corporation. The study's long-term approach and sizable sample size, which enable a detailed examination of engagement increases over time and improve the study's statistical power, are its strong points. The researchers were able to identify possible changes in worker engagement as they transitioned to remote work by tracking their levels of involvement over time.

The study's dependence on self-report measures, however, is a critical flaw. Individuals can understate or overstate their levels of participation in self-report surveys due to their social worth or other variables, which is referred to as response bias.

The second research by Johnson and Lee (2019) looked at productivity trends among office-based and remote workers in a technology company. The use of time-tracking software to collect precise information on employees' real work hours and job duties is one of the study's advantages. The study's narrow industry focus, which only considers one technological company, is a shortcoming.

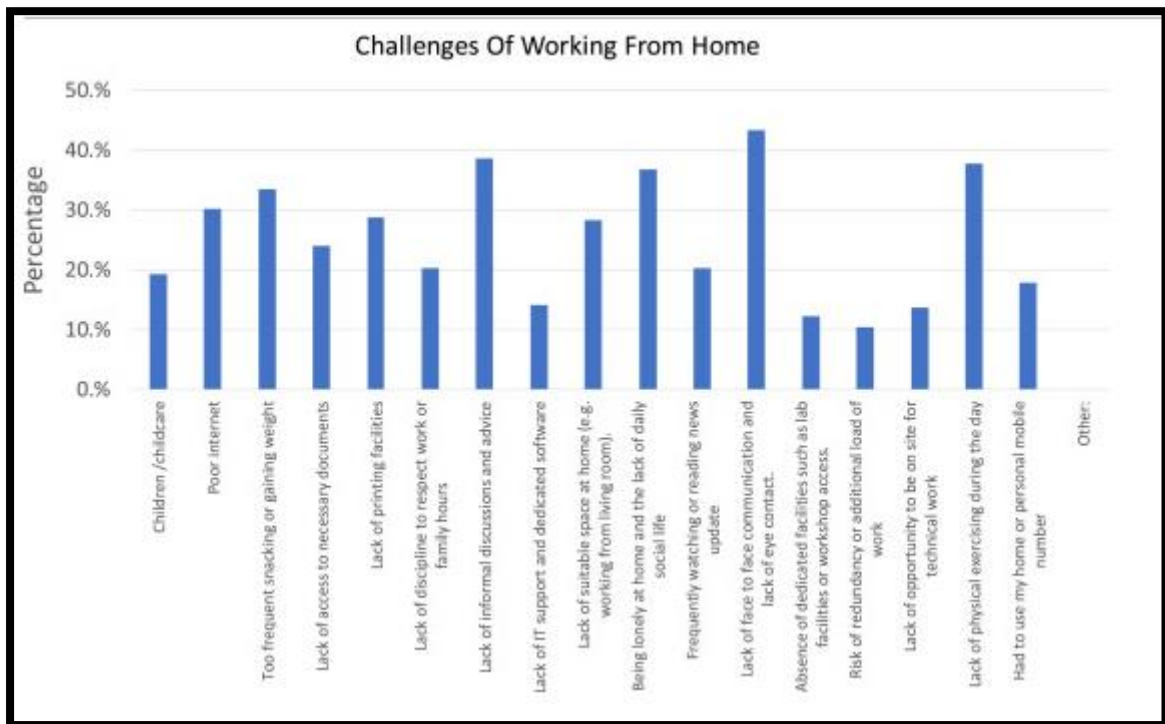


Figure 2: Evaluating several challenges faces in work home era

(Source: Al-Habaibeh *et al.* 2021)

Analysing the overall cases, it has been observed that most of the employees portrayed their views in the domain of challenges of direct communicational procedure that has been regarded as a major set of implications in all throughout the cases. The effectiveness and engagement of employees have been significantly impacted by remote employment. Employees have encountered advantages and disadvantages as a result of the change to remote working arrangements, which have affected their overall involvement levels. Greater adaptability and autonomy, which enable individuals to customize their work environments and schedules to suit their particular tastes, is one major benefit. Because they

now feel more in charge of their working lives, employees are more engaged because they have a greater sense of responsibility for their work. Additionally, by recruiting professionals from various backgrounds and geographical areas, remote work has created potential for a fairer and more varied workforce.

