

**Fraud Trends - Quarterly Analysis**

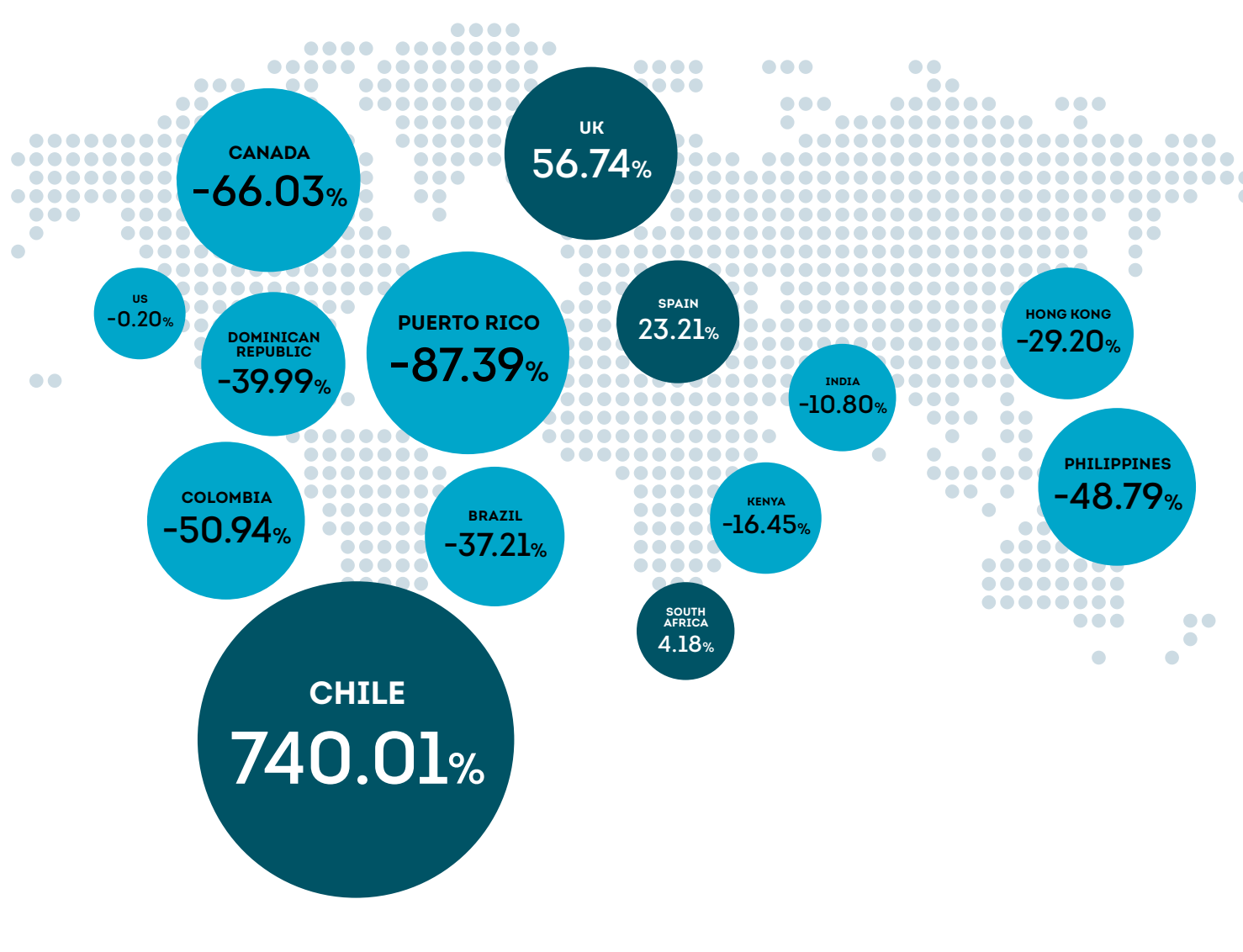
# Digital Holiday Fraud in 2021

TransUnion analyzed same-store ecommerce sales for digital fraud during the traditional start of the global holiday shopping season: US Thanksgiving to Cyber Monday.\* All findings except the last chart are based on intelligence from billions of transactions and more than 40,000 websites and apps contained in TransUnion's flagship identity proofing, risk-based authentication and fraud analytics solution suite - TruValidate™.

