



IPCIDE BLOG

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Is the pandemic-driven adoption of digital technologies by businesses here to stay?

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Summary

The pandemic was expected to permanently alter how societies function. Mobility restrictions, changing demand patterns, and greater uncertainty led businesses to rapidly adopt digital technologies. Recent evidence, however, suggests that there was an “overshoot” and businesses have been returning to pre-pandemic ways of operating. For sustained and effective digital adoption by the private sector, concerted policy attention and systematic support would be necessary.

Accelerated adoption

Evidence from around the world suggests that the COVID-19 pandemic accelerated businesses' adoption and use of digital technologies to cope with mobility restrictions, changing demands, and increasing uncertainty¹. For example, Ragoussis & Timmis (2022) find that lockdown stringency, workplace closure and stay-at-home requirements, and number of COVID deaths all predict growth in e-commerce and online payment. OECD (2021) finds that containment measures to control the pandemic explained a large portion of the variation in online platform activities across countries, and stricter measures were associated with higher growth of online platform activity.

Although widespread, the increase in adoption was not homogenous. Small firms, for example, were constrained in their ability to adopt digital technologies

due to factors such as lower organizational capacity, lower digital capabilities of workers, decline in revenues, inadequate liquidity and lack of access to credit². Additionally, Adian et al. (2020) find that small businesses were more likely to adopt digital responses such as delivery, carryout and new products, rather than remote work and online sales.

Temporary or sustained?

Many believed that the pandemic would permanently alter the way various aspects of society function. But with the easing of restrictions, and the fear of infection and its consequences waning, we find mixed outcomes. While the pandemic has undoubtedly catalysed a digital transition in the private sector, to what extent is this permanent, still needs to be determined.

The transition to digital payments, for example, looks like it is here to stay. Its convenience makes it appealing to customers (and many businesses) even in the post pandemic world. The ubiquitous nature of digital payments at present, suggests a behavioural shift among customers who no longer carry cash and businesses therefore stand to lose if they don't accept digital payments. Moreover, innovations in e-payment solutions have also lowered costs of digital transactions. However, this is not true for all types of pandemic-led digitalisation of business functions.

1 Apedo-Amah et al., 2020; McKinsey, 2020; Abed, 2021; Eurostat, 2022; Ragoussis & Timmis, 2022

2 Adian et al., 2020; Apedo-Amah et al., 2020; de Nicola et al., 2021; Eurostat, 2022

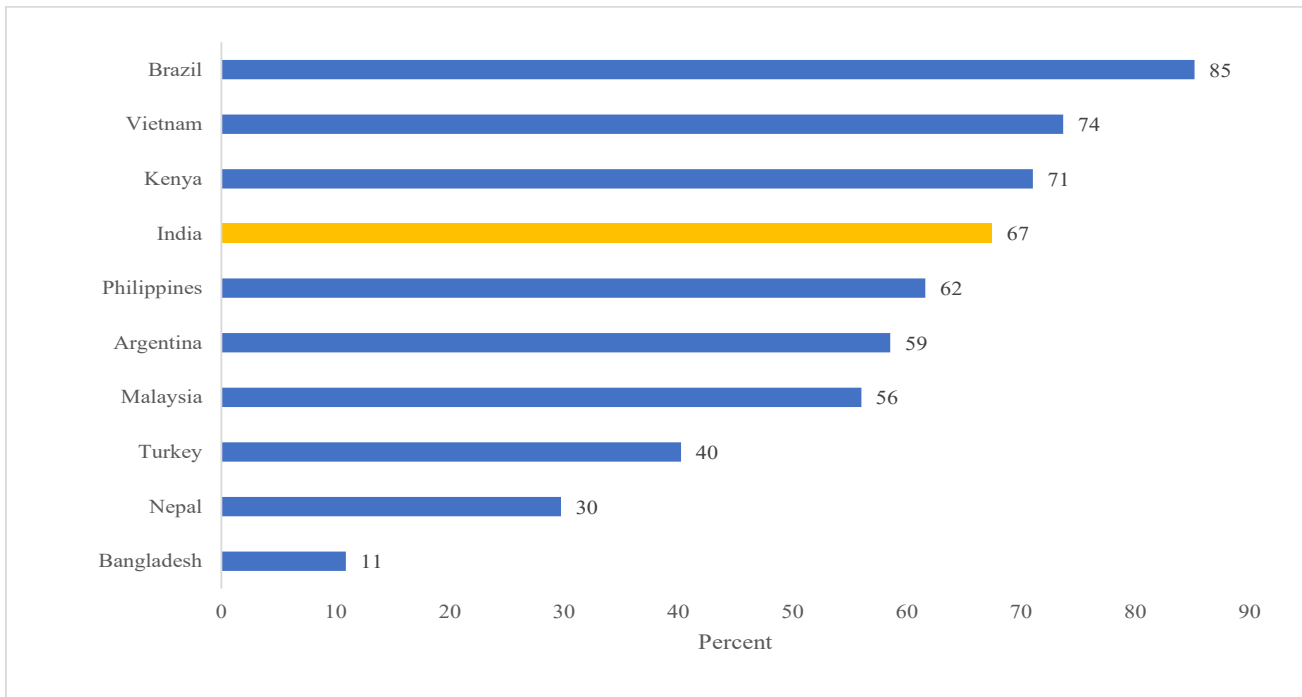
3 Bright, 2020; Jamison, 2022; BCG & PhonePe Pulse, The Economist, 2022; Vélez, 2022

