

MEASUREMENT OF THE DIGITAL ECONOMY 2024

Office of the National Board of Digital Economy and Society

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**Office of the National Board of Digital
Economy and Society**



Preface

The Office of the National Board of Digital Economy and Society (BDE) has implemented the Digital Contribution to GDP Project 2024 to improve and enhance the measurement of the Digital Economy Contribution to GDP, aligning with the structural changes in the economic system. The data generated will serve as critical input for planning, policy formulation, and strategic development of Thailand's digital economy and society.

The study and development of digital economy measurement for 2024 follows the Digital Supply and Use Tables (DSUT) framework from the OECD. The primary focus is to develop the Thailand Digital Supply and Use Tables (TDSUT), aiming to progress toward a Digital Economy Satellite Account (DESA), a satellite account within the framework of the System of National Accounts 2008 (2008 SNA). This approach aligns with international standards in definitions, scope, classifications, and methods for measuring economic activities across the national economy. The goal is to produce reliable statistical data that can serve as a critical tool for assessing economic growth from the perspective of GDP impacted by digital technology. It also supports the effective monitoring of trends, policymaking, and planning in relevant sectors, in line with international standards, and allows for cross-country comparisons. This report presents the conceptual framework, definitions, scope, classifications, and methodologies consistent with current international standards. It also provides the results and analysis of Digital Contribution to GDP across three approaches: production, expenditure, and income.

The Office of the National Board of Digital Economy and Society (BDE) would like to express its gratitude to both public and private sector organizations for their support in providing data, feedback, and valuable suggestions, which have been instrumental in enhancing the accuracy and comprehensiveness of Thailand's Digital Contribution to GDP. We hope this report will be beneficial to agencies and interested parties for applications in relevant fields.



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Project Overview

Measurement of the Digital Economy

Objectives

- To improve and develop the efficiency of measuring the digital economy value and gross domestic product resulting from the digital economy (Digital Economy Contribution to GDP). The results will be used as supporting information for planning, policy formulation, and digital development strategies for Thailand.



Approach to Measuring the Digital Economy Value

The measurement of the digital economy's value in 2024 is a continuation of the efforts undertaken in 2023, based on the framework of the Digital Supply and Use Tables (DSUT) developed by the OECD. In the case of Thailand, this involves the creation of the Thailand Digital Supply and Use Tables, aiming to progress toward establishing the Digital Economy Satellite Account (DESA). This initiative seeks to develop a statistical dataset that aligns with international standards in terms of definitions, scope, categorization, and methodologies for measuring economic activities as part of the overall national accounts system.



Outcomes and Benefits

- 🕒 **Assessment of economic growth:** Utilization as a vital tool for analyzing GDP influenced by digital technology.
- 🕒 **Support for monitoring and policymaking:** Facilitation of effective, modern, and internationally standardized monitoring, policymaking, and planning in relevant sectors, enabling comparisons with other nations.



Conceptual Framework

The digital economy refers to economic activities that rely on the use of digital technologies as a driving factor. This includes the utilization of digital technologies, digital infrastructure, digital services, and data by various stakeholders, including producers, consumers, and government agencies.



Definition of Thailand's Digital Industry

Digital industries refer to sectors that intensively apply digital technology (Digital Technology Intensive Industry) and represent future industries that form the essential foundation for the development of other production and service sectors. These industries leverage digital technologies and include:

- Hardware Industry
- Software Industry
- Smart Devices Industry
- Digital Content Industry
- Digital Services Industry
- Telecommunication Industry



Scope of Digital Economy

The scope of the digital economy is classified into 4 tiers:

1 The Core Measure

The digital economy, at its basic level, encompasses economic activities related to the production of goods and services in the digital technology sector. This includes computer hardware and components, connectivity devices, digital telecommunications equipment, computer software, embedded software for electronic applications, digital telecommunication network services, internet services, digital content*, and electronic data services.

*Digital content refers to data, news, documentaries, music, movies, animation, advertising, and other social media that are delivered through digital communication systems, including the rights to reuse of these materials.

2 The Narrow Measure

The digital economy, in its narrow definition, encompasses both the basic-level digital economy activities and economic activities that primarily rely on digital technology. For this study, the narrow scope includes the production of smart devices, e-commerce, platform services, business services, transportation services, travel and accommodation reservation services, financial and insurance services, educational services, healthcare services, entertainment, sports, and recreational services, as well as other services conducted through digital communication systems.



