



# Global Economic Insight

## E-commerce behavior points to structural shift in online shopping

With economies reopening as vaccination rates grow higher and mobility restrictions relax, e-commerce sales continue to hold steady above pre-pandemic levels as a share of overall retail sales. This suggests the possibility of the more permanent structural shift in online shopping behavior that we first reported in our earlier Global Economic Insight<sup>1</sup> analysis of online sales between 2019 and 2020. In Singapore, e-commerce sales as a share of total 2021 retail sales were 0.9 percentage-points higher than their respective 2020 levels.

The app economy was a big contributor to this behavioral shift towards online shopping. During the pandemic, many merchants either created their own apps or made use of existing apps/platforms to connect with customers virtually.

At the same time, consumers were spending more time at home, and depended on these apps for their shopping needs throughout much of the past two years. In fact, time spent on shopping apps worldwide reached over 100 billion hours in 2021. By country, Singapore registered a robust growth of 46 percent in time spent on shopping apps, in tandem with its higher e-commerce share. In the U.S., growth in time on shopping apps was a more modest 12 percent.

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### Key Points:



Online sales remained strong post-pandemic



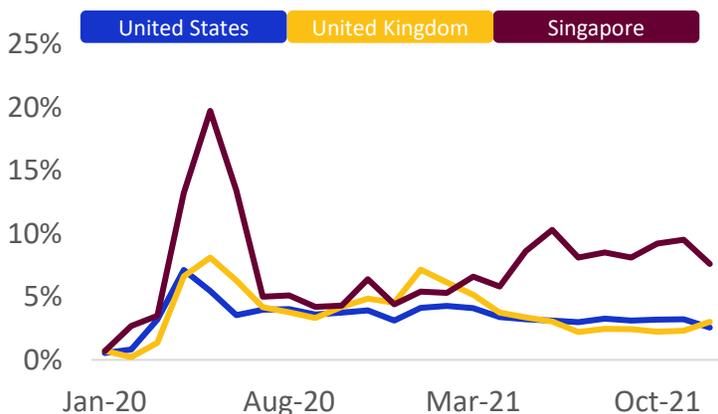
Companies benefited from further increasing their online presence



Online behavior of firms remained sticky

Fig. 1: Share of online retail sales over total retail sales (Relative to 2019)

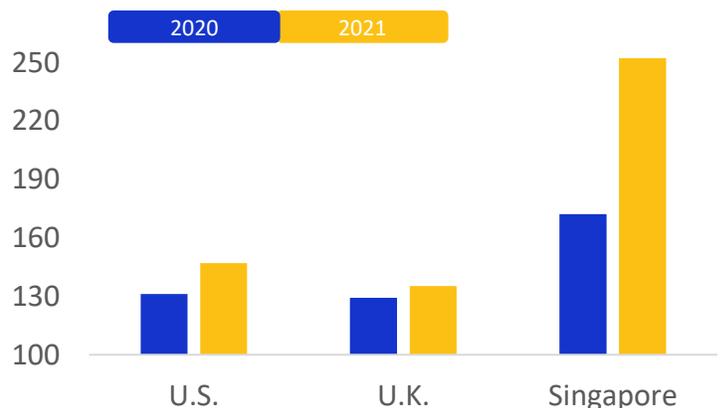
The behavioral shift towards online spending since the start of the pandemic has been sustained in 2021



Sources: Census/Haver Analytics, U.K. Office of National Statistics/Haver Analytics, Singapore Department of Statistics/Haver Analytics

Fig. 2: Index of total annual hours spent on shopping apps for phones\*

Selected countries in North America, Europe and Asia Pacific (indexed to 2019=100)



\* Data includes phones that use the Android™ Operating System  
Source: Data.ai



# Further expansion into the digital space is still possible

Concerns that online sales<sup>2</sup> channels would decline again once mobility returned and foot traffic in retail stores<sup>3</sup> increased again proved to be unfounded. In fact, 10 percent of small- and medium-sized businesses (SMBs)<sup>4</sup> and 8 percent of large firms that had increased their online business in 2020 further increased their online presence in 2021. The protracted digital shift had positive impacts on payment volumes.

