

ADVENT OF E-COMMERCE AND DIGITALIZATION – A POST PANDEMIC PERSPECTIVE

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Abstract

The Covid-19 pandemic has led to an inevitable rush in the use of digital technologies due to the social distancing norms and nationwide lockdowns. People and organizations all over the world have had to adjust to new ways of work and life. An increase in digitalization is leading firms and educational institutions to shift to work-from-home. The regulation of the internet, a key resource, will be crucial post-pandemic. The lockdowns across countries have entailed a rise in the use of information systems and networks, with massive changes in usage patterns and usage behaviour. The pandemic accelerated the evolution of commerce, increased the importance of the electronic sales channel and inspired innovation in the purchasing process. With this view this study was employed to study about the scope for digital process and E-commerce operations.

Keywords: Digital, Internet, payments, Post-pandemic, E-Commerce.

Introduction

With the spread of the pandemic, almost all regions have implemented lockdowns, shutting down activities that require human gathering and interactions - including colleges, schools, malls, temples, offices, airports, and railway stations. The lockdown has resulted in most people taking to the internet and internet-based services to communicate, interact, and continue with their job responsibilities from home. Internet services have seen rises in usage from 40% to 100%, compared to pre-lockdown levels. Video-conferencing services like Zoom have seen a ten times increase in usage, and content delivery services like Akamai have seen a 30 % increase in content usage (Branscombe, 2020). Cities like Bangalore have seen a 100 % increase in internet traffic.

Employees are adjusting to new "normals" - with meetings going completely online, office work shifting to the home, with new emerging patterns of work. These changes have come across most organizations, whether in business, society, or government. The changes have also come suddenly, with barely any time for organizations and people to plan for, prepare and implement new setups and arrangements; they have had to adjust, try, experiment, and find ways that did not exist before.

It is in this context that we see the use of information systems to continue in the same vein for some time in the foreseeable future as during the lockdown. We examine the possible scenarios in this surge in information technology usage during and post the pandemic.

Increasing digitalization

As the use of video- and audio-conferencing tools increases significantly, organizations will ramp up their technology infrastructure to account for the surge. This will lead to increased investment in bandwidth expansion, network equipment, and software that leverages cloud services. With employees becoming acclimatized to the idea of work-from-home (WFH), meeting and transacting online, firms will shift to WFH as a norm rather than as an exception.

Education is another domain in which there a dramatic shift to the online mode of transacting. Since the beginning of the lockdown, schools, colleges, and universities around the world have shifted their classes to video conferencing platforms like Zoom and Google Meet. Along with these synchronous modes of teaching, asynchronous platforms like edX and Coursera have also seen an increase in enrolments (Shah, 2020). Some institutions are now shifting entirely to the online mode for the forthcoming academic year, with the exception of sessions that require a physical presence, such as the University of Cambridge in the UK and the California State system in the US (New York Times, 2020).

Digital transformation technologies such as Cloud, Internet-of-Things (IoT), Blockchain (BC), Artificial Intelligence (AI), and Machine Learning (ML), constitute a bulk of the of what is being adopted by organizations as part of their transformation effort.

Internet access and digitalization

The regulation of the internet will become crucial after the pandemic as it will remain a policy tool for governments. They can intercede on aspects of monitoring, bandwidth control, surveillance,

intermediary liability, and e-commerce. The pandemic has brought the world to a situation where those not connected to the internet are facing total exclusion. With strict social and physical distancing measures in place, new routines require accessing the internet for most services. Hence, those on the wrong side of the digital divide are completely left out.

Positive trend towards E-commerce

Among the more important changes is the activation of the new 65+ age group in online trade, which before the pandemic was very trusting of the processes taking place on the Internet. The pace at which the digital transformation of businesses, especially commerce, is progressing this year is unprecedented. It is not a revolution, but rather an accelerated evolution, because the appearance of the pandemic has become a catalyst for market changes that had to happen sooner or later. Importantly, in terms of business, this phenomenon has affected B2C and B2B models to a similar degree and undoubtedly, like the pandemic, has a global reach.

Retailers are investing more and more in e-commerce, because their customers are increasingly using this channel. The percentage of people who only shop online increased to 14% from 4% a year ago. At the same time, the presence of the baby boomer generation is becoming more and more visible in e-commerce.

Digital transformation

Despite the changes catalysed by the pandemic this year, the digital transformation of business is either a key motto for entrepreneurs or it is otherwise neglected by them. But if it's done properly, in fact, it can pave the way for big increases. Such companies just have to be aware of the complexity of this matter.

Each digital transformation should start and be subordinated to the business model of a given company. That's why many businesses now have an important lesson to learn. Currently, the question is no longer whether it is worth investing in the digital transformation process, but how to do it quickly and cost-effectively, because each day of delay aggravates the difficult situation of many companies and makes it impossible to take advantage of the upcoming changes.

As the recent McKinsey study in China suggests, consumers are likely to opt for online shopping even after the outbreak ends, especially for categories such as groceries and personal care. This trend is likely to continue long after the lockdowns are called off as people would still be apprehensive to visit crowded areas like malls or supermarkets.

Buying trends during lockdown

As the consumer behavior changes, retailers will witness an increasing dependency on the online orders. Projecting on some of the behaviour and channel mix we are witnessing in markets like China, the volume mix will look something like as depicted in the table below. As dependency on the marketplaces increase (and hence their clout), so will the possible margins being charged by them.

