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**How Has the Covid-19 Pandemic Affected the Block Chain Industry: a Comparative Analysis of Pre- and Post-Covid Communication Strategies**

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**Abstract**

The block chain industry runs on trust and effective external communication to attract customers, deliver products, and generate loyalty and trust. In a time where COVID-19 reigns supreme, wreaking havoc on the economy on a global scale, how has the pandemic affected the advancement of block chain technology and projects? Using comparative analyses, we will look into how block chain companies are modifying their existing communication strategies to adapt to a changing post-COVID world. We will derive important overall strategies from anecdotal evidence to present a formal framework for dealing with global phenomena like the current pandemic.

**Keywords:** block chain, economy, crypto currency, communications, strategy, trust

**1. Introduction**

We've all lived through one of the most challenging years in human history—one with a looming pandemic, lockdowns forcing businesses and the economy to shut down, and an increasing realization that behavioral changes introduced during the pandemic, ala social distancing, are here to stay. Thus, where marketing communication distinguishes itself from other such marketing tools in its comprehensiveness and emphasis on strategic roles including broad-ranged disciplines, like advertising, public relations and direct responses, or its ability to mix these for greater clarity, consistency and maximum impact (Bagozzi& Dholakia, 1999), changes need to be introduced to address the elephant in the room. Already challenging for marketing communication is the fact that customers, brands and media are profoundly ever-changing, and staying atop competition requires strategies that are performant and consistent across this transitional dynamic (Amaldoss& He, 2010), yet not one company was prepared for what the year had in store for them. Furthermore, a consumer's path to purchase is also quite non-traditional in the days following the peak of the outbreak, whereby it is much shorter overall, somewhat complex and less hierarchical, demanding greater personalization across messaging, timing and location. Communication objectives had always required companies to utilize as many media types as possible and adopt richer arrays of possibilities (Hu, Lodish& Krieger, 2007). The corona virus pandemic prompted many to rethink their approach.

A single corona virus molecule found survivability in exploiting the mass-scale human connectivity in a largely connected and globalised world. It multiplied all over the globe and wreaked havoc in a matter of days, paralyzing the entire global economy—a very strong

testament to the complex interconnectivity that runs global trade. Humans had always relied on globalised connectivity to sustain their complex supply chains and as soon as the World Health Organization(WHO) declared a pandemic, sourcing and communications strategies used by many industries had to be readjusted for bottlenecks and limited product development.

Even as the corona virus hindered the movement of goods and people in all manners of traditional industries, the pandemic simultaneously advanced block chain technology. Although a downturn was observed in the block chain industry and delays in project development led to investments drying out, the industry didn't entirely go under.

### *1.1. Early days of the pandemic*

In the early days of the pandemic, all things went awry with companies coming to grips with issuances of decrees of a looming pandemic that limited consumer activity, particularly in the service industry. This wasn't as evident for businesses that used the internet to conduct businesses; however, several companies had begun to suspect their supply chains would be severely affected during the COVID crisis, regardless of the nature of their business.

As soon as it was evident that the world was experiencing a pandemic, several block chain companies started experimenting with various ways of improving upon the supply chain dynamics that were needed to expedite testing and contact-tracing methodologies (Idrees, 2021). Contact-tracing platforms such as viri.io presented block chain alternatives to testing and tracking patient vectors - the makers of the platform called it "a single global contact tracing network" (Cision, 2020).

Alternatively, let's take an example of the automotive industry diversifying into the block chain industry, particularly companies that planned to push weight in the electric vehicle (EV) market before the pandemic. Large automobile companies had finally started realizing that EVs could bring about much vitality to their business, with year-on-year trends showing global sales jumping almost 40 per cent for EVs (IEA, 2020). Where initially questions arose about how batteries could be ethically sourced and disposed of, it became evident that other areas of their supply chain could also be affected by the looming pandemic.