3 The Broad Measure

The digital economy, in its broad definition, encompasses the basic and narrow scopes of the digital economy, as well as other economic activities that leverage digital technology to significantly enhance efficiency or drive growth. For this study, the broad scope includes industrial goods production, agricultural production, and general business operations that utilize computers, robots, electronic devices, or other digital tools to control processes or partially replace human labor in production, distribution, or customer service.

4 Digital Society

The digital economy, in its complete definition or as a digital society, encompasses the basic, narrow, and broad scopes of the digital economy, as well as free digital services provided for public benefit. This study considers examples of activities present within internet communication systems, such as health education, sharing knowledge and life experiences by organizations or individuals, government information services, and knowledge-sharing platforms like Wikipedia.





Measurement of the Digital GDP

The measurement of Gross Domestic Product resulting from digital technology (Digital Contribution to GDP), or simply referred to as Digital GDP, is conducted using the national income accounting framework across three approaches: the Production Approach, the Expenditure Approach, and the Income Approach.

Production Approach



The method of measuring value added that arises from the production activities of all goods and services produced within the scope of the digital economy, by classifying data according to the Thailand Standard Industrial Classification (TSIC) 2009, covering 138 sub-items (at the 5-digit level).

Expenditure Approach



The measurement of final expenditure in the economic system within the scope of the digital economy consists of:

- Final household consumption expenditure
- Final government consumption expenditure
- Fixed investment or fixed capital formation
- Export and import of goods and services

Income Approach



The measurement of primary income factors includes:

- Labor compensation
- Operating surplus
- Mixed income*
- Depreciation
- Net production tax

*Mixed income refers to personal business income (by national accounts system definition, this means production where one cannot separate their own labor costs from operating profits)



Data Sources

The measurement of the digital economy in 2024 involves collecting and gathering data from various relevant sources, consisting of:

Secondary Data



Collected from regulatory agencies overseeing various economic sectors, such as data on production sector revenues and expenditures, e-commerce survey results, software production survey data, and financial and insurance transaction records, among others.

Expenditure Data



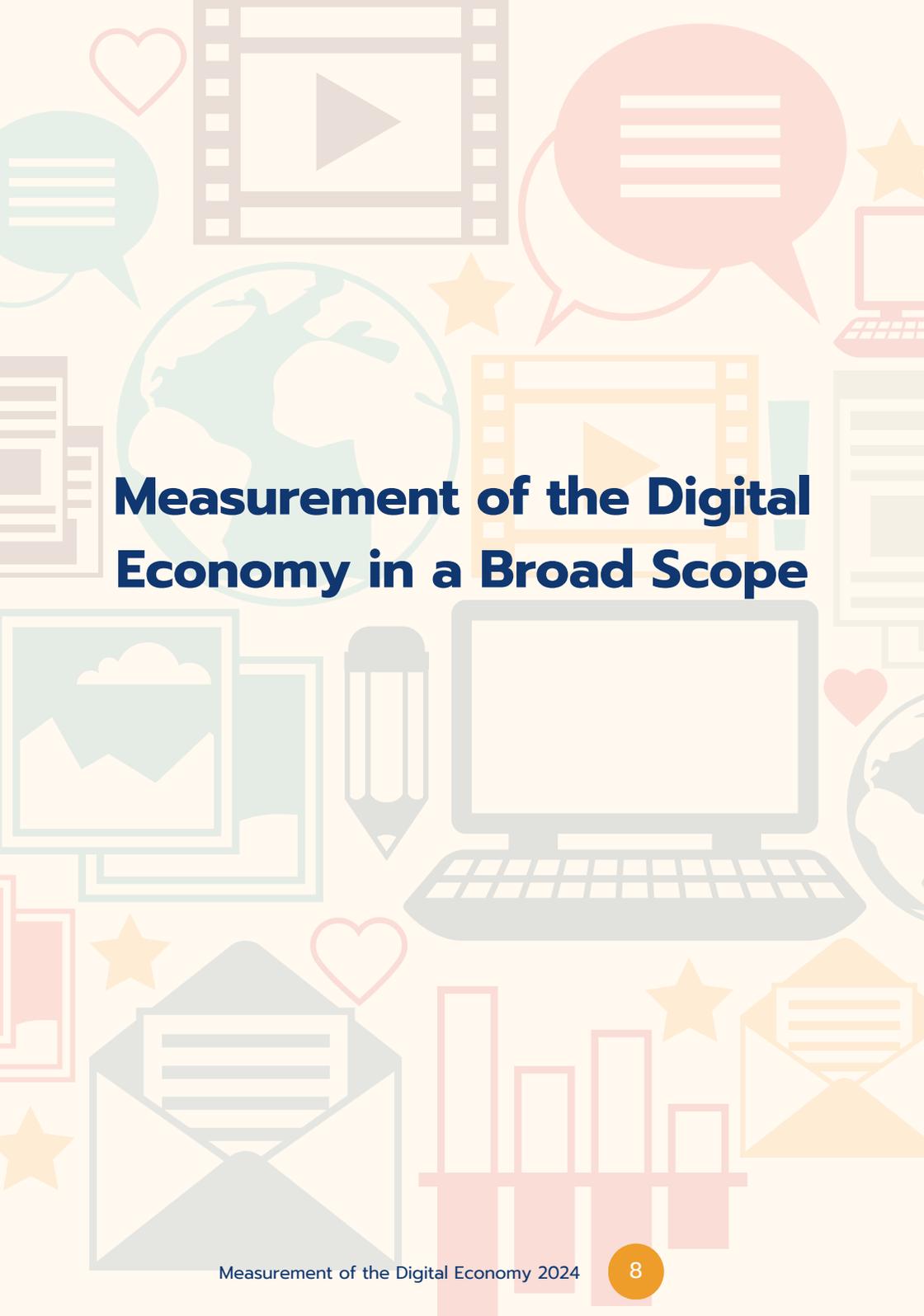
Collected from household socio-economic survey results, government budget disbursements through the GFMS and ELAAS systems.

