

A Study on Digital Collaboration in Business Post Covid-19

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Abstract: *The COVID-19 pandemic has threatened the corporate climate and businesses had no alternative but to revisit their plans to solve the epidemic. The worldwide COVID-19 lockdown has had unparalleled impacts on people's personal and professional lives. This unpredictable scenario caused businesses across the globe to reconsider their corporate strategies. Most market executives agreed to introduce digital transformation programs to keep companies running as smoothly as possible through the outbreak of COVID-19 and to help plan for the recovery process. However, pushing transformation during these turbulent and unprecedented times was a challenge for both company executives and workers. A structural change toward the digitalisation and transformation of the economy was also ongoing before the pandemic. Present trends have intensified the paradigm, as demonstrated by a dramatic shift in investment in digital enterprises. Most encounters between clients and staff must take place in a contactless environment. With rare exceptions, digital service is the only way to remain in business despite mandatory shutdowns and limited activity*

Key Word: *Digital collaboration, Business, Post Covid-19, Digitalisation.*

Date of Submission: 03-09-2022

Date of Acceptance: 17-09-2022

I. Introduction

The pandemic was a reality check for industries who ignored digital innovation and who weren't prepared for it. In addition to that the burden of potentially healthier workers, a rapid and drastic decline in demand and complete economic instability, some digital lags failed to transition their company to a virtual world. Many businesses that were willing to leverage technologies well will be able to keep going and reinvent their corporate model for the future by speeding up digital innovation which eventually placed them ahead of their competition. As a result of the pandemic, executives are overseeing a dramatic shift in how companies operate, spanning tactical shifts in fields such as meeting configuration and cadence, and day-to-day management, as well as enterprise-wide improvements in leadership and resource management, technology utilization, and creativity.

When people are limited to their homes, the need for interaction, connectivity and knowledge is stronger than ever. During this period of physical isolation, there is a heavy dependency on technology for us to live in this unfamiliar territory. The same happens to companies when brands and advertisers are forced to establish relations not only with customers but also with peers and other shareholders. Going digital is no longer an option; to succeed and potentially succeed in these turbulent times, people and companies need to stay in touch. In the sense of digital collaboration, brands must retain ties with clients, staff and even innovative people. Given the complexity of the pandemic, there is reason to expect that the recovery process for COVID-19 would involve extraordinary amounts of orchestration, coordination, and adjustment of current arrangements across what is expected to be a difficult and potentially long-lasting duration across the globe. The accelerated migration of pandemic-driven emerging technology will continue to recover.

II. Review Of Literature

The Covid-19 pandemic had led to an eventual surge in the use of emerging technology due to social distancing standards and national lockdowns. People and organisations all around the world have had to transition to modern ways of working and living (De', Pandey, & Pal, 2020). Many companies nowadays, especially small and medium-sized businesses (SMEs), no longer have the luxury of designing strategies over time but struggle to find survival plans over the next quarter or months. Many emerging economies, such as China and India, have established large domestic markets, resulting in a major decline in their dependency on foreign trade. The crisis of the coronavirus pandemic has accelerated the strategic divide and so seriously undermined the supply chains of most corporate companies that people are starting to question if this is the end of globalisation (De', Pandey, & Pal, 2020). The pandemic has created a rigid working environment, including online jobs, and flexible working hours for businesses and workers across the globe, allowing the transformation

of the platform economy to decrease unemployment and expand job prospects. As a result, companies are now seeking to find ways to enhance the survival of viable business and supply chains (Sharma, Luthra, Joshi, & Kumar, 2020). As certain regions continue to re-open, companies are wondering ways to return to some sort of full-speed resemblance in an unpredictable world in which waves can alleviate (and possibly restore) lockdowns. In doing so, they will have to confront the three systemic shifts that are taking place. Customer preferences and desired connections have shifted dramatically, and although they will continue to evolve, the uptick in the usage of digital platforms is there, at least to some degree. Companies would need to ensure that their digital platforms are on par with or stronger than those of their competitors to compete in this new environment. As the economy recovers, demand growth can be unpredictable; inconsistent across geographies, markets, product groups, and consumer segments; and sometimes sluggish to return to pre-crisis levels (Ågerfalk, Conboy, & Myers, 2020). Although a few sectors will face exceptionally high demand, leaders of many businesses will have to contend with systemic overcapacity cycles. These businesses are faced with the painful need to approve the cost base and resources of their activities, supply chains and organisations, and to actively move their fixed costs to variable costs whenever possible. Complicating matters for leaders as they struggle with how to cope with inconsistent recovery is that historical records and forecasting models would be of limited value to determine where pockets of demand would arise and where supply would be required. New data and fully restored computational models would be required to inform organizational decisions. Many companies have moved almost instantly to remote-working models. The remote-first setup enables businesses to mobilize global resources immediately and adapt more effectively to customer demands by delivering everything from product details to digital distribution and after-sales service. In consequence, remote ways of operating have, at least in part, enabled the quicker execution of the drumbeat that we all hear in our organizations. And this phase shift in remote adoption is now likely to be significant enough to revisit existing business models.