## Suspected Digital Fraud Attempt Rate Increasing Worldwide



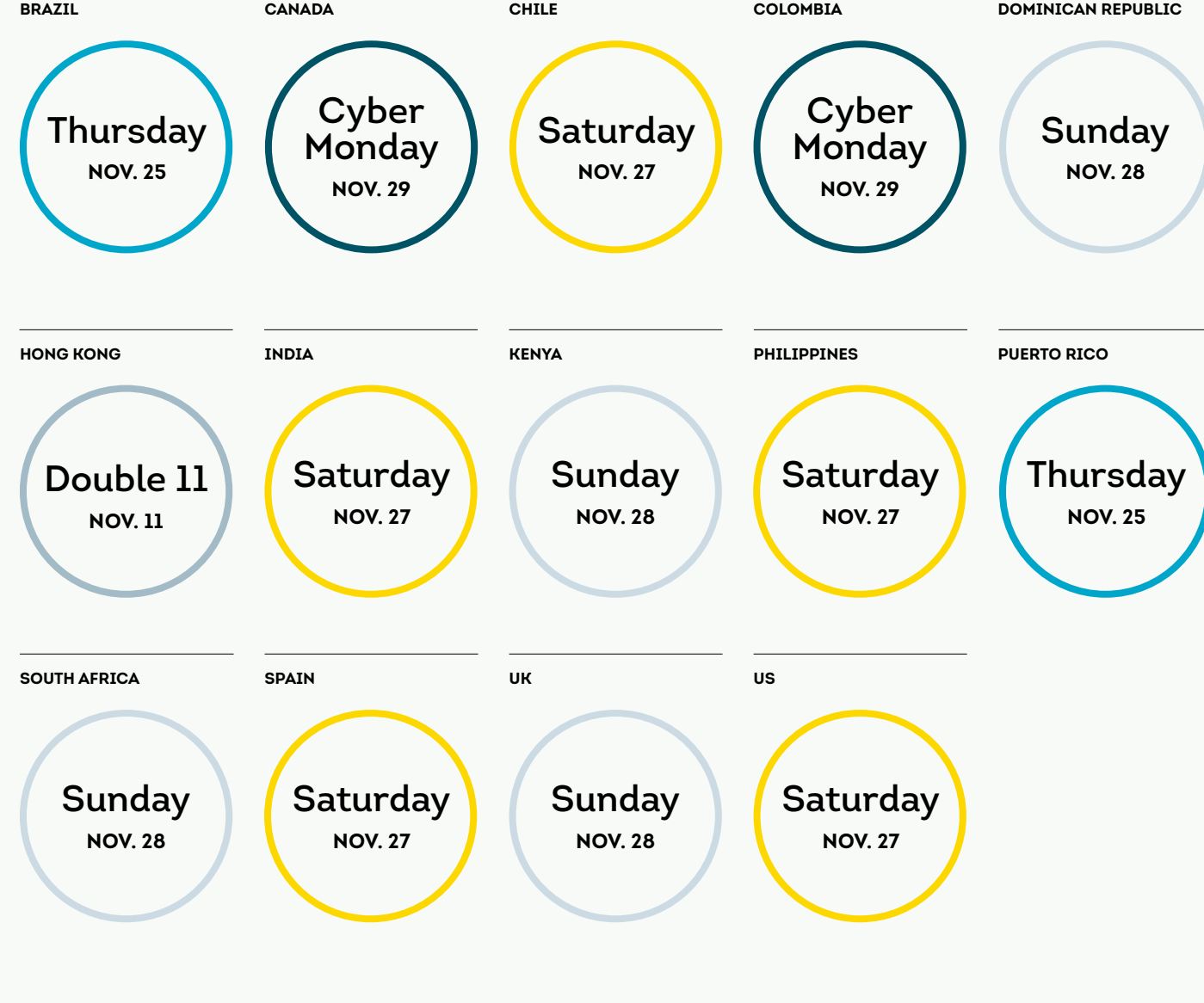
Percent growth when comparing Nov. 25-29, 2021 to Nov. 26-30, 2020.\*\*