Primary Data



Derived from surveys of business entities, both corporate and individual, as well as surveys of government agencies, including public organizations, and household sample surveys, among others.





Measurement of the Digital Economy in a Broad Scope

Measurement of the Digital Economy in Broad Scope



Background

- Currently, the production of goods and services outside the scope of the digital industry has increasingly adopted digital technology in production and service processes, significantly enhancing production efficiency (spillover effect).
- In 2024, BDE developed tools to measure the economic impact on non-digital industries or to expand the measurement scope to a broad level by utilizing the production function approach.



Study Approaches

1 Digital Supply-Use Tables (Digital SUTs)

The concept is developed from Supply-Use Tables (SUTs), which represent economic data linking production, consumption, and the use of goods and services within a country's economy. It can integrate real-time Big Data from multiple digital sources to provide a clear overview of current economic changes.

As a result, evaluating public policies using Digital SUTs enables policymakers to better understand the economic impacts of their decisions. At present, the Asian Development Bank (ADB) is developing a framework for Digital Supply-Use Tables (SUTs) as the foundation for creating a Digital Economy Satellite Account (DESA) to identify and define digital industries.

2 Digital Input-Output Table

This approach utilizes input-output tables that separate value-added into Value Added (VA) from the core of the digital economy or digital industries and Value Added (VA) from other non-digital industries.

3 Estimation of Economic Value

This method estimates the economic value generated by digitalization across the rest of the economy (Wu, 2013). It employs the growth accounting framework to evaluate the contribution of ICT investment to Singapore's GDP between 1990 and 2008, and it remains a primary approach for estimating the size of Singapore's digital economy. From an economic perspective, growth accounting quantifies the contributions of various input factors to output and productivity growth.

Furthermore, Oxford and Huawei (2023) have advanced this framework to broaden the scope of measuring indirect impacts, such as the spillover effect, by utilizing digital assets. This approach highlights the role of digital technologies in driving productivity gains and economic growth. Additionally, new methodologies have been developed to provide more comprehensive assessments of the impacts of digital technologies.