Customers have now switched to digital with several businesses. Employees are now operating fully remotely and to a degree agile. Companies have also introduced analytics and artificial intelligence (AI) programs in their activities. IT teams have now performed at a pace they've never had before. Access to interconnected, pervasive and synchronous information is revolutionizing the digital, creative and collective work of the knowledge economy. The freedom to work anywhere and at any moment disrupts our views and traditions of room use and control (Hu, 2020). To capitalize on the potential for digitalisation, businesses need to be flexible and quickly build skills that will help them withstand the changes that the environment forces on them. These dynamic skills contribute to unique strategic and operational processes such as product re-development; finding and collaborating with new ecosystem partners; and strategic decision-making that creates value within such dynamic ecosystems by manipulating existing capital into new value-creating strategies (Eisenhardt & Martin, 2000). But some analysts claim that these changes are quick responses to the pandemic and that if normalcy resumes, companies can return to their former market models or find a different balance to settle. That might well be what happens, but the potential provided by the pandemic to digitize a market or to find a suitable new business model could well be exploited by companies that are seeking to extend their possibilities (Seetharaman, 2020).

III. Objective of the study

The challenges faced by technology executives are among the most multi-dimensional issues affecting organizations. Virtually immediately, they were asked to support a wide variety of new stresses, such as changing consumer expectations on digital platforms, reconfigured supply chains, additional appropriate staff collaboration capability and bandwidth, permits and equipment to support remote work, and a list of other concerns demanding urgent scale and resilience. And there is no proven road map available to deal with the global humanitarian crisis on the size of COVID-19. Globally, technology decision-makers in every company have also made substantial choices to adapt quickly to the COVID-19 pandemic crisis to improve staff protection and ensure business continuity. So, my objective of this research paper is to find the how digital collaboration has helped businesses post COVID-19.

Conceptual model

Although several views agree on the need for coherence in the internal logic and functioning of the business model, few specifically research how coherence and synergies are accomplished. In this paper, thus, we apply the "square alignment" model, which specifically involves relations between the dimensions of the business model. In the following, we will clarify the elements of this model and its alignment. Any market models need to change in the face of a crisis.

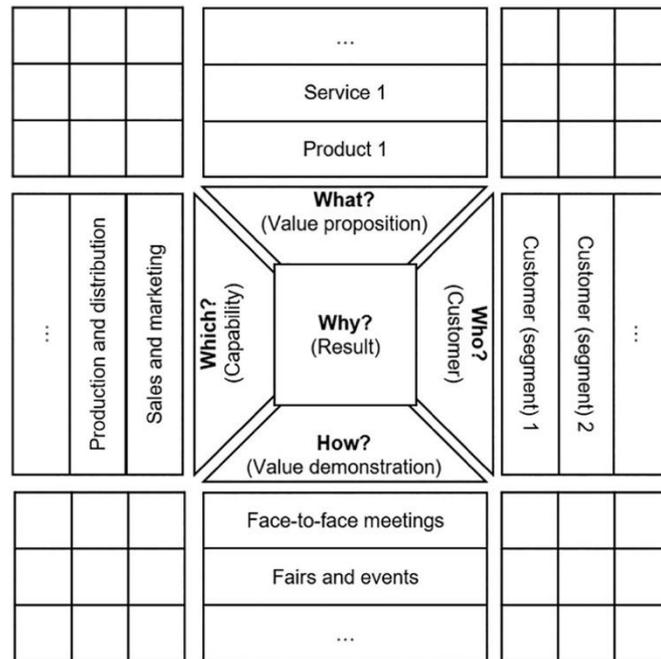


Figure 1 Alignment Squared Model (Ritter & Pedersen, 2020)

- **Customers**

To describe a company, it is necessary to specify whom the company is servicing and who should benefit from engaging with the firm. Customers, or rather segments of customers, are defined in terms of their needs. Segmentation deals with the separation of the business into distinct classes of purchasers with preferences, attributes or attitudes that could involve distinct goods or targeting variations. Since the idea of segmentation was first proposed by Smith (1956), the business-marketing literature addressed different approaches to consumer segmentation, including the business purchasing hub, the nested approach and the qualitative segmentation.

- **Value Proposition**

Another critical part of a corporate model is the value proposition of a company and what it provides to its clients or what it responds to meeting the demands of its customers. The quality proposal is the whole set of interactions that come from it, including any price, that a company allows any consumers to have. Similarly, the meaning is still defined uniquely by the beneficiary. By sharing money, the customer has access to value-creation opportunities, but not to value itself, since the value is generated only when the customer uses the bid. As such, the sharing of services is followed by a value proposition and a guarantee of potential value creation by the consumer.