Tracking resources such as cobalt, a raw material used in lithium-ion batteries, served as a driver to rethink supply chain management. Cobalt mining was notoriously seen as enabling systematic human rights abuses against child laborers used to extract the substance (Amnesty International, 2019). The issue of human rights abuses surrounding cobalt extraction, especially the death of a Congolese child, had already dragged two leading tech companies into a lawsuit (Kelly, 2020) and worried several executives in the automobile industry who'd just started considering sourcing and developing supply chains for the manufacture of battery units.

In effect, these companies already had a crisis on their hands where they had to justify the ethical sourcing of the raw materials as well as a looming pandemic. It was then that these companies decided to use block chain technologies — manufacturers like BMW and Volvo insistently adopted the novel approach of using block chain, primarily because of its reliability in determining the true origins of a transaction. And herein lay a significant change in the

communication strategies for these companies — they started to champion the ethical dilemma and presented block chain as a cure to end human rights abuses in the resource extraction for cobalt, primarily using a sombre tone identifying there to be a need to solve the issue as a unified global objective (Jones, 2021).

As everyone started hearing stories from China, Iran and Italy about how hospitals were being overrun by patients and numbers of deaths growing exponentially, companies started tailoring their communication strategies to grapple with the gravity of the situation. Post-pandemic, BMW was already campaigning for the ethical sourcing of cobalt by demonstrating how it was something everyone had to think about in a sustainable manner (BMW, 2020), when in March 2020, at the start of the pandemic, the company decided to alter their messaging to be more inclusive, e.g., calling their consumers “family members”. Several other companies followed suit and started reminding their consumers how they were all “one nation, one people and one world.” Even though communication had to obligatorily hold up health-related messaging prompting awareness, most, if not all, passed along a message of togetherness alongside educating about hygiene and cleanliness.

### *1.2. Lockdowns and social distancing*

As the number of deaths from corona virus blew out of proportions, governments throughout the world began implementing stricter measures — mandating lockdowns and advising citizens to keep their distance from others. With restrictions on public mobility, businesses began to see a decline in their sales. Even online businesses began to take a toll because, after all, the products needed to be delivered by people also. Companies began to adopt new strategies when it came to messaging — they started normalizing contactless deliveries and opted to use compliance as means to further their business activity. Food delivery companies welcomed this renewed spark in their business activity while companies with a physical presence saw a boost in their business with compliance to social-distancing practices making sure that these instructions were properly communicated to both their employees and their customers.

Block chain facilitates people with transactional activities that don't really require close proximity and are rather suitable for information exchange over a distance. However, several researchers and block chain companies started working on solutions that used block chain technology to revolutionize “social-distancing and crowd-reducing measures” (Garg, et. al., 2020). As countries were hit by wave after wave of corona virus cases, many suspected that lockdowns and social distancing were there to stay. Where technological innovations have always enabled businesses to unmistakably identify their customers with greater precision, mandating social distancing was throwing the spanner in the works. Messaging becomes much easier to deliver when we know more about our customers and thereby greatly minimizes our efforts in trying to establish suitable channels of communication to deliver those messages. This form of specificity, however, comes at a cost of losing out in terms of broader reach but the benefits far outweigh the risks — no matter how anyone tackled the issue, compliance seemed to be hurting businesses' communication strategies.

### *1.3. Finding the way back to normalcy*

As soon as the news hit about several companies working on creating vaccines for the corona virus, companies began anticipating that one good way of bringing consumers back to conduct business with them was in beckoning them with “proposals of hope”.

Block chain companies found it best to promulgate a message of hope by helping pharmaceutical companies realize their potential in rapid end-to-end tracking, development and monitoring of vaccines (Thasarathakumar, 2021). Several block chain companies developed identifiers to keep track of the various ingredients used in the manufacture and then the eventual distribution of vaccines globally. Herein, these companies indulged in adding much-needed value creation of the vaccine development and rollout process.

With news of efficacy rates rising for vaccines being rolled out, it seemed pertinent then that companies started encouraging consumers to find solace that things may eventually go back to normalcy. Businesses attracted customers with promotions, e.g., no-risk bookings, waived cancellation and change fees. Promotions even included benefits and loyalty programs for customers wherein the block chain industry again had an advantage — these companies began to roll out solutions for winning consumer loyalty in the direst of circumstances.