## Most Popular Day for Suspected Digital Fraud

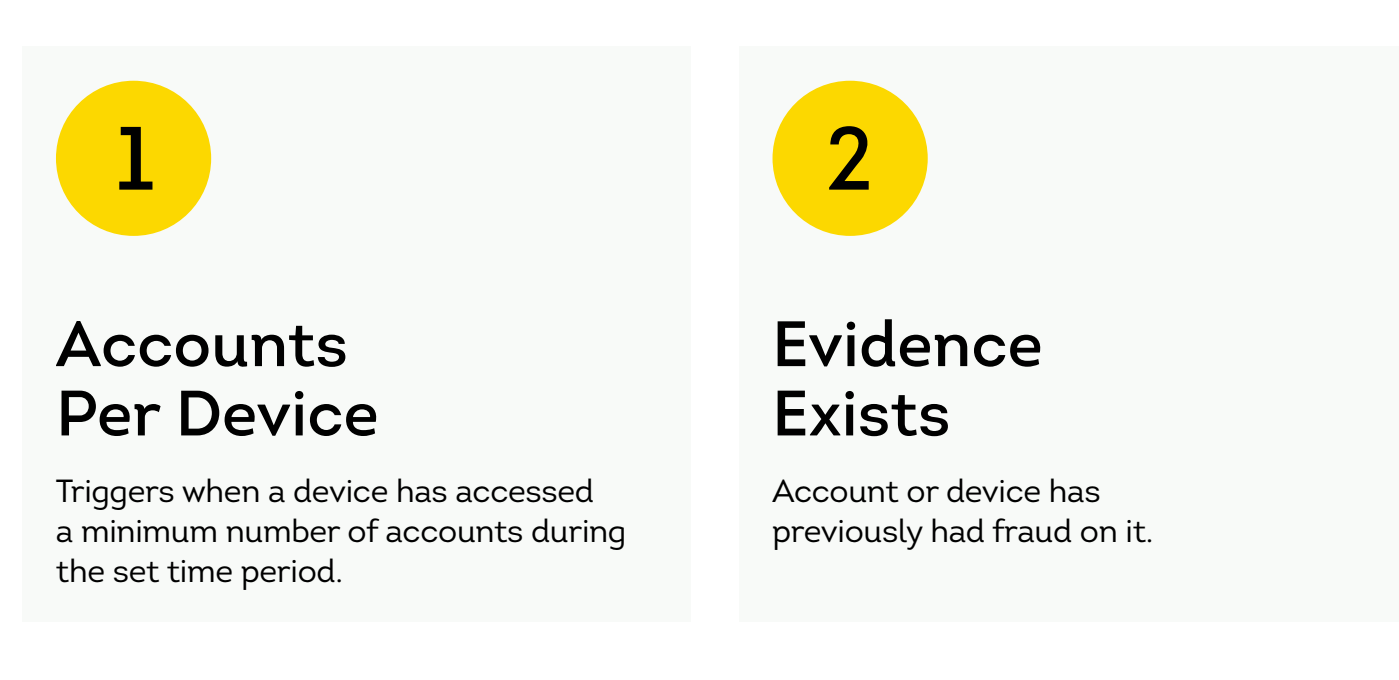


During start of 2021 holiday shopping season.