- **Value Demonstration**

The aspects in which companies aim to persuade consumers of the benefits of their benefit ideas are another essential aspect of business model. Value presentations will take on a range of types and platforms, such as personal events, trade shows and social media messages. They can also provide value estimates, value modelling and strategic positioning. Managers therefore ought to make strategic decisions on which message should be delivered through which contact medium to which form of customer and when.

- **Capabilities**

Economic activity happens as one or more players merge, produce, share or generate resources by utilizing other resources. As a result, the economic agent gains access to capital, hires this capital in a transition process, and provides transformed resources as market value proposals. In recent years, the operations of companies have been identified as skills. Capacity is the qualification and/or skill required to undertake a certain task. It describes organizational capacity as a high-level routine (or a set of routines). In this respect, the corporate potential is encapsulated in the norms, procedures and structures of the enterprise, allowing companies to replicate their operations over time and thereby to retain their capacities. Certain aspects of the criteria, procedures and structures which be implicit and thus impossible for rivals to imitate.

In addition to the negative and positive impact of the recession on business models, the business model can itself be the source of a recession, as is the case when manufacturing waste produces environmental

problems, overconsumption triggers financial hardship, and poor capability leads to disgruntled consumers and PR controversies (Ritter & Pedersen, 2020).

IV. Research methodology

The data used in the research methodologies are quantitative in nature. The primary data required for the study was collected by conducting surveys. The data was collected from businesses in Kerala particularly in Kochi. A total of 108 participants were involved in the data collection process and the SPSS verifies the reliability of the findings. Some of the surveys were even conducted through video calls.

Hypothesis Testing

- **The effect of Platform Technology**

Data originating from digital networks, if applied properly, will help businesses enhance their consumer service. Most businesses are doing something incorrectly. Instead of focusing on data, they're focusing on technology. Without testing, complex innovations are used to enhance the mechanism for all stakeholders. It is the level of implementation of emerging technologies used by the focal firm for platform market operations. The scale is determined by three factors, i.e., IT hardware, system software and data standardization.

H1 – Platform Technology has a positive effect on Business post Covid-19

- **The effect on Collaboration of Business Need**

The innovation needs of a focal firm in a shared network setting. Components for evaluating the collaborative sector of focal companies need to grow into new markets, make greater use of Internet-based business opportunities and adapt to developments in the competitive climate. By integrating the efforts and skills of various companies, all participants in the network are best positioned to innovate and expand and improve their productivity at several levels. Market networks can provide member companies with access to services that would otherwise be beyond the reach of a single business. Individual companies can face a range of limitations as they attempt to compete in global markets. This will require size and experience. Through cooperation, organizations will also balance each other and specialize in various fields to participate in industries that are typically outside their scope.

H2 – Collaborative Business Need has a positive effect on Business post Covid-19

- **The effect on the potential for Collaborative Innovation**

When the level of platform infrastructure and collaborative market needs of collaborative innovation practices are at the same level. There is a strong match between platform technologies and market. In other words, if both IT and collaborative levels are comparatively high. Business needs are projected to have greater impacts than where there is a high level of IT and a low level of collaborative business needs. In comparison, it would be anticipated that the results would be greater if there were a low level of need for both IT and collaborative business than if there were a low level of need for collaborative business. There is a low level of IT and a high level of collaborative business need.

H3 – Collaborative Innovation has a positive effect on Business post Covid-19

- **Effects of Collaborative Capacity for Innovation**

To provide the opportunity to develop digital collaborative technologies with distributors at a lower degree of organizational capacity while assessing firm operations. From a technical capacity hierarchical point of view, collaborative engineering capability is a higher-level technical capability, and wireless communication capability is a lower-level functional capability. Via improved absorption potential, the collaborative innovation capability possesses expertise related to the direct generation and execution of digital communication tasks with process partners and can produce process output.

H4 – Digital Collaboration Capability has a positive effect on Business post Covid-19

Data analysis

Table 1 Correlation between Variables

	PT	CBN	CIC	DCC
Platform Technology (PT)	1.000			
Collaborative Business Need (CBN)	0.49	1.000		
Collaborative Innovation Capability (CIC)	0.56	0.40	1.000	
Digital Collaboration Capability (DCC)	0.48	0.35	0.51	1.000

The above table distributes the Pearson correlation between factors, displaying the lowest scale to the highest one. The laws are solid $r > 0.7$ or $r < -0.7$ modest $0.3 < r < 0.7$ weak $r < 0.3$. The variables in this table are necessary to be processed for data analysis.