### *1.4. Are we out of the pandemic yet?*

Even when we know that the pandemic is far from over, with countries employing a rather slow rollout of vaccines, companies need to orient customers towards increasing sales. Several companies can be seen now depicting hopeful messages of a point in time when we’d all go back to normalcy. Although it is hard to say when the pandemic would subside, the overall messaging largely tends to favour positivity to usher in a sense of things going back to normal.

## **2. Methods**

To build upon a thesis that can be applied to a scalable communication strategy, especially in times of crisis, we based our study on the collection of anecdotal evidence and observations made for various companies during the COVID pandemic. These observations were then collected to form a grounded theory through inductive reasoning.

It is understood that there may be little proof for such theory to apply to a broader view of the overall market, but all efforts have been exhausted in trying to ensure that enough comparable information is presented to the reader to deduce their resolution to the underlying hypothesis. In doing so, we’ve employed a correlational research design to measure the relationship of the derived theoretical framework with communication strategies used by blockchain companies and/or projects.

## **3. Discussion**

There isn’t much transparency when it comes to blockchain companies and their communication strategies, however studying these companies and their projects in conjunction with their traditional contemporaries helped to shed greater light on how block chain companies evolved

and restructured their communication strategies, and also how traditional businesses started adopting block chain and subsequently diversified their strategies.

*3.1. Awareness/Acceptance: A sombre sense of togetherness*

As we saw in our observations for automobile manufacturers (§1.1.), companies in the early days of any crisis tend to favor messaging that is sombre in tone trying to signal to its consumers the seriousness with which they're tackling the impending issues. BMW and Volvo diversified into blockchain businesses when they started rethinking their supply chains following the death of several Congolese children mining cobalt. They wanted to tout the transparency of the blockchain system to traverse transactional information to source as a "sustainable" alternative and this message of "sustainability" echoed more so in the early days of the pandemic when such words shrouded the morbid imagery of coronavirus deaths with a universal acceptance that something needed to be fixed. It is here that companies are seen to quell the sombre, serious undertones in their messaging by promoting camaraderie and unity. Even the contact-tracing platform offered by viri.io was marketed as a "global" solution connoting unity transcending borders towards a common cause.

As an antithesis, we ought to look at another crisis — the aftermath of the 2011 Fukushima Daiichi nuclear disaster in Japan. Immediately following the disaster, the Japanese felt ashamed in admitting that much of the blame for the incident rested on their shoulders, from the mismanagement of the nuclear power plants to the disregard for safety concerns that dated from years before the eventual disaster. However, when the World Health Organisation released a report in 2013, citing concerns for children developing thyroid growths from radioiodine poisoning, the government had to save face (WHO, 2013). In hindsight, the government could have used these communication principles to deploy effective communication. They could have raised awareness about these health-related concerns, adapted to a strategy that prioritised children found with thyroid growths (benign or otherwise), appraised the affected with improved healthcare and anticipated a better, cleaner and safer nuclear programme. The government failed to do all that. When scores of children were reported to have thyroid growths, the government reportedly blamed the screening effect—an explosion in the rate of benign cases being reported as a result of screening programmes examining everyone without prejudice and finding cases that would otherwise be largely non-symptomatic and would have gone unreported anyway (WHO, 2013; p. 87-88). With mismanagement on such a large scale, the disaster is sometimes touted as the last nail in the coffin of renewable nuclear energy which could otherwise, if made safe enough, fulfil the global energy needs many times over. Had the messaging been sombre and serious without indulging in pointing fingers hither and thither, the nuclear disaster may have perhaps been turned into an exercise of bringing people together.

*3.2. Adaptation: Normalizing compliance*

While this study explored the effects mandating compliance had on business activity, it became apparent that compliance may just be a good thing. Take for instance the example below.