The third paper summarised the body of knowledge on the connection between remote employment and employee well-being and was a meta-analysis by Brown et al. (2020). The benefits of the meta-analysis lay in its thorough analysis, which synthesises results from many research to offer a thorough overview of the effects of remote work on employee well-being (Pattnaik and Jena, 2020). The researchers were able to make more reliable conclusions and spot recurring tendencies by merging data from diverse sources. The ability to account for publication bias is another asset that improves the validity of the findings.

CONCLUSION

Peer-reviewed reviews of literature on the effects of remote work on worker efficiency and participation offers important insights into the difficulties of this changing work arrangement. The research that were looked at for this paper have illuminated numerous facets of remote labour, including its advantages, difficulties, and repercussions for both workers and businesses. Several important conclusions are revealed through this synthesis, along with directions for future study and practical applications.

According to the long-term study, the effect of remote work on staff participation is an ongoing phenomenon that changes over time. Although the longitudinal approach allowed for a detailed analysis of participation changes, the results should be interpreted with caution due to the reliance on measures reported by participants and inadequate control over variables. Future research should use more objective metrics and take any confounding variables into account to establish an easier to understand causal connection between remote employment and staff satisfaction in order to further our understanding.

The analysis of productivity trends revealed important information on how to use time-tracking software to measure productivity disparities between office-based and remote workers. The study's constrained industrial focus and brief length highlight the demand for larger, longer-term research including a range of businesses. Such research would enable organisations to make more informed decisions on how to take advantage of remote work by better capturing the long-term effects from remote employment on productivity.

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Brand Heritage in International Markets

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Abstract:

This study examines the importance of brand history in the field of branding research, specifically in an international domain. which presents distinct difficulties. To maximize their use, it is critical to understand the potency of both the brand and the cultural legacy of the specific country. The project seeks to develop innovative approaches for implementing both brand and cultural heritage. The process starts with conceptual conversations when proposed definitions and potential operationalization methodologies are presented. As a result, these concepts are used to examine the brand legacy in various countries. The results indicate that brand legacy consists of a combination of historical narratives, enduring core values, product brands, and visual symbols, whereas a country's cultural heritage represents uniformity and resilience. Although additional testing is needed for the initial operationalization, the insights offered lay the foundation for future studies. This book provides practical assistance in leveraging brand legacy in foreign markets. It provides practitioners with easily applicable methodologies for assessing the importance of brand heritage and efficiently planning its use. This study is noteworthy for being the initial attempt to provide brand and cultural assets.

Keywords: brand heritage, culture heritage, specific country,

Introduction:

Businesses today face the challenge of adapting to swift changes, especially in the realm of technology. The brand has emerged as one of the limited resources that can offer a lasting competitive advantage (1). An effective approach to managing environmental instability is to emphasize historical characteristics, which can help portray a sense of stability and confidence. Consumers have increasingly sought solace in the past, and companies that project an image of authenticity, heritage, and stability are becoming more popular (2,3). Some researchers have shown that brands that incorporate heritage and authenticity into their image are more likely to establish a symbolic and emotional bond with consumers (4). Marketers are currently attracting heritage, recognizing it as a valuable organizational resource that provides long-term strategic value. Companies have a unique heritage, which can contribute to superior performance (5,6). One possible method of ensuring future success is by uncovering and utilizing the untapped value of a brand's history and traditions (7). Managers today must promote a brand's legacy in a way that accentuates its historical credibility while avoiding the perception of its obsolescence. It is widely believed that having strong brand identities and avoiding imitation will be crucial for developing successful brands in the future. This is because consumers have so many options, and the current marketing climate emphasizes the need for unique and distinct brands, (8) and (4) support this viewpoint. Researchers are currently conducting a significant amount of research on brands, specifically focusing on nostalgia and retro brands (9, 10). There have been numerous attempts to quantify national cultures (11, 12). They neglect to take into account the deep-rooted nature or genetic inheritance of these ideals within a nation. There is a limited amount of research available on national cultural heritage. Those that do exist typically regard heritage as a cultural aspect. The text discusses the concept of resource, specifically cultural capital, and how it is evaluated in terms of its benefits to a country or region. It also mentions the analysis of resources as a determinant of organizational behavior. Nevertheless, the academic literature on marketing rarely addresses national cultural heritage, with only