Table 2 Model Summary

Model	R	R square	Adjusted R Square	Std. Error of Estimate	R Square	F Square	df1	df2	Sig. F Change
1	.631	.399	.347	.29529	.399	8.380	8	102	.000

Table 3 ANOVA

Model	Sum of Squares	Df	Mean Square	F Square	Sig.
1 Regression	5.785	8	.732	8.380	0.000
	8.890	102	.087		
	14.675	120			

Table 4 Coefficients for Hypothesis Testing

Model	Standardized Coefficients	t	Sig.
PT	.310	2.834	.004
CBN	.350	3.54	.003
CIC	.420	3.278	.001
DCC	.216	1.908	.037

The alpha value is 0.05. If the p-value is less than the alpha, the alternate hypothesis(H1) is accepted. On the other hand, if the p-value is greater than the alpha given, the alternative hypothesis(H1) is denied and the null hypothesis is accepted.

P<0.05 H1 accepted

P>0.05 H1 rejected

The hypothesis testing are as follows;

H1: 0.004 < 0.05

Decision: Accept H1 hypothesis

Initial Hypothesis: Platform Technology has a positive effect on Business post-Covid-19.

Final Hypothesis: Platform Technology has a positive effect on Business post-Covid-19.

H2: 0.003 < 0.05

Decision: Accept H2 hypothesis

Initial Hypothesis: Collaborative Business Need has a positive effect on Business post-Covid-19

Final Hypothesis: Collaborative Business Need has a positive effect on Business post-Covid-19.

H3: 0.001 < 0.05

Decision: Accept H3 hypothesis

Initial Hypothesis: Collaborative Innovation Capability has a positive effect on Business post-Covid-19.

Final Hypothesis: Collaborative Innovation Capability has a positive effect on Business post-Covid-19.

H4: 0.037 < 0.05

Decision: Accept H4 hypothesis

Initial Hypothesis: Digital Collaboration Capability has a positive effect on Business post-Covid-19.

Final Hypothesis: Digital Collaboration Capability has a positive effect on Business post-Covid-19.

V. Findings

An immersive effect and mediation effect are included in the suggested hypotheses. The interaction effect is in keeping with the technologies on the site and collaborative business need (H1), while a mediating influence is fit for the capacity to communicate with new technology (H2). Composite durability and Cronbach's alpha for each design met the required threshold of 0.65. These findings indicated that all the constructions had satisfactory reliability. The average derived variance (AVE) for each variance. Both indicators were loaded high on their respective models and did not show higher cross-loading on other constructs. The findings indicate that our interventions are of adequate validity.

VI. Conclusion

With the advancement in network technology, several companies have increased company efficiency by encouraging cooperation. However, there is no literature on the generation and impact mechanisms of collective innovation ability. In this article, based on an Organizational Power Hierarchy Literature, we suggested that the health of network technology and collaborative business needs higher-level operational capabilities, collaborative creativity capabilities, and then improve lower-level operational capability and digital collaboration capability. Our study model has found good data validity, offering evidence for our two hypotheses. We hope that this report will inspire more studies to enrich it. Our view of how organizations promote collective innovation potential and its effect on other lower-level organizational capabilities and firm performance. In these periods of crisis, businesses have no alternative but to update their short-term and long-term plans. Remote work has become a modern standard, and both project members and staff are faced with new ways of working. In vulnerable times, driving change takes time and effort. Remember, implementing a digital transformation strategy was the only way forward during this pandemic. The goal here is to interact freely with all your employees. This is the best way to guarantee that everyone is part of the latest approach that is being introduced, and that each employee learns how to help the company navigate the COVID-19 crisis.

The COVID-19 crisis also illustrated the connection between business continuity and modern digital-first approaches. Technology is proving to be a vital lifeline in attempts to resolving a range of organizational problems, and forward-looking businesses are reaping real profits from it. For example, IoT-enabled warehouse innovations have improved flexibility in global supply chains, delivering real-time data at any point of the life cycle, allowing the fast reaction to change in demand. The ability to leverage data to support real-time decision-making is critical when employee movement is risky, and absenteeism is on the rise. Market leaders should collaborate with their IT peers to facilitate the evaluation and deployment of technology to enhance and maintain critical business processes. Digital transformation is more important during this crisis. But it doesn't mean it's going to look the same as it did before the pandemic. Assets in terms of both talent and money are likely to be limited. Digital projects may need to be reprioritized based on importance in the current climate. New problems and opportunities can come to light more urgently. For certain organizations, the powers of change can be so strong that a long-term strategic roadmap must be updated. And every digital transition roadmap that does not produce value at any increment would need to be re-imagined. The key is to continue exploring and innovating with front and centre digital solutions. In the right solution, companies will grow bigger, more flexible and more customer-centric than ever.

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Firdaus Fazaludeen, et. al. "A Study on Digital Collaboration in Business Post Covid-19." *IOSR Journal of Business and Management (IOSR-JBM)*, 24(09), 2022, pp. 01-07.