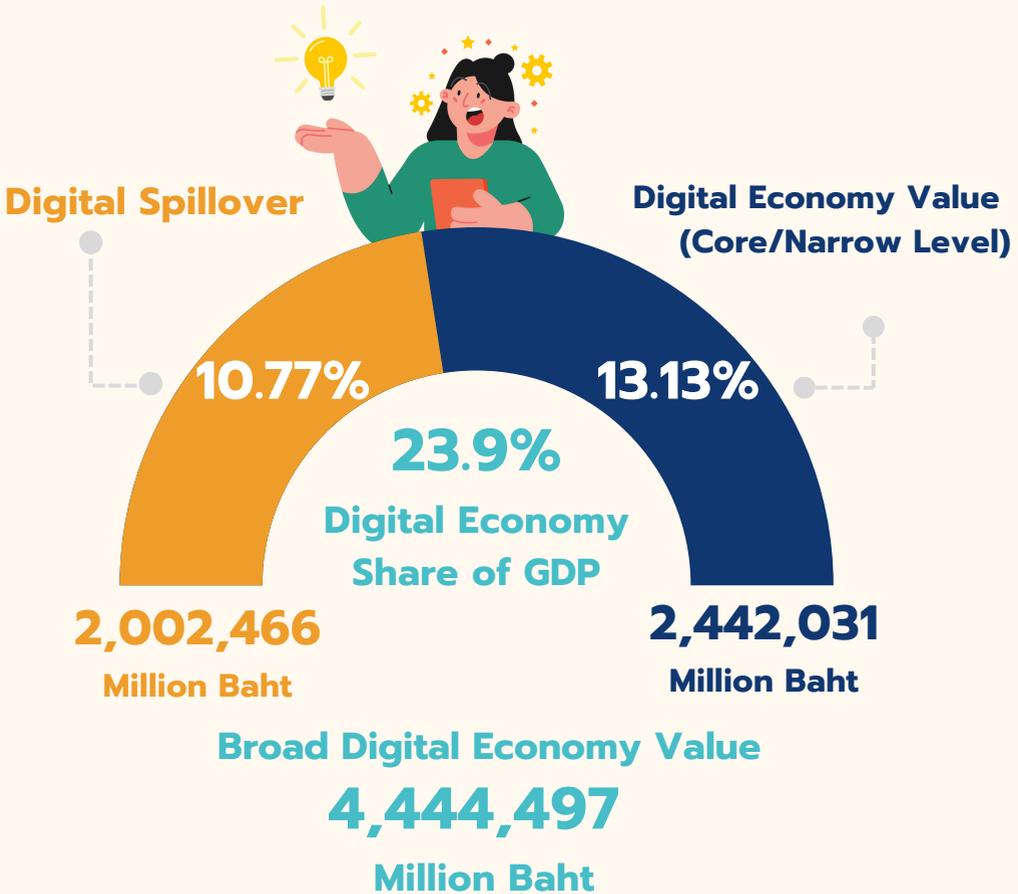
The measurement of the broad digital economy value utilizes a model with clear and widely accepted definitions, previously implemented in countries such as Singapore and China.

In this study, the broad digital economy value will be measured using a model.



Broad Digital Economy Value in 2024e

Thailand's Broad Digital Economy Value in 2024e

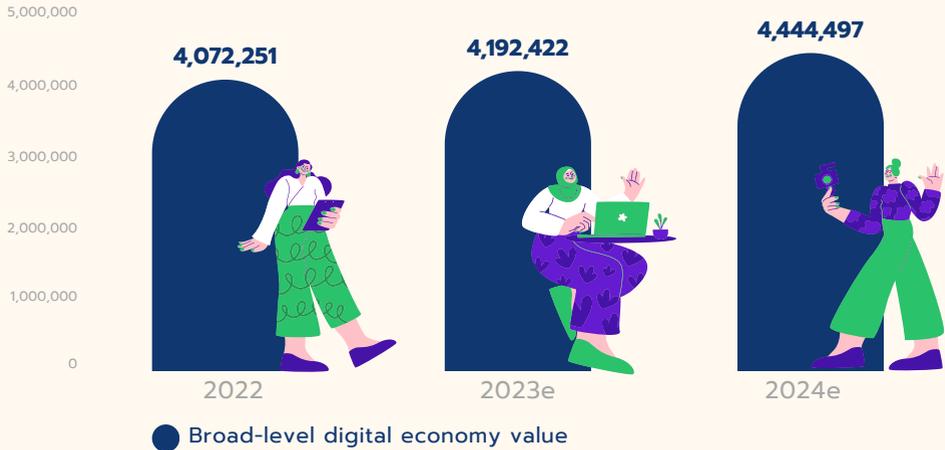


The study on the value added from Thailand's digital capital revealed that **the coefficient of $\ln(Kd/Y)$, representing the impact of digital capital, including both the core/narrow definition and spillover effects (broad definition), is 1.82.**

