

Innovation strategy during COVID-19

Understand how the s-curve will change
in the post-pandemic era



Abstract

Against the backdrop of COVID-19, the world saw structural changes to both, personal lives of individuals and the businesses. This unexpected situation initially received a knee-jerk reaction. However, with time, the social systems at large embraced the challenges and figured out ways to deal with them in creative ways.

Many technology-related changes, including telehealth, remote workplace, digitized customer interactions, adoption of AR/VR for training, industrial maintenance, virtual retail experiences, and distance learning, gained significant traction. Most of these technology innovations were already undergoing evolutionary change. Starting with a slow initial phase of performance, they were headed towards an accelerated and scaled interval before stabilizing and maturing. The pandemic triggered a shift in technological paradigm and created the need for a revolutionary change for these technology-driven innovations.

As we move forward, it is important to understand where we are headed. This white paper analyzes the impact of COVID-19 on technology adoption to chart a clearer path ahead.

Few basic concepts

The Technology adoption curve

Figure A in Exhibit-1 shows the technology adoption^{1,2} (an amalgamation of Innovation Theory and Chasm) across the industry spreads through various player categories viz. Innovators, early adopters, early majority, late majority, and laggards. S-Curve indicates that innovators and early adopters get the advantage of a head start.

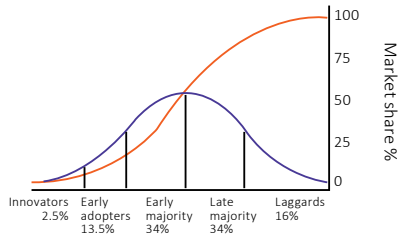
Technology hype cycle

Technology Hype Cycle³ (Figure B in Exhibit-1) shows how technology evolves through five stages, beginning with the innovation trigger and ending with the plateau of productivity. The curve helps us understand the market expectation of technology at a particular time and its growth potential in future.

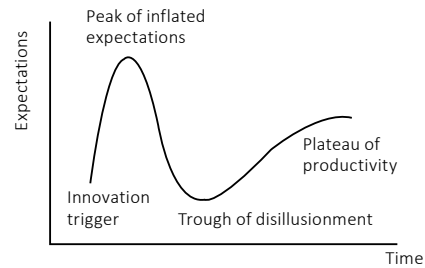
[1] Diffusion of Innovation Theory by Rogers E., 1962

[2] "Crossing the Chasm" by Moore, G. A., 1991

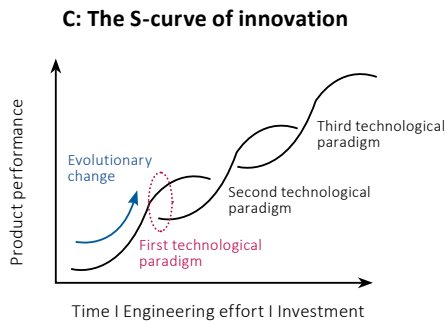
[3] Gartner Hype Cycle, Research Methodology



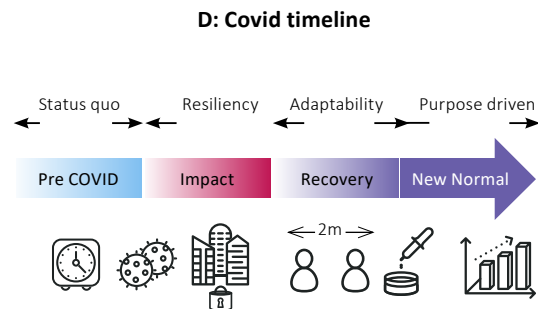
A: The revised technology adoption curve



B: The Technology hype cycle



C: The S-curve of innovation



D: Covid timeline

Exhibit - 1

S-Curve of innovation

S-Curve of Innovation (Figure C in Exhibit-1) represents product performance, competitive advantage, or generated value over time. During the evolutionary change, performance starts from a slow initial phase, goes through an accelerated and scaled interval before it stabilizes and matures. As the technology loses its competitive advantage, there comes need for a revolutionary change (Technological Paradigm), which results in a new S-Curve.

Pandemic timeline

Figure D in Exhibit-1 broadly divides the entire world into four phases; all of the industries and humanity transitioned into the post-COVID-19 world after the mass spread.

Relevance in COVID-19 world

The Hype Cycle demonstrates consumer’s expectations from a set of technologies or technology-driven innovations at a particular time and its likely roadmap over the future. To relate to the current situation, we can consider this standard set of technology-driven innovations as a collection of emerging developments that have gained traction during the pandemic era. Few examples of these technology-driven innovations include telehealth, remote workplace, digitized customer interactions, adoption of AR/VR for training, industrial maintenance, virtual retail experiences, and distance learning. This collection of emerging developments will go through the extended era of

innovation, traverse the path of inflated expectations, and finally plateau through disillusionment and enlightenment phases (Blue Curve). Also, the curve is steeper and re-incarnated, which otherwise would have followed a flat plateau (Grey Curve). This shift is primarily because of increased activity around hyper-personalization and capability around predicting customer behavior. Governments and companies are feeding to these inflated expectations by supporting them through times of uncertainty, offering free value add, fostering closer customer relationships, and realigning the business models and distribution networks by acclimating to new digital behavior of the consumers. Exhibit-2 shows both the curves for consumer's expectation, with (Blue Curve) and without the pandemic (Grey Curve).