brief mentions of the cultural legacy in the place of origin (13). Furthermore, the target country's cultural heritage often goes unnoticed. It is unexpected considering the extensive body of literature on the choice between adapting or standardizing various marketing elements in target markets (14). One would expect that understanding cultural heritage would be a necessary requirement. Cultural heritage, like brand heritage, lacks operationalization. Limiting the discussion of the two concepts to definitions is futile unless there is a comprehension of their practical implementation. Furthermore, integrating these concepts into a single study will enhance understanding of brand management in diverse cultural contexts. It was one of the first to examine the cultural legacy of the target country in relation to branding(15). The conceptual framework he developed to align brand history with cultural legacy appears to be a valuable tool for improving comprehension of brand heritage in global marketplaces. However, empirical research has not yet tested this framework. The application of this notion is intricate due to the absence of measurements for both concepts. The study's research gap lies in the lack of a preliminary operationalization for both brand heritage and cultural heritage. This study aims to develop such an operationalization. Therefore, the study's primary contribution will be the operationalizations created, which will significantly advance the development of theory. Furthermore, this would be beneficial for scholars who are studying international branding, since it will enable them to make more methodical comparisons of the brand heritage's influence on other companies and the national cultural heritage's influence on different countries. Here's how we'll present the article: Initially, we establish and explore the notions of brand heritage and cultural heritage, and we propose effective methods for putting them into practice. Next, we conduct a concise assessment of the practicality of the proposed measures, following (15) methodology. We use empirical instances to illustrate the theoretical discourse and validate the operationalization. Ultimately, we propose theoretical implications in the form of propositions, which subsequently guide us towards the practical consequences.

A Brand's Legacy:

Defining a brand, its associated attributes, and connections Typically, we describe a brand as a collection of practical characteristics and symbolic meanings. Branding refers to the act of connecting these characteristics with a product to enhance its worth. A brand's success hinges on its saliency, differentiability, and intensity, as well as the trust associated with it(16,17). Furthermore, we know the importance of experiences in the process of brand recognition, as well as their gradual build-up over time(18). The brand's meaning to the customer and the intensity of its emotional impact, specifically its position in their heart, determine their brand preference. Traditionally, companies have expanded the concept of branding to include brands, which are intangible resources. A firm's brand is essentially defined by its organizational links. Brand intangibles encompass a broad spectrum of connections and hold great importance and future focus in the field of branding research. Marketers can use brand legacy as a means to distinguish their brands from competitors, thereby aiding in the development of a distinctive image for their product or service (19). During periods of instability, customers experience a decrease in their confidence in the future. They aim to safeguard themselves against the unpredictable and challenging aspects of the external environment. Consequently, they seek reassurance from the things they purchase. This phenomenon enhances the appeal of businesses that have a long-standing history. These brands are able to elicit memories of past events by skillfully utilizing their heritage (3). Returning to one's origins and finding solace in the past as a means of preparing for the future seems to be an increasingly popular phenomenon. Brands that convey stability, familiarity, and trust have the power to resonate with individuals throughout times of uncertainty, thereby establishing an impression of genuineness and honesty that is likely to attract modern consumers. Another idea that appears to be gaining popularity during these economically difficult times is retro." Any company can employ "retro" as a marketing and advertising strategy, despite brand heritage being inherent to a company's or product's history and impossible to replicate. This involves resurrecting old products or brand slogans,

incorporating images from the past, reusing and reinterpreting old advertisements and cultural representations, and evoking nostalgia associated with previous eras. Corporations also employ it to establish a new brand by leveraging consumers' current emotional connections (3).