When combined with the core/narrow digital economy value, **the broad digital economy value of Thailand in 2024e is estimated at 4,444,497 million THB.**

Digital Economy Value of Thailand: Broad Measurement from 2022–2024e

Value (Million Baht)
(Current market prices)

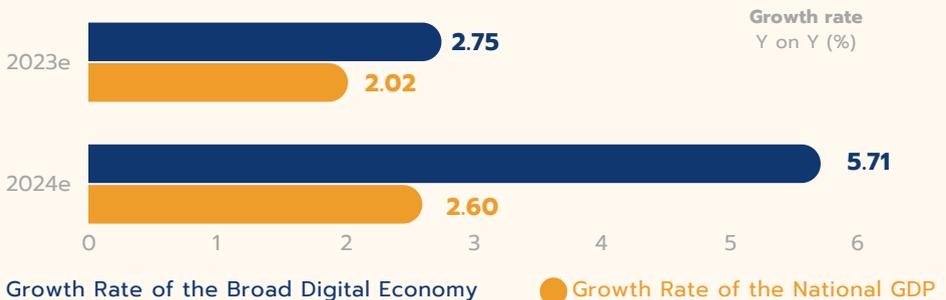


Gross Domestic Product (GDP) from 2022 - 2024e



Source: Office of the National Economic and Social Development Council

Growth of Digital Economy and National Economy in Chain Volume Measure (CVM) in 2023e - 2024e



Broad Digital Economy Share of GDP in 2024e

National GDP
18.60 Trillion Baht



Broad Digital GDP
4.44 Trillion Baht
Share of GDP
23.9%

Broad Digital GDP in 2024e

4,444,497 million Baht, representing 23.9%

Gross Domestic Product (GDP) valued at 18,517,050 million Baht

Broad Digital Economy Share of GDP, 2022-2024e

2022



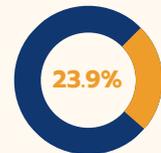
Broad Digital Economy
4,072,251 million Baht

2023e



Broad Digital Economy
4,192,422 million Baht

2024e



Broad Digital Economy
4,444,497 million Baht

From 2022 to 2024e, Thailand's broad digital economy has **grown continuously, increasing its share of GDP from 23.4% to 23.9%**



Narrow Digital Economy Value in 2024e

Digital Economy Value by Production

Digital Economy Production Value (Gross Output)

at current market prices



5,864,323.84

Million Baht

Growth: 6.92% from 2023e

Digital Economy Value Added

at current market prices



2,442,031.23

Million Baht

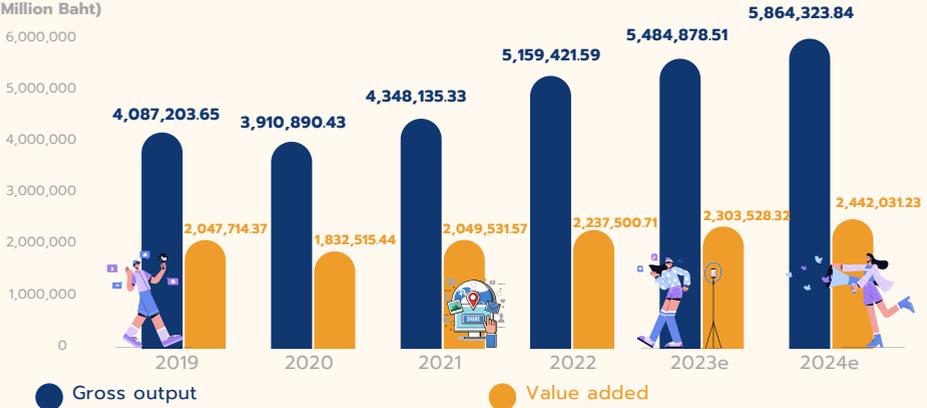
Growth: 6.01 % from 2023e

Key Supporting Factors

The hardware industry added 744,211.64 million Baht (30.5% of total digital economy value added) with 4.59% growth, driven by mobile phone services.