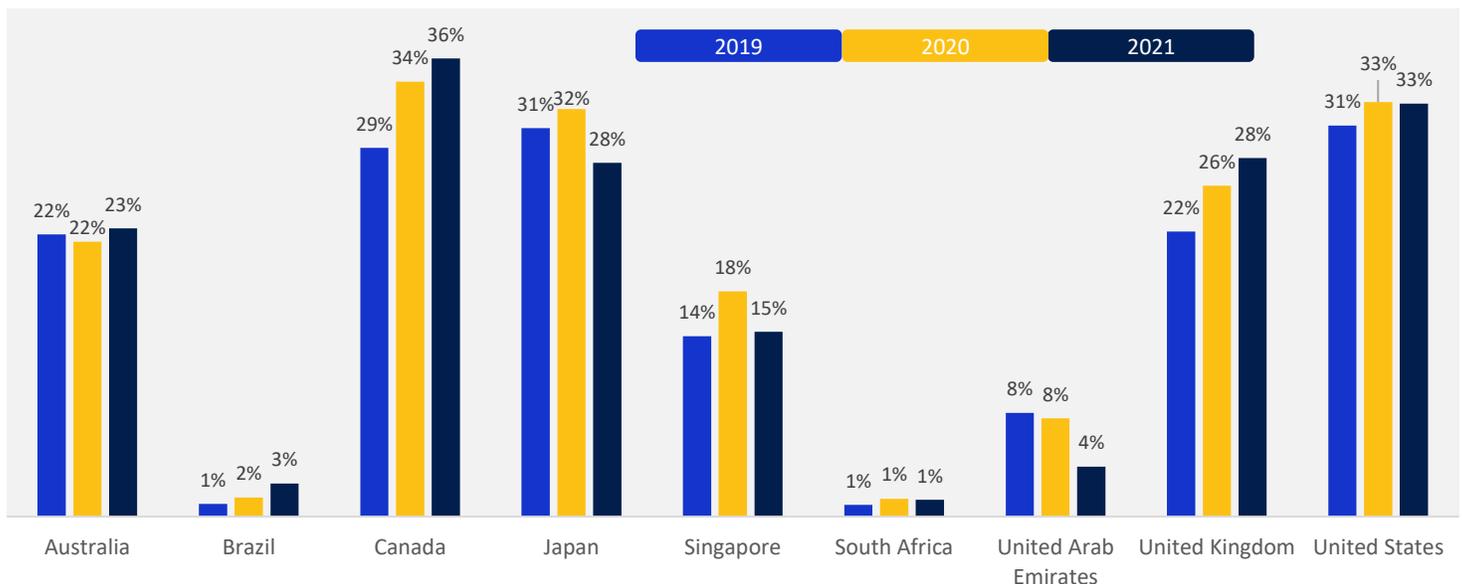
This analysis is an extension of our earlier research<sup>5</sup> conducted during the height of the pandemic. Unlike the earlier analysis, which used a cross-sectional (i.e. 2019 to 2020) dataset, this analysis used a longitudinal panel dataset from 2019 to 2021, allowing us to observe firms' behavior from pre-pandemic to post-pandemic, including their 2021 online presence and outcomes. According to our analysis of VisaNet data, we observed the following dynamics on retail merchants:

- Share of online sales for both SMBs and large businesses inched up further in 2021.** Earlier, government statistics showed that the share of e-commerce sales increased through the pandemic and was maintained at a higher level ever since. Using VisaNet data, we can attribute the rise to both retail SMBs and large firms. The overall share of e-commerce sales for retail SMBs first rose by 2.2 percentage points to 27.6 percent in 2020. It then increased by 0.8 percentage points to 28.4 percent in 2021. Interestingly, the growth in online sales for retail SMBs in 2021 was stronger compared to 2020's online sales growth and 2021's overall sales growth. **This suggests that having an online sales presence remains vital for SMBs despite the return of mobility.**

There are variations between countries. For Singapore, the share of e-commerce sales of retail SMBs dropped by 3.2 percentage points in 2021, but was still higher than 2019 levels. This was primarily due to weakness in e-commerce sales by retail SMBs that maintained similar levels of online presence since 2019. Japan had a similar experience. Despite the benefits of increasing online sales, there could still be impediments to getting retail SMBs to do so.

**Fig. 3: Share of e-commerce sales of retail SMBs by country**

Retail SMBs in parts of Asia saw a decline in their share of online sales in 2021 compared to Canada and the United Kingdom