Retailers will have two options. They can continue to fulfil orders via online aggregators and hence lose a higher chunk towards margin and affecting bottomline. Or they can set up their own brand.com in order to restrict the revenue bleed (not to mention also reaping other long-lasting benefits viz. fostering brand loyalty etc.).

In these times of crisis, retailers are increasingly using physical stores as fulfilment centres to turn inventory over quickly and cut losses. Omnichannel retailers, who innovatively utilize their physical store space will inevitably be the winners of this new world order.

Brands can deploy personalized engagement beyond discounts or offers by keeping their consumers posted about their internal developments - be it about the store operations in their nearest neighborhoods or even to just convey words of empathy and care about the current situation. For instance, restaurants can actively communicate about the hygiene steps they've taken to increase confidence amongst customers. Personalized engagement platforms can enable brands to also communicate about shifting their operations online and reallocate some of the store credits that can be redeemed online.

To sum it up, we all knew the world was turning digital. A new order was being established. But for all we know, the pace has suddenly increased exponentially. It is at our doors, knocking down the traditional walls right now, as opposed to by 2030 as we all were expecting.

Implications for research

- Design of secure technologies, like blockchain-based applications, for the surge in online education and healthcare activities.
- Policy for regulating digital infrastructure needed for increased digital transformation.
- Design of technologies for managing secure online interactions – for education, healthcare, payments.
- Design of apps for contract tracing and disease surveillance that balance privacy versus public health.
- Managers will have to understand resistance to technology and ways to manage change, both among employees as well as customers.
- Given the significant role which the internet is about to play in times to come, Internet intermediaries will work with government and civil society to address privacy and surveillance issues for better adoption of technology.

Conclusion

We understand that a pandemic can have severe consequences (Keys, 2000), including changing the political contour of the world, destroying empires, and creating nations. For the Covid-19 pandemic, we envisage a dramatic shift in digital usage with impacts on all aspects of work and life. How this change plays out remains largely dependent on our responses to and shaping of the emerging trends.

References:

- Aker J.C., Boumnijel R., McClelland A., Tierney N. Payment mechanisms and antipoverty programs: Evidence from a mobile money cash transfer experiment in niger. *Economic Development and Cultural Change*. 2016;65(1):1–37.
- Belanger F., Collins R.W., Cheney P.H. Technology requirements and work group communication for telecommuters. *Information Systems Research*. 2001;12(2):155–176.
- Castell N., Kobernus M., Liu H.-Y., Schneider P., Lahoz W., Berre A.J., Noll J. Mobile technologies and services for environmental monitoring: The Citi-Sense-MOB approach. *Urban Climate*. 2015;14:370–382
- Agarwal S., Sengupta D., Kulshrestha A., Anand S., Guha R. The Economic Times; 2017. Internet users to touch 420 million by June 2017: IMAI report.

- Aghasian E., Garg S., Gao L., Yu S., Montgomery J. Scoring users' privacy disclosure across multiple online social networks. *IEEE Access*. 2017;5:13118–13130.
- Cho S., Qiu L., Bandyopadhyay S. Less than zero? The economic impact of zero rating on content competition. *The Economic Impact of Zero Rating on Content Competition (September 30, 2016) NET Institute Working Paper, (16-04) 2016*
- Gandy O.H. The surveillance society: Information technology and bureaucratic social control. *Journal of Communication*. 1989;39(3):61–76.
- Gu J., (Calvin) Xu Y., Xu H., Zhang C., Ling H. Privacy concerns for mobile app download: An elaboration likelihood model perspective. *Decision Support Systems*. 2017;94:19–28.
- Johnson V.L., Kiser A., Washington R., Torres R. Limitations to the rapid adoption of M-payment services: Understanding the impact of privacy risk on M-payment services. *Computers in Human Behavior*. 2018;79:111–122.
- Kathuria R., Kedia M., Verma G., Bagchi K., Sekhani R. Anatomy_of_an_Internet_Blackout.pdf. *Indian Council for Research on International Economic Relations*. 2018
- Luo X., Li H., Zhang J., Shim J.P. Examining multi-dimensional trust and multi-faceted risk in initial acceptance of emerging technologies: An empirical study of mobile banking services. *Decision Support Systems*. 2010;49(2):222–234.
- Lupton D. M-health and health promotion: The digital cyborg and surveillance society. *Social Theory & Health*. 2012;10(3):229–244.
- Morrison-Smith S., Ruiz J. Challenges and barriers in virtual teams: A literature review. *SN Applied Sciences*. 2020;2:1–33. Springer.
- Pollach I., Treiblmaier H., Floh A. Online fundraising for environmental nonprofit organizations. *The Hawaii International Conference on System Sciences*. 2005:9.
- Smith H.J., Dinev T., Xu H. Information privacy research: An interdisciplinary review. *MIS quarterly*. 2011;35(4):989–1016.
- Tarafdar M., Tu Q., Ragu-Nathan B.S., Ragu-Nathan T. The impact of technostress on role stress and productivity. *Journal of management information systems*. 2007;24(1):301–328. Taylor & Francis.

- Wachanga D.N. Ethnic differences vs nationhood in times of national crises: The role of social media and communication strategies. *Journal of African Media Studies*. 2015;7(3):281–299.
- Youn S., Hall K. Gender and online privacy among teens: Risk perception, privacy concerns, and protection behaviors. *CyberPsychology & Behavior*. 2008;11(6):763–765. Mary Ann Liebert, Inc., publishers.