In December 2015, the political consulting firm Cambridge Analytica ramped up its efforts behind the Trump campaign. Much like any communication strategy, the firm used market segmentation principles to collect about 5,000 distinct data points on over 220 million Americans to land Trump to victory. The enormous amounts of data points helped the firm segment the American voting population by accurate specificity and delivered targeted messaging to each audience group. The firm at times, one would argue, rather unethically, micro-targeted several groups to be deterred from voting at all. No amount of data is small enough to effectively identify your intended target audience — the more the better.

Naturally, when it came time for the US elections in 2020, campaign marketers had already thought up ways in which they could help bring specificity to their communications mix. Not only did the US national election see the largest turnout of enfranchised adults casting their votes but had managed to somehow encourage tens of millions of people to vote despite the pandemic. One blatantly obvious metric identified that many people are concerned about their health following high COVID death tolls in the country, and therefore the Democratic party emphasise in their communications for people to use mail-in voting rather than turning up to the polling places thereby avoiding long queues and staying safe at home. Eventually, this factor would become the crucial edge for the party to win the US elections by a large margin.

### *3.3. Appraisals: Welcoming back business*

No sooner had China's name been associated with the pandemic, people started cancelling their plans to visit the country and the tourism industry in China saw a sharp decline. The country had a large number of local tourists as compared to people coming from outside China. The pandemic gave the Chinese tourism ministries the right motivation to promote local tourism to counter the effects of the decline in the number of foreign visitors coming to the country.

Using block chain technologies, several Chinese payment gateway companies ensured that hotels and restaurants at various tourist destinations made it easier for people to transact wherever and however they want. The hospitality industry saw a huge growth in its revenues when it started partnering with these companies to build upon block chain technologies (Pérez-Sánchez, 2021).

### *3.4. Anticipation: Looking forward to a brighter future*

In this phase, possibly towards the end of any crisis, we see companies move towards messaging that has a positive and optimistic tone, primarily with messages that promise going back to normalcy, towards a time before the crisis began. These messages (as those in the previous phase) show a tendency to go towards messages of hope and yet here we see that this hope has somehow manifested into something tangible.

### *3.5. 4A's Crisis Communication Model: The proposed framework*

In aggregating the above observations and evidence, we've come to an understanding that there are four distinct phases of change in communication strategy throughout a crisis. Although most of the evidence presented above was of the COVID crisis, we've tried our best to approach the

problem with a correlational study of similar crisis events, bringing us to the realization that this model could be used in a broader sense than is effectively perceived.

The framework dictates that these four phases are as follows:

Table 1: The 4A's Crisis Communication Model

Phase	Tone	Messaging	Example
1. Awareness	Sombre, Serious	Unity, Togetherness	Companies called consumers "family members" and let them know that "we are in this together"
2. Adaptation	Instructional	Compliance, New normal	Companies promoted slogans like "stay home, stay safe" and promoted compliance
3. Appraisal	Welcoming, Beckoning	Hopeful, Promotions	Companies offered promotions, e.g., no-risk bookings and waivers on cancellation and change fees
4. Anticipation	Positive, Optimistic	Anticipation, Promises of normalcy	Companies started using phrases like "looking forward to the future" and "let's get back to business"

Although one may be inclined to write the above-mentioned phases off as mere one-off coincidence, these transitional phases may also yet hold the key for many companies to effectively manage their communications strategies in times of a crisis.

#### 4. Conclusion

This research served as a basis of looking at several block chain companies and projects throughout the course of the corona virus pandemic. What started as a research into how the pandemic changed the course of communication strategies for these projects, ended up providing us with a formal framework that defined how any company, be it block chain or not, can alter and tailor their communication strategies in time of crisis. This framework can serve as a model for companies to walk through in four distinct phases to navigate through a crisis.

This framework is a result of inductive analysis of various observations and anecdotes that led the researcher to believe that these phases could transcend horizontally and vertically to any company and any industry. There is ample proof in the observations that this could be applied to other areas of interest but more research is needed in that aspect.

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