The adoption curve for this collection will align with the hype cycle in such a way that chasm falls right when the consumer's expectation is at a depth of disillusionment (Exhibit-2 Yellow Curve). This phase will occur only in the new world when things start to stabilize, and there would be an urge to go back to good old ways. However, the consumer's expectations rebounded every time the world went into a crisis, whether it was the 2008 Financial Crisis, 2011 European Debt Crisis, or 2016 Crude Oil Price Crisis. Accelerated and scaled adoption has in the past and will, in the future, become the benchmark.

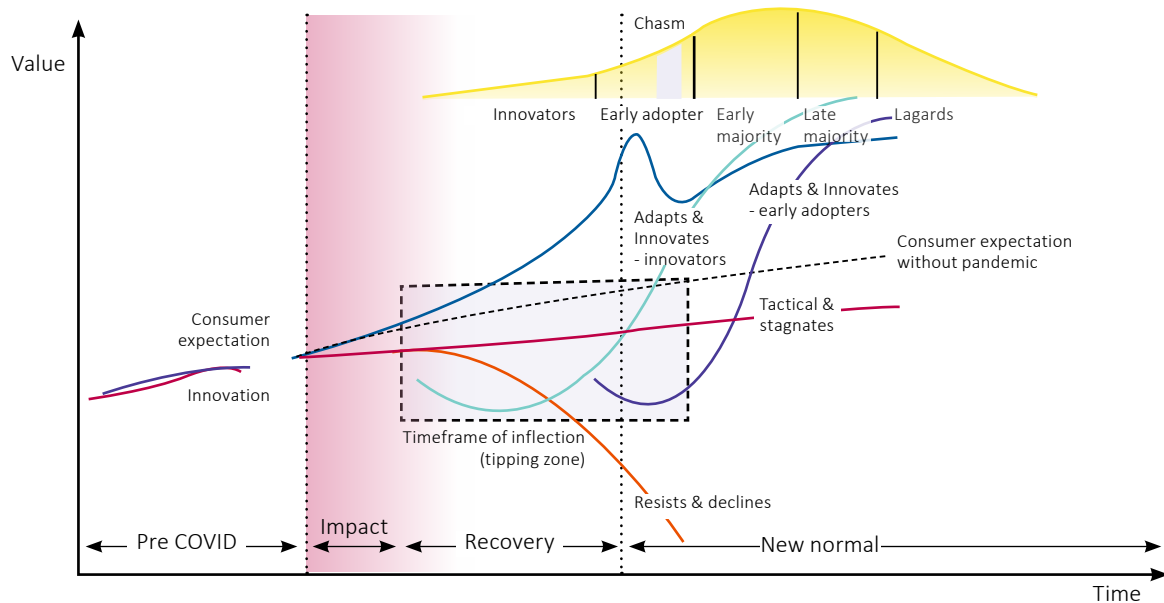


Exhibit - 2

Technologies that emerged as game changers during 2020 were not born overnight. They were present in the pre-COVID-19 era as well, with proven and demonstrated outcomes. However, there was resistance to change due to the absence of a need. The outbreak created a technological paradigm forcing a revolutionary change and triggering the acceptance of this collection of emerging innovations. Exhibit-2 outlines the plausible post-pandemic pathways for the S-curve of innovation, dependent on an organization's response and approach. As the recovery phase commenced, organizations rebooted the innovation process by acknowledging the technological paradigm and followed a renewed S-Curve (Green Curve). Of course, few players will be leading the trend, with several to follow (Purple Curve). Timing to realize this revolutionary change will differentiate innovators and early adopters from the rest of the competitors. While some may still live in the present world by taking tactical decisions to stay afloat (Pink Curve), others will resist responding (Orange Curve). In either case, these companies will be way behind the benchmark.

Insights from the BIG picture

Inflection timeframe is crucial

There are numerous moving pieces involved in driving an organization forward. However, the robustness of business strategy depends on successfully navigating the S-Curve and identifying moments to leap over to the next one. These moments are called inflection points. In case of a significant event like a pandemic, the entire industry goes through paradigm shifts, and these moments of change are elongated and extend over a period. Hence, it can be referred to as an inflection timeframe. To be prepared for the strategic inflection timeframe, organizations must recognize them well in time.

There are specific signs to identify an inflection timeframe.