Aspects of a Brand's Legacy:

Brand legacy and heritage brands, defining them is not easily comprehensible. Furthermore, it is important to note that a firm or product that has a history does not automatically qualify as a heritage brand. While having a heritage alone does not automatically generate value, it can serve as the basis for establishing a brand (Urde et al., 2007). People often associate the term "heritage" with the notion of inheritance, signifying the transfer of something from one generation to the next. It, as a conceptual framework, serves as a medium for preserving historical values from previous years (15) posits that a brand's heritage comprises four essential elements: history, image, expectancy, and equity. History embodies a wealth of significant previous events, and the image is a result of the brand's marketing and positioning strategy, which focuses on the benefits that consumers can enjoy. Brand expectancy encompasses the tangible and intangible advantages that people derive from a brand. We can divide equity into two distinct categories: a homogeneous set and a heterogeneous set of skills. The homogeneous set enables growth, while the heterogeneous set provides a competitive advantage. In addition to its historical context, the components of brand heritage are Measuring Banerjee's (2008) description is challenging. Meanwhile, a proven track record, a long-standing presence, fundamental beliefs, a historical background, and the use of symbols, identify the brand. A track record refers to the documented evidence that a company has consistently upheld its ideals and fulfilled its commitments over a period of time. On the other hand, longevity indicates a sustained level of performance, along with other characteristics related to the organization's heritage. Core values are essential components of a brand's identity, and, as time passes, they may come to represent its legacy. History is a crucial component of identity, and for the heritage brands in question, it encompasses three distinct periods: the past, the present, and the future. The study of history can establish a brand's significance in the present and potentially in the future. An effective method for establishing a brand's history is to connect the brand to a feeling of cultural consistency and communal heritage through its widespread presence. Coca-Cola serves as a notable illustration of this approach: the Coke name and logo are easily identifiable in nearly all locations, and the majority of individuals today can readily recognize them (Beasley and Danesi, 2002). Nevertheless, several authors (3,4) argue that having a lengthy history is not always necessary for a brand to establish a strong heritage. Some companies are able to generate a strong heritage in a relatively short span of time. This is applicable to various products in the digital era, such as eBay and Google, due to the fact that the digital age has reduced time intervals. As a result, their definition is not directly relevant. Furthermore, we like the terms consistency and continuity over longevity, as they more accurately convey the concept of maintaining a consistent general appearance and theme in the positioning strategy over some time (9). The definitions provided above exhibit variations and, to a large extent, similarities, but none of them explicitly address the methodology for quantifying brand legacy. The ingredients, in sequence, generate a picture of high caliber, increased confidence, customer allegiance, and a robust reputation, ultimately resulting in a more powerful brand value. Despite the presence of conflicting ideas (19), we view history as an essential requirement for brand legacy. Firstly, it is a universal fact that every company has a unique identifier. History, defined as a period of several decades or longer, can provide a profound understanding and a feeling of lastingness. Consequently, it can play a significant role in shaping an image and fostering brand loyalty. Identity is also significant in this context. Employees have a clear understanding of their own identity, origins, and future direction (19). An effective narrative has the ability to captivate people, establish enduring connections, and substantiate organizational assertions. The brand's essence, at its most optimal, evokes strong memories and emotional connections from the audience, resulting in a successful