Source: VisaNet

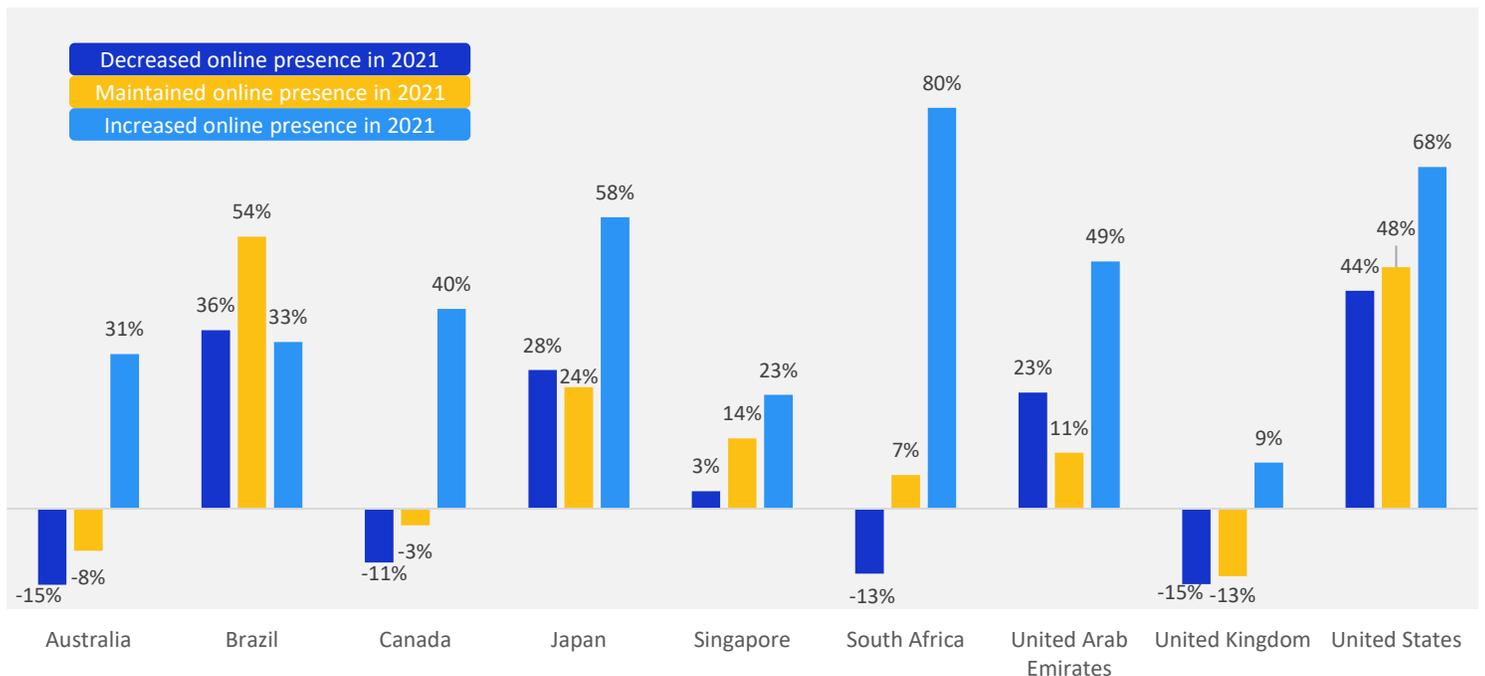
# Online behavior of firms tends to be sticky

- Retail firms’ behavior remains sticky in 2021**, meaning they maintained the status quo in their online activity in 2021 as compared to 2020. In particular, 89 percent of firms that maintained the same online presence between 2019 and 2020 continued to do so in 2021. By firm type, 90 percent of SMBs and 87 percent of large firms maintained similar levels of online activity yearly from 2019 to 2021. **This reinforces the earlier point that there may need to be more nudges to push more SMBs to increase their online presence.**
- Both SMBs and large firms can still benefit from expanding their online business further.** Retail SMBs that further increased their online presence in 2021 following an expansion in 2020 generally enjoyed stronger growth in sales. For instance, in the United States, total sales grew by 68 percent for such retail SMBs. This is 20 percentage points higher than retail SMBs that increased their online presence in 2020 but maintained it in 2021. Retail SMBs in the United States that increased their online presence in 2020, but decreased it in the following year saw the weakest growth of 44 percent in total sales. This suggests that **marginal returns increase** when firms deepen their online presence.

One exception was Brazil, where retail SMBs that maintained a similar online presence in 2021 compared to 2020 saw the strongest growth in sales of 48 percent. One possible explanation is that these retail SMBs heavily expanded their online business in 2020 and saw no need for further expansion. This is evidenced by their robust e-commerce sales growth in 2021, which was at least two times faster than retail SMBs that further expanded their online business.

**Fig. 4: Sales performance of retail SMBs by country that increased their online business in 2020 and their respective 2021 online presence status compared to 2020 (YoY percent change in payments volume)**

Generally, retail SMBs that further increased their online presence saw robust growth in payments volume