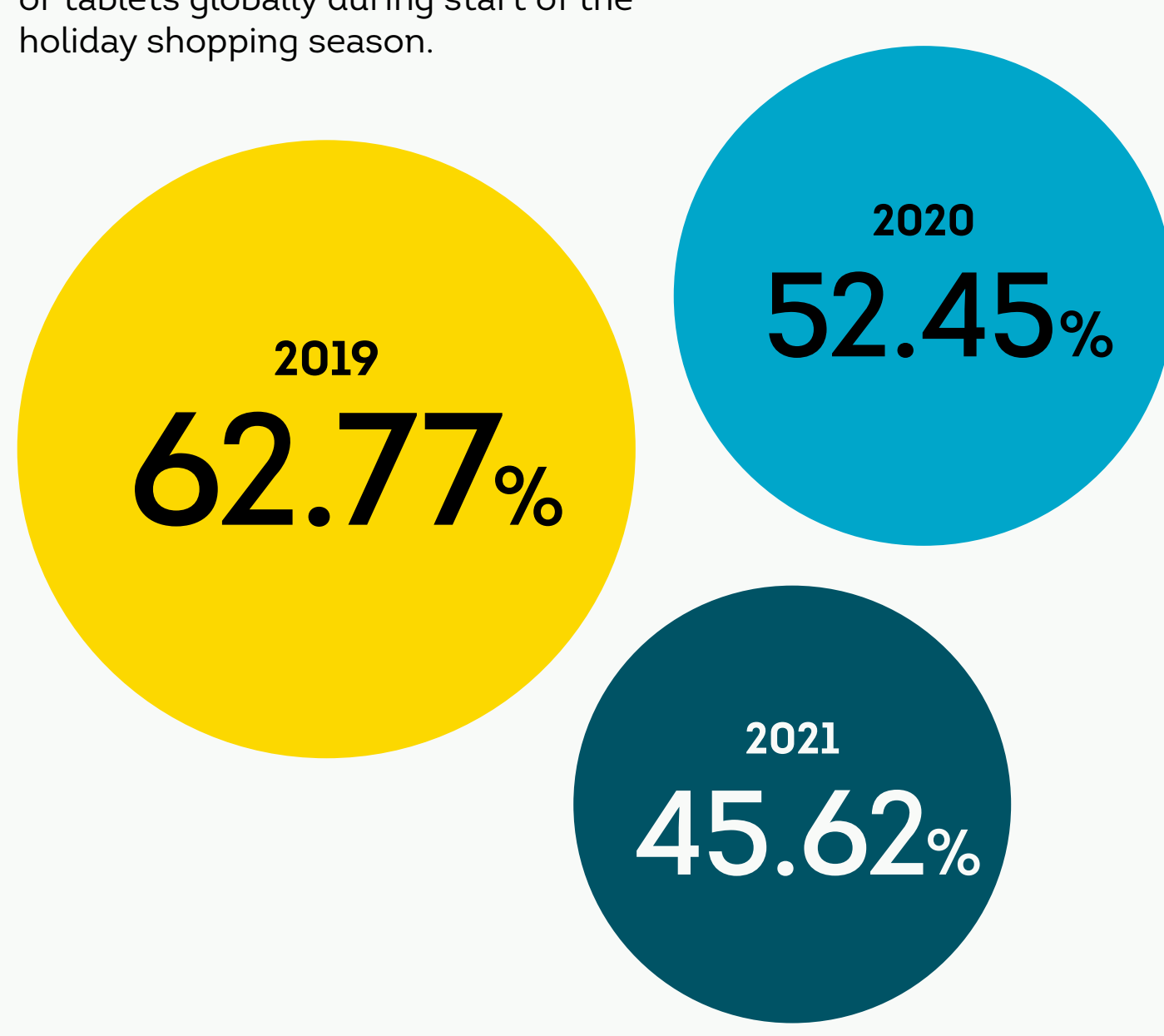
## Top Reasons TruValidate Identified Transactions as Suspected Fraudulent

Globally from Thursday, Nov. 25, to Cyber Monday 2021.