Digital Economy Gross Output and Value Added from 2019 - 2024e

Current market prices
(Million Baht)



Gross Domestic Product (GDP) from 2019 - 2024e

2019

National GDP Value

16,889,169 Million Baht

2020

National GDP Value

15,661,294 Million Baht

2021

National GDP Value

16,186,633 Million Baht

2022

National GDP Value

17,378,002 Million Baht

2023e

National GDP Value

17,954,667 Million Baht

2024e

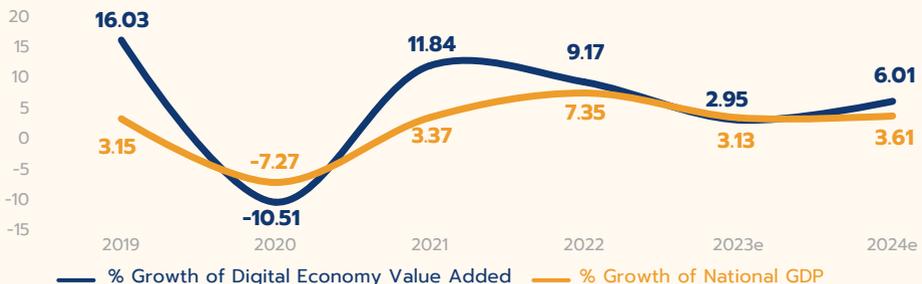
National GDP Value

18,603,100 Million Baht

* Source : Office of the National Economic and Social Development Council

Digital Economy Growth and National GDP Growth from 2019-2024e

Y on Y (%)



* source : Office of the National Economic and Social Development Council

Digital Economy Share of GDP in 2024e

National GDP
18.60 Trillion Baht



Value added
2.44 Trillion Baht
Equivalent to
13.13%
of National GDP

In 2024e, the Digital Economy Value Added to Gross Domestic Product (Digital Contribution to GDP) represents **13.13 percent**