Source: VisaNet



## Footnotes

1. “Will the abrupt, pandemic-induced e-commerce shift reshape retail’s future?”, Visa 2021.  
<https://usa.visa.com/dam/VCOM/global/partner-with-us/documents/global-economic-insights-march-2021.pdf>
2. Online transactions in this document are card-not-present transactions.
3. Analysis is based on a sample of Visa merchants located in 25 markets around the world from 2019 to 2021. The sample includes the subset of Visa merchants in the retail trade category (excluding gas stations and food service establishments) that were minimally active in 2019, 2020, and 2021. A merchant’s segment is defined based on the merchant category code where it registered the largest purchase volume in 2019.
4. Small- and medium-sized businesses are defined as having total purchase volume in 2019 that was not within the top quartile of all Visa merchants within the same market and merchant category. These businesses could grow into large businesses in 2021 but are still classified as SMBs for classification purposes.
5. “Will the abrupt, pandemic-induced e-commerce shift reshape retail’s future?”, Visa 2021.  
<https://usa.visa.com/dam/VCOM/global/partner-with-us/documents/global-economic-insights-march-2021.pdf>



## Accessibility Notes

**Fig 1.** Line chart showing the share of online retail sales to total retail sales relative to 2019. Share of online retail sales for United states ranged from low of 0.6 percent in Jan-2020 to a high of 7.1 percent in Apr-2020 and finishing at 2.6 percent in Dec-2021. Share of online retail sales for United Kingdom ranged from low of 0.7 percent in Jan-2020 to a high of 8.1 percent in May-2020 and finishing at 3.0 percent in Dec-2021. Share of online retail sales for Singapore ranged from low of 0.7 percent in Jan-2020 to a high of 19.7 percent in May-2020 and finishing at 7.6 percent in Dec-2021.

**Fig 2.** Bar chart showing the index of total annual hours spent on shopping apps for phones. Index of total hours spent for the United States increased from 131.2 in 2020 to 147.1 in 2021, while in the United Kingdom it increased from 129.2 to 135.3, and in Singapore it increased from 172.2 to 252.2, respectively.

**Fig 3.** Bar chart showing share of e-commerce sales of retail small-and medium-sized businesses. Australia went from 22 percent in 2019 to 22 percent in 2020 and finished at 23 percent in 2021. Brazil went from 1 percent in 2019 to 2 percent in 2020 and finished at 3 percent in 2021. Canada went from 29 percent in 2019 to 34 percent in 2020 and finished at 36 percent in 2021. Japan went from 31 percent in 2019 to 32 percent in 2020 and finished at 28 percent in 2021. Singapore went from 14 percent in 2019 to 18 percent in 2020 and finished at 15 percent in 2021. South Africa remained at 1 percent for 2019, 2020 and 2021. United Arab Emirates was at 8 percent for both 2019 and 2020 before finishing at 4 percent in 2021. United Kingdom went from 22 percent in 2019 to 26 percent in 2020 and finished at 28 percent in 2021. United States went from 31 percent in 2019 and remained at 33 percent for both 2020 and 2021.

**Fig 4.** Bar chart showing retail SMBs that decreased, increased and maintained their online presence in 2021. In Australia, retail SMBs that decreased their online presence in 2021 saw total sales growth drop by 15 percent, those that maintained their online presence also saw a decline in total sales growth by 8 percent and those that increased their online presence saw a 31 percent growth in total sales. In Brazil, retail SMBs that decreased their online presence in 2021 saw total sales growth increase by 36 percent, those that maintained their online presence saw an increase in total sales growth by 54 percent and those that increased their online presence saw a 33 percent growth in total sales. In Canada, retail SMBs that decreased their online presence in 2021 saw total sales growth drop by 11 percent, those that maintained their online presence also saw a decline in total sales growth by 3 percent and those that increased their online presence saw a 40 percent growth in total sales. In Japan, retail SMBs that decreased their online presence in 2021 saw total sales growth increase by 28 percent, those that maintained their online presence saw an increase in total sales growth by 24 percent and those that increased their online presence saw a 58 percent growth in total sales. In Singapore, retail SMBs that decreased their online presence in 2021 saw total sales growth increase by 3 percent, those that maintained their online presence saw an increase in total sales growth by 14 percent and those that increased their online presence saw a 23 percent growth in total sales. In South Africa, retail SMBs that decreased their online presence in 2021 saw total sales growth drop by 13 percent, those that maintained their online presence saw an increase in total sales growth by 7 percent and those that increased their online presence saw a 80 percent growth in total sales. In United Arab Emirates, retail SMBs that decreased their online presence in 2021 saw total sales growth increase by 23 percent, those that maintained their online presence saw an increase in total sales growth by 11 percent and those that increased their online presence saw a 49 percent growth in total sales. In the United Kingdom, retail SMBs that decreased their online presence in 2021 saw total sales growth drop by 15 percent, those that maintained their online presence also saw a decline in total sales growth by 13 percent and those that increased their online presence saw a 9 percent growth in total sales. In the United States, retail SMBs that decreased their online presence in 2021 saw total sales growth increase by 44 percent, those that maintained their online presence saw an increase in total sales growth by 48 percent and those that increased their online presence saw a 68 percent growth in total sales.



## Forward Looking Statements

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