Some evidence on reversion

The World Bank Business Pulse Survey on formal firms provides some empirical insights. A significant share of formal firms with 5 or more workers in India reported an increased use of digital platforms during the pandemic (Figure 1). However, we begin to see

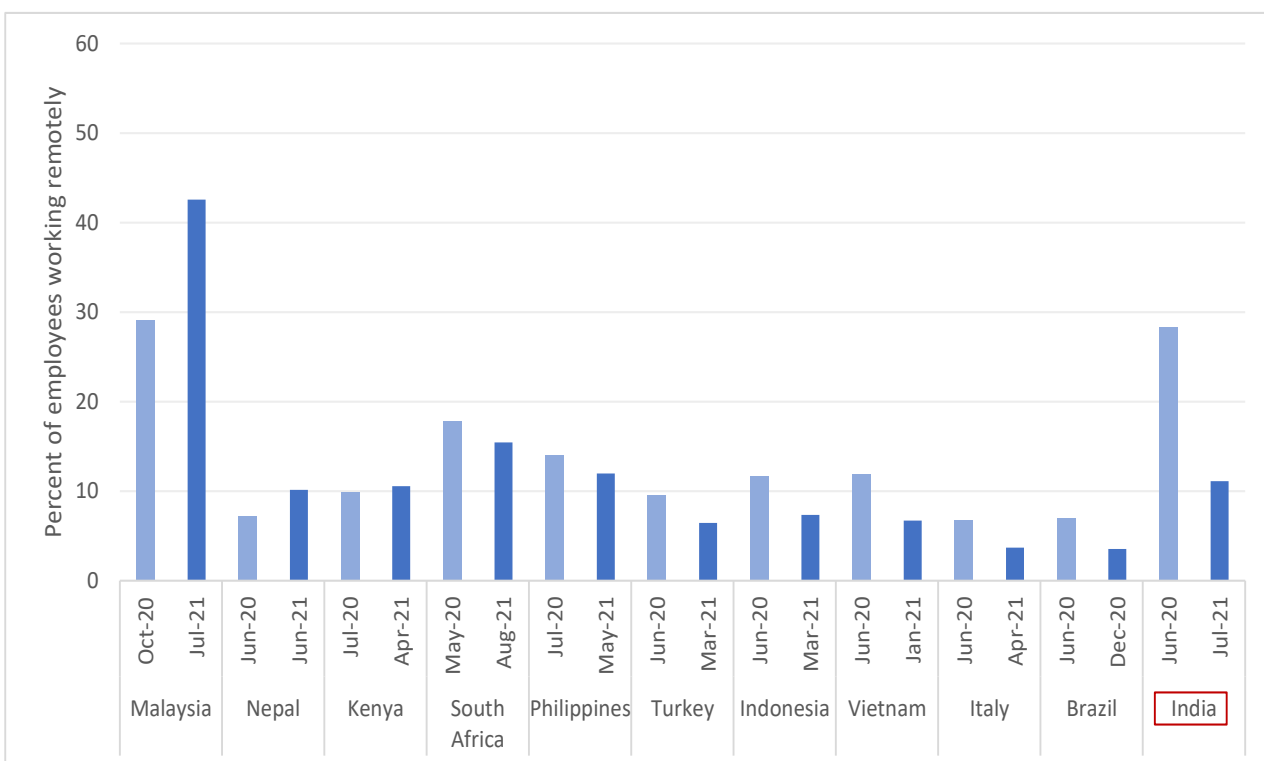
some reversion in terms of the intensity of use by mid-2021 in India as well as other countries. These are reflected in the practice of remote work as well as online sales (Figure 2a and 2b).