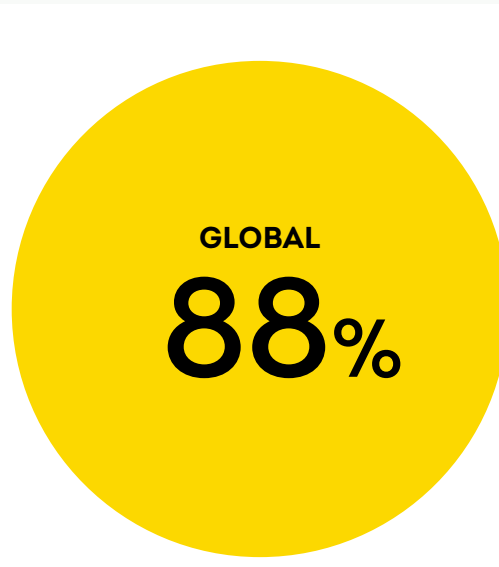


## Schemes From Mobile

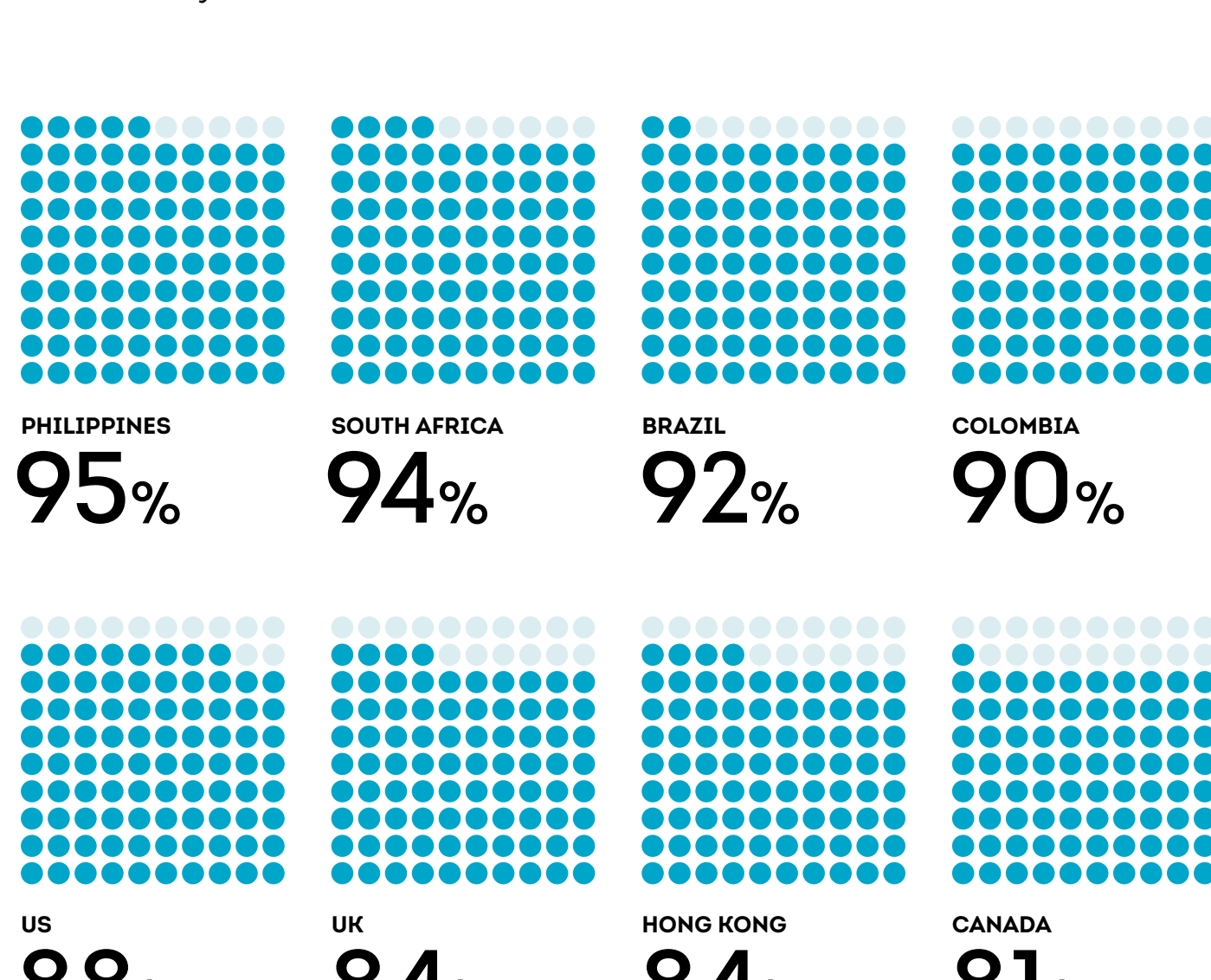
Percent of suspected digital fraud attempts coming from mobile phones or tablets globally during start of the holiday shopping season.



## Consumer Concern



Percent of consumers surveyed who said they're concerned with being victimized by online fraud this holiday season.\*\*\*



\*For Hong Kong, TransUnion analyzed transactions on Double 11, Nov. 11, and US Thanksgiving to Cyber Monday.  
 \*\*The percent of suspected digital fraud attempts are those that TruValidate customers either denied or reviewed due to fraudulent indicators compared to all transactions it assessed for fraud. The country and regional analysis examines transactions originating from select countries and regions.  
 \*\*\*TransUnion's Consumer Pulse survey of 10,402 adults was conducted Oct. 28-Nov. 18, 2021 by TransUnion in partnership with third-party research provider, Qualtrics® Research-Services. Adults 18 years of age and older residing in Brazil, Canada, Colombia, Hong Kong, the Philippines, South Africa, and the UK and US were surveyed using an online research panel method across a combination of desktop, mobile and tablet devices. Survey questions were administered in Chinese (Hong Kong), English, French (Canada), Portuguese (Brazil) and Spanish (Colombia). To increase representativeness across resident demographics, the survey included quotas to balance responses to the census statistics dimensions of age, gender, household income and region. Generations are defined as follows: Gen Z, born 1995-2003; Millennials, born 1980-1994; Gen X, born 1965-1979; and Baby Boomers, born 1944-1964. These research results are unweighted and statistically significant at a 95% confidence level within ±0.96 percentage points based on a calculated error margin.