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Economic Impact of Meta in Türkiye

Methodology Note

Size of the digital economy in Türkiye

We measure the digital economy using a hypothetical extraction method (HEM) based on Input-Output (I-O) analysis. This approach estimates the value of an economy with and without its digital industries, allowing us to quantify both their direct contribution and their indirect supply-chain effects.

We define digital industries using standard industry classifications from the Input-Output tables:

- Computer, electronic and optical products (C26)
- Telecommunications services (J61)
- Computer programming, consultancy and related services; information services (J62_J63)

We use the 2023 Input-Output tables published by the Turkish Statistical Institute (TurkStat), projecting values to 2025 using IMF GDP growth rate forecasts. Using input-output modelling techniques, we estimate total GVA for the Turkish economy. We then hypothetically extract the digital sectors by setting the value of these industries to zero and re-estimating GVA. The difference between the baseline and the extracted scenario represents the value of the digital economy.

We additionally model the evolution of the digital economy's share of GVA up to 2035 using average growth in digital indicators. Namely, we draw on Statista and World Bank data to calculate recent growth in e-commerce activity and Internet penetration respectively, scaling the digital share of the Turkish economy by growth in these indicators and applying this to projected Turkish GDP in 2035, estimated by applying linear forecasting techniques to longitudinal IMF GDP estimates.

Economic impact of WhatsApp in Türkiye

We estimate the total economic impact of WhatsApp in Türkiye by combining business benefits and consumer benefits into a single measure of economic activity generated by the platform.

<u>Business benefits</u>

This represents the economic activity for businesses through WhatsApp's role in advertising, boosting sales, and supporting efficient communication. We estimate this as the sum of:

- **Returns from WhatsApp advertising**. We estimate the economic activity generated by click-to-WhatsApp advertising on Meta's platforms by constructing a top-down estimate of business advertising on Meta platforms using Statista data on social advertising spend and StatCounter data on market share. We then draw on a WordStream benchmark for click-through rates on WhatsApp and Meta's update to Tadelis et al., 2023's estimate of the relevant return on advertising spend.
- **Business productivity gains**. We estimate the productivity savings for businesses using WhatsApp for communication, coordination, and customer service. We draw on Forrester research on efficiency gains from business communication on Meta platforms and International Labour Organisation (ILO) data on working hours to estimate the annual hours saved by workers using Meta's business messaging tools. We monetise this using World Bank data on hourly GVA per worker, and apportion by WhatsApp use as a share of all Meta use in Türkiye by looking at relative app downloads for Meta platforms according to SensorTower.
- **Sales from WhatsApp Business API adoption**. We estimate the incremental sales generated by larger businesses using the WhatsApp Business API for automated messaging, order confirmations, customer support, and lead generation. We multiply large business share of GDP from UN Conference on Trade and Development (UNCTAD) analysis, TurkStat and World Bank data on online WhatsApp users as a portion of the Turkish population, and Forrester research on the incremental percentage increase in total sales revenue from using WhatsApp Business.

Consumer benefits

This represents the savings on communication costs from using WhatsApp instead of alternatives such as SMS and voice calls. We calculate WhatsApp-specific consumer savings by estimating the total volume of calls and messages supported by WhatsApp in Türkiye, estimating the counterfactual cost of this communication is supported instead by traditional operator networks, and scaling the difference in cost by the number of WhatsApp users in Türkiye.

First, we estimate the volume of voice calls and messages that are supported by mobile data (i.e., made through apps like WhatsApp) rather than traditional operator networks for the average Turkish person. We use:

- Average mobile internet usage per subscription from Turkish telecom regulator data (BTK)
- Share of mobile data used for communication from Sandvine Global Internet Phenomena Report
- Split between voice/video calls and messaging within communication data from Sandvine
- Number of mobile subscriptions in Türkiye from BTK

We then calculate the prices consumers pay for data-based communication using average revenue per user (ARPU) data and the share of ARPU attributable to data services. We use:

- Average revenue per user (ARPU) from BTK

- Data share of ARPU to isolate the cost attributable to data-based communication from BTK

We then estimate the prices consumers would pay if this volume of communication were instead conducted using traditional SMS and voice and video calls. We calculate unit costs for traditional communication:

- Cost per minute of traditional voice calls: derived from voice ARPU share divided by minutes per subscriber from BTK data

- Cost per SMS: derived from SMS ARPU share divided by SMS volume per subscriber from BTK data

We then apply these unit costs to the estimated volume of data-based calls and messages to identify the per-person counterfactual spend. We scale this up to national levels using TurkStat data on the total number of households in the country and the proportion of consumers who regularly use WhatsApp.

Opinion research

Polling claims are derived from two online surveys conducted in Türkiye between November and December 2025.

A consumer survey was conducted amongst 1,000 adults aged 18+ living in Türkiye between 28 November and 16 December 2025. We weight the consumer survey using Iterative Proportional Fitting ('raking') to nationally representative proportions. The results are weighted by age, gender, region, and education level to match the latest available population benchmarks for Türkiye. The maximum margin of error for the general population sample (n=1,000) is approximately ±3 percentage points, and for the senior business sample (n=250) is approximately ±6 percentage points, at the 95% confidence level.

A business survey was conducted amongst 250 senior business decision makers in Türkiye between 28 November and 8 December 2025. Senior business decision makers as respondents who describe their job role as a founder or co-founder, C-suite executive (e.g. CEO, CFO, CMO, CIO), Vice President, Director, or senior-level manager. We exclude respondents who describe their role as a junior manager, analyst, associate, or other non-senior position. The survey includes senior decision makers from a range of organisation sizes, including small and medium-sized businesses (below 250 employees) and larger businesses (250 or more employees).