Figure 1: Percent of firms (≥5 workers) that started or increased the use of digital platforms



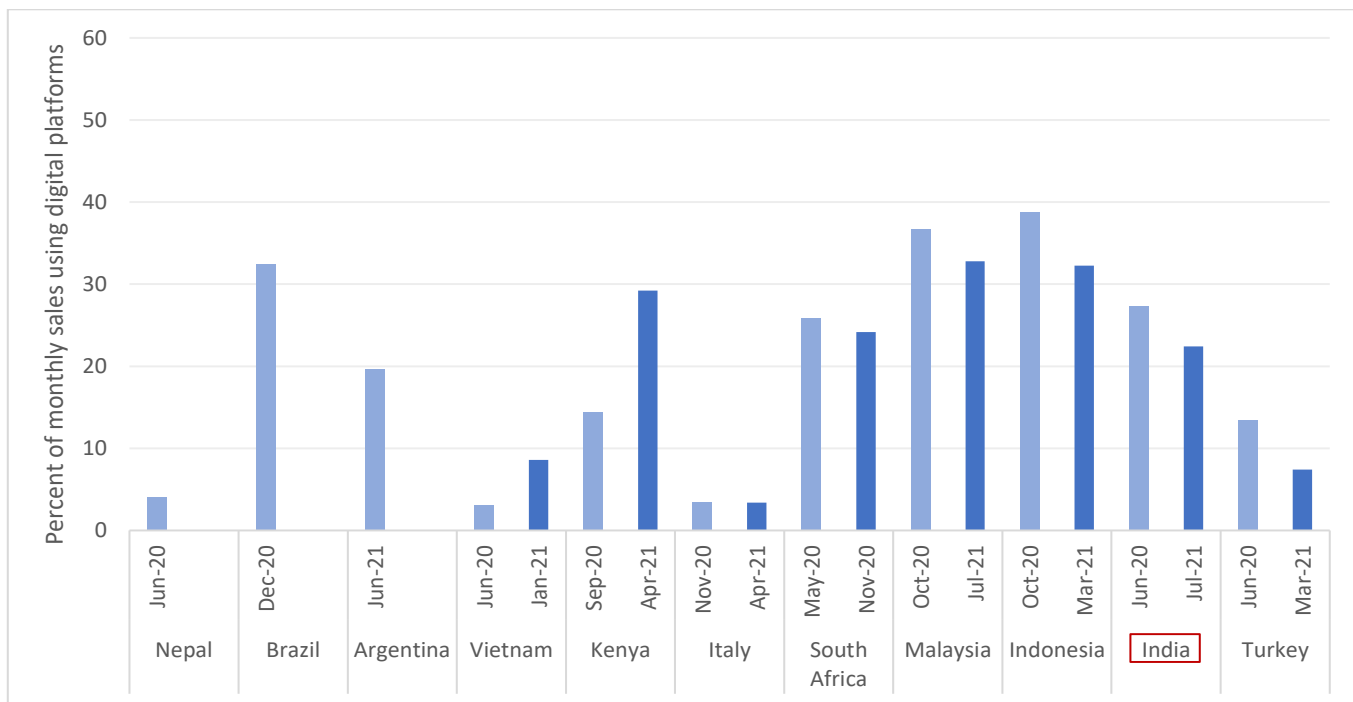
Source: World Bank Pulse Surveys, 2020 and 2021.

Figure 2a: Remote work (firms with ≥5 workers)



Source: World Bank Pulse Surveys, 2020 and 2021. Countries are ordered from left to right in terms of percent change between the two time periods. India has the largest decline.

Figure 2b: Sales using digital platforms (firms with ≥ 5 workers)



Source: World Bank Pulse Surveys, 2020 and 2021. Countries are ordered from left to right in terms of percent change between the two time periods. India has the second largest decline.

The pros and cons of remote work have been debated intensely. On the one hand, it offers convenience for employees and slower infrastructure costs for firms, while on the other hand, employees miss having a dedicated workspace and opportunities for human interaction, considerably impacting labour productivity. While the pandemic has permanently changed the perception and capabilities of organizations to enable flexible work arrangement, many countries are returning to business as usual in terms of place of work.