Digital Economy Share of GDP in 2019-2024e

2019



Digital Economy Value Added
2,047,714.37 Million Baht

2020



Digital Economy Value Added
1,832,515.44 Million Baht

2021



Digital Economy Value Added
2,049,531.57 Million Baht

2022



Digital Economy Value Added
2,237,500.71 Million Baht

2023e



Digital Economy Value Added
2,303,528.32 Million Baht

2024e

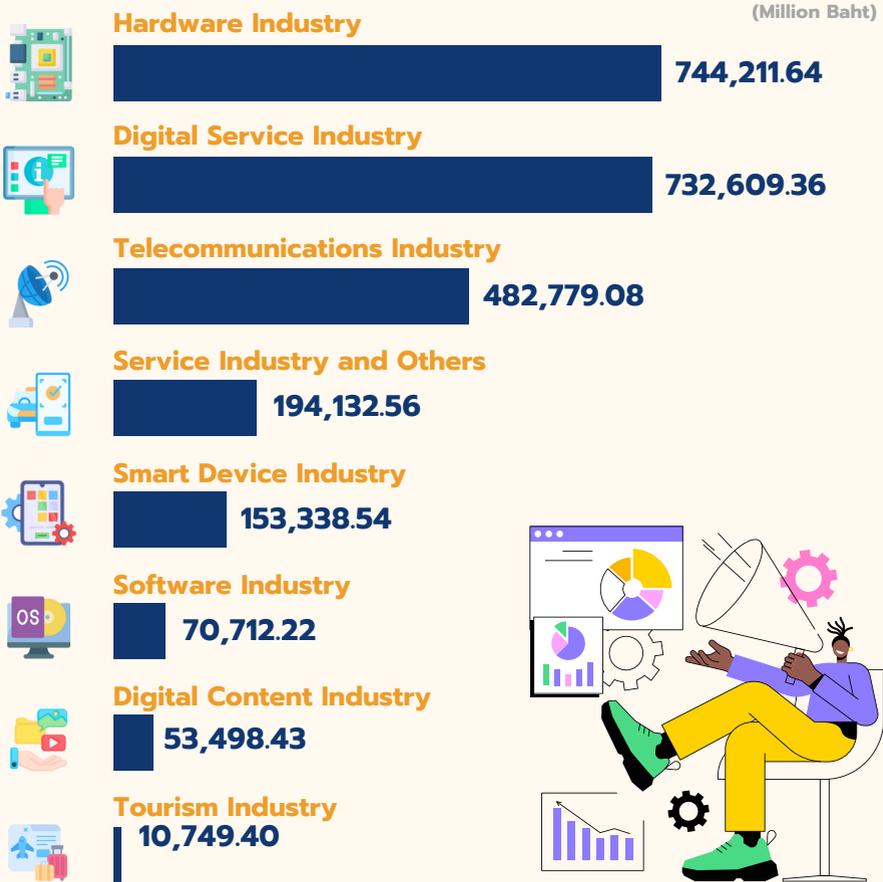


Digital Economy Value Added
2,442,031.23 Million Baht

From 2019 to 2024e, the Digital Economy Value Added to GDP averaged **12.55%**, indicating a shift toward a more digital-dependent economy in Thailand by 2024e

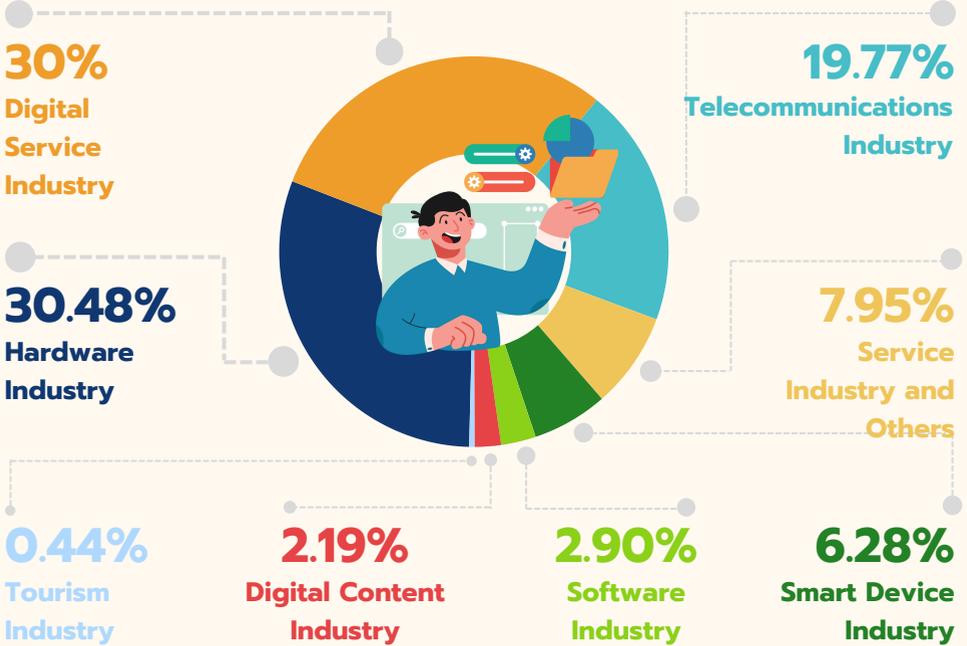
Digital Economy Value by Industries in 2024e

Value of production activities in the digital economy categorized into 8 key industry sectors in line with the digital economy policy framework of the Office of the National Board of Digital Economy and Society (BDE)

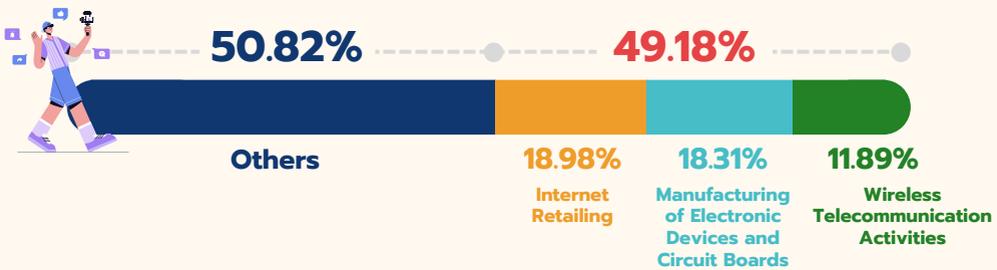


The most significant digital industry in 2024e is the hardware industry, valued at 744,211.64 million Baht, accounting for 30.48% of the total. The second is the digital services industry, valued at 732,609.36 million Baht, representing 30% of the total. Key subcategories include internet retailing and credit card services.