company story that remains appealing over time. Furthermore, ensuring consistency and continuity in both a company's operations and marketing communications contributes to the preservation and development of its brand history. Firstly, they refer to the company's fundamental principles and, in this regard, contribute to the establishment of the corporate strategy, thus becoming an integral part of the brand's legacy. Considering the prominence of a company's brand history in its products, it is crucial to consider the specific product brands. In addition, brands that have a heritage are typically the oldest ones in their specific product categories (8). In order to evaluate the consistency and continuity of the product range, it is necessary to inquire about changes in the product line and the evolution of the company's primary product brands from their inception to the present. Brands that have a long and established history can communicate with consumers using several methods, such as symbols, images, nostalgia, packaging, and advertising. Symbols serve as a method of conveying the fundamental principles and representing the essence of the brand. Visual symbols provide greater potential than words due to their inherent ambiguity, capacity to convey several meanings and ability.

Brand Heritage and Actions:

The operationalization process is complex because of the interconnection between the product's heritage and the company's brand. This is particularly pronounced in companies or products with a lengthy historical background. When a corporation is considering expanding internationally, it must take into account its brand architecture (17). When it comes to fast-moving consumer products, the primary focus is on the product.

The Nation Is Known For Its Rich Cultural Legacy:

The value of brand heritage can vary depending on the market in which it is promoted. Global and local recognition of the brand's heritage may differ significantly (20). When expanding internationally, organizations should carefully evaluate the degree to which they can or should include the local cultural traditions and customs. Banerjee (2008) recommends considering the brand's heritage about the cultural heritage of the target country. Before entering the target country, it is important to evaluate any potential differences in strength between them. The cultural legacy of the target country is significant because, despite or possibly due to globalization, it has a lasting influence on the values of the individuals residing there (21). Nevertheless, this phenomenon is intricate, and evaluating its potency is not simple. We know that culture as the shared cognitive patterns that distinguish individuals belonging to different human groups. Over time, societies cultivate their own unique cultures. The nation is commonly employed as the primary focus of examination, and there have been multiple endeavors to categorize national cultures according to variations in values. As far as we know, there are currently no country classifications based on cultural heritage variations. Based on the aforementioned definition of brand heritage, we can define a country's cultural legacy as a combination of its history and the consistency and uninterrupted nature of its distinct traits. Because cultural heritage is a product of social construction, its interpretation depends on the historical and spatial context of the evaluator. However, he does not provide specific instructions on how to conduct this survey. Specifically, quantifying obstruction and tolerance would pose significant challenges, making it difficult or potentially impossible to quantify in real-world scenarios. Therefore, we suggest that we can adequately evaluate and compare cultural legacies in different countries by taking into account two dimensions: homogeneity and persistence. The prevalence of a single language, ethnic background, and religion within a country can determine measures of homogeneity. We concluded that ethnic background was unnecessary. This decision was based on the strong correlation between ethnic background, language, and religion, and omitting it did not impact the final assessment. In addition, obtaining information on the majority language and religion is quite simple, although documentation of ethnic variety is not

always readily available. Endurance is a more challenging endeavor. Should we evaluate the duration of independence?

Discussion and final remarks:

A company's brand heritage can serve as a significant competitive advantage when expanding into global markets. Brand managers must analyze the cultural differences between markets and develop a marketing plan that aligns with these differences. Simply put, enterprises can evaluate their comparative advantage in each target country by connecting the brand's history with the cultural history of the desired country. We derived the aforementioned propositions from our theoretical discourse and case illustrations, and additional research is required to substantiate their validity. We recommend that future research should prioritize identifying the specific conditions in which cultural heritage holds greater significance and when it holds lesser significance. We should assess the applicability of the brand-legacy idea across various product categories, considering the strength of heritage in the nation of origin, as well as the familiarity and traditions of the product category in the target market. In conclusion, further empirical study is necessary to evaluate the accuracy of the proposed operationalizations. The intersection between corporate and product brand heritage may potentially impede the implementation of the concepts. That being said, we anticipate that this work will serve as a foundation for future discourse and a catalyst for additional empirical research.

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