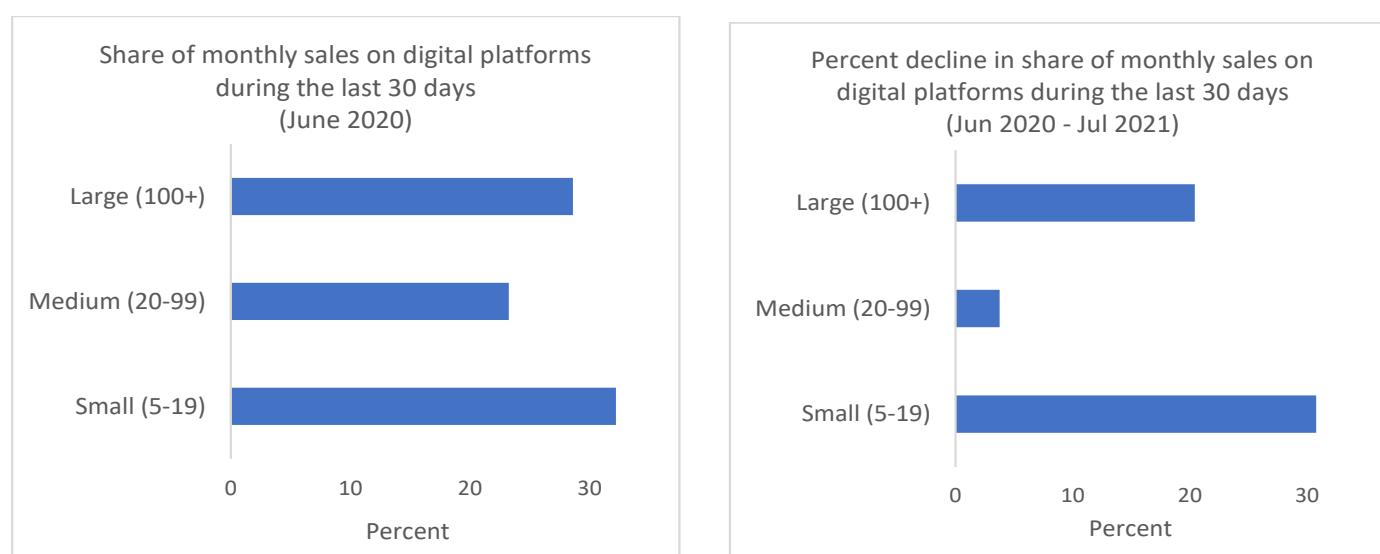
Online sales, however, appears to be more persistent with relatively smaller declines in the share of monthly sales using digital platforms. The convenience of online sales for consumers may outweigh the costs of delivery and preference for shopping in person even in a post pandemic context. For businesses, benefits from increased sales and lower infrastructure

expenditure may outweigh costs of delivery and using digital technologies.

Heterogeneity in adoption and reversion

On average, small formal firms (5-19 workers employees) in India reported relatively higher shares of sales through digital platforms than large firms in June 2020. But they also showed the greatest decline between June 2020 and July 2021 (Figure 3a and b). The need for cash flow in order to survive may have pushed them to adapt, and their smaller scale may have allowed them to better handle the immediate logistics of selling through digital platforms. However, these findings suggest that many of them may not have found it appropriate as a long-term choice. These findings of heterogeneity by size are also likely to differ if informal firms are accounted for.

Figure 3a and 3b: Heterogeneity by firm size in sales using digital platforms, and its decline between 2020 and 2021 (firms with ≥ 5 workers)



Source: World Bank Pulse Surveys, 2020 and 2021.

As the frequency and intensity of infections continue to decline, and restrictions continue to be eased, it remains to be seen how these trends will change. A larger sample of firms and sector wise analysis of how these responses evolved over time alongside changes in restrictions, infection rates would help understand these dynamics better. Further, the exit and entry of many businesses during the pandemic – not captured in this data – also contributed to the digital transition

by changing the composition of business models and modes of business in the economy.

In conclusion, while the pandemic has provided a push towards digital adoption, it appears to have been an overshoot, especially for the smaller firms. For sustained and effective digital adoption by the private sector, concerted policy attention and systematic support would be necessary.

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