- Industry boundaries become porous with players competing from across the industries (like automobile company manufacturing ventilators)
- A rapid change in customer behavior (like telehealth or remote workplace)
- An influx of new sales channel (like video or live chat with reps)
- A renewed sense of direction (like sustainable products or offerings)
- Enhanced social/emotional connect with products (like supporting local businesses)

Accelerated and scaled adoption

Existing transformation initiatives will see an increased momentum, and new ones will evolve. Hence, the adoption curve (Exhibit-3) will also show a deviation from its expected trajectory. As the adoption accelerates, the curve will shift towards the left, giving a competitive advantage to adopters with faster market penetration. Further, due to scaled innovation, the curve will move upwards, creating more market share.

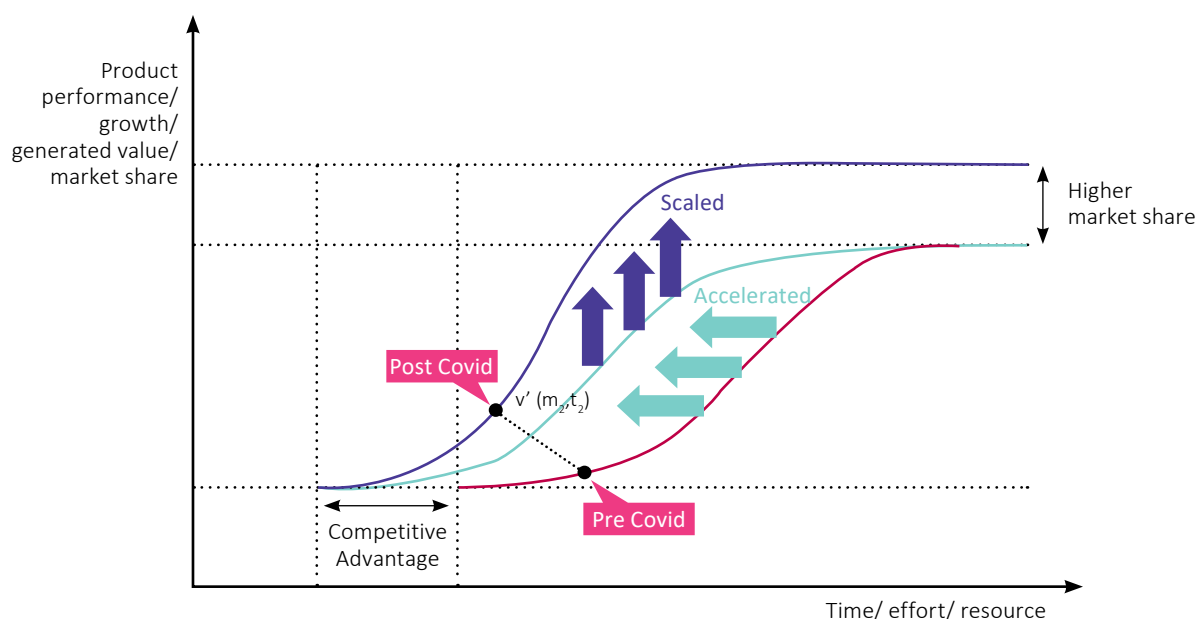


Exhibit - 3

Futuristic mindset

The concept of accelerated and scaled adoption in the previous section explains how v' (Customer Value generated in the future) will be greater than v (Customer Value generated at present). Organizations that embrace a futuristic mindset, or in other words, a purpose-driven strategy to reach v' , will find it natural to navigate through the turbulent times. Industry leaders and strategists must envision their business model down the future to prioritize current innovation and transformation plans. They must ask themselves:

- What are we doing today to be different in the future?
- Is our present action and effort good enough to produce products/services in the future with lesser effort yielding more revenue?
- Will my business be relevant enough even after 10-15 years from now?

A playbook for driving change

Several factors, including need, competency, financials, market, competitors, and legislation, play a critical role in determining an organization's appropriate response to such an innovation impetus. However, there are few themes of successful responses that worked for industry leaders in the past.

- **Innovation Portfolio:** Re-evaluate all the innovation initiatives that existed before COVID-19 and reprioritize them along with the new ones based on the futuristic mindset strategy.
 1. Assemble a task force to ideate, experiment, and pilot innovations. This team should capture new demand by pursuing a new market, creating unique differentiation, and recharting the value-cost perception.
 2. Create a separate entity for scaling the proven initiatives. This group will focus on the most critical aspect of a large-scale business - viability and feasibility - which demand a different mindset and approach.
- **Autonomous:** Companies must produce right at the source of consumption. Ensure that offerings are available to customers on-demand and in real-time by accessing the flow of the intellectual property. Also, the products should be scalable and created faster than ever before.
- **Empower Workforce:** Communicate the organization's focus on innovation to employees to enhance morale. Encourage crowdsourcing of ideas, recognize hidden talents, and reward achievements and out-of-box thinking.

Conclusion

To emerge triumphant in the post-pandemic era, organizations must nurture a culture of innovation, realize the opportunities this crisis has offered, find ways to harness diverse thinking, engage with the remote workforce, and continue to champion the sustainable agenda. Sustainable growth is only possible when the entire organization is built to adapt and innovate. Actionable themes discussed in this paper will be the key to thrive in the new world.

About the author

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