Share of Value Added by Industries in 2024e



Share of Value Added by 53 Production Activities in 2024e



In 2024e, when considering the value added by 53 production activities, **the top three contributors were internet retailing, manufacturing of electronic devices and circuit boards, and wireless telecommunication services, accounting for 18.98%, 18.31%, and 11.89%, respectively. Together, these activities represented 49.17% of the total value added.**

Digital Economy Value in 2024e

Chain Volume Measurement (CVM) Approach



Digital Economy Value Added
in Production Using
Chain Volume Measurement
(Reference Year = 2017)

2,417,794.64
Million Baht



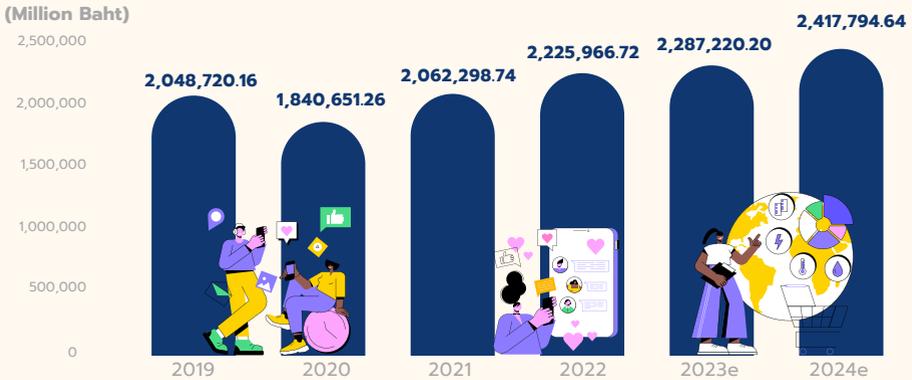
Growth Rate
(Reference Year = 2017)

5.71%
from 2023e

Key Supporting Factors

The acceleration of the telecommunications industry is primarily driven by the growth of wholesale and retail trade in telecommunications equipment and devices, internet services (both wireless and cable), mobile phone services, and online broadcasting through radio and television platforms. This trend aligns with increased internet accessibility among the population, further boosting the digital services industry. Growth in digital services is reflected in the expansion of online financial services and e-commerce activities.

Digital Economy Production Value Using Chain Volume Measure (CVM) from 2019–2024e



* Digital Economy Production Value Using Chain Volume Measurement (CVM) (Reference Year = 2017)

Gross Domestic Product (GDP) Using Chain Volume Measurement (CVM) from 2019 - 2024e

2019

National GDP Value

10,919,319 Million Baht

2020

National GDP Value

10,258,697 Million Baht

2021

National GDP Value

10,417,928 Million Baht

2022

National GDP Value

10,686,750 Million Baht

2023e

National GDP Value

10,902,382 Million Baht

2024e

National GDP Value

11,185,844 Million Baht

* Gross Domestic Product (GDP) Using Chain Volume Measurement (CVM) (Reference Year = 2015)

* source : Office of the National Economic and Social Development Council

Digital Economy Growth and GDP Growth (CVM) from 2019-2024e

Y on Y (%)



— Growth Rate of Digital Economy Production Value Using Chain Volume Measure (CVM) (Reference Year = 2017)

— Growth Rate of Gross Domestic Product (GDP) Using Chain Volume Measure (CVM) (Reference Year = 2015)

* Source : Office of the National Economic and Social Development Council

Digital Economy Value by Enterprise Size (SMEs) in 2024

Using the definition of small and medium-sized enterprises (SMEs) from the Office of Small and Medium Enterprises Promotion, the digital economy was categorized into eight industry groups. In 2024:

- Small enterprises had a production value of 1,590,917.49 million Baht, generating value added of 744,143.95 million Baht, accounting for 30.47% of the total value added.
- Medium enterprises had a production value of 246,744.04 million Baht, generating value added of 90,877.96 million Baht, accounting for 3.72%.
- Large enterprises had a production value of 4,026,662.31 million Baht, generating value added of 1,607,009.31 million Baht, accounting for 65.81%.

Small Enterprises

Production Value
1,590,917.49
 Million Baht

Value Added
744,143.95
 Million Baht

Medium Enterprises

Production Value
246,744.04
 Million Baht

Value Added
90,877.96
 Million Baht

Large Enterprises

Production Value
4,026,662.31
 Million Baht

Value Added
1,607,009.31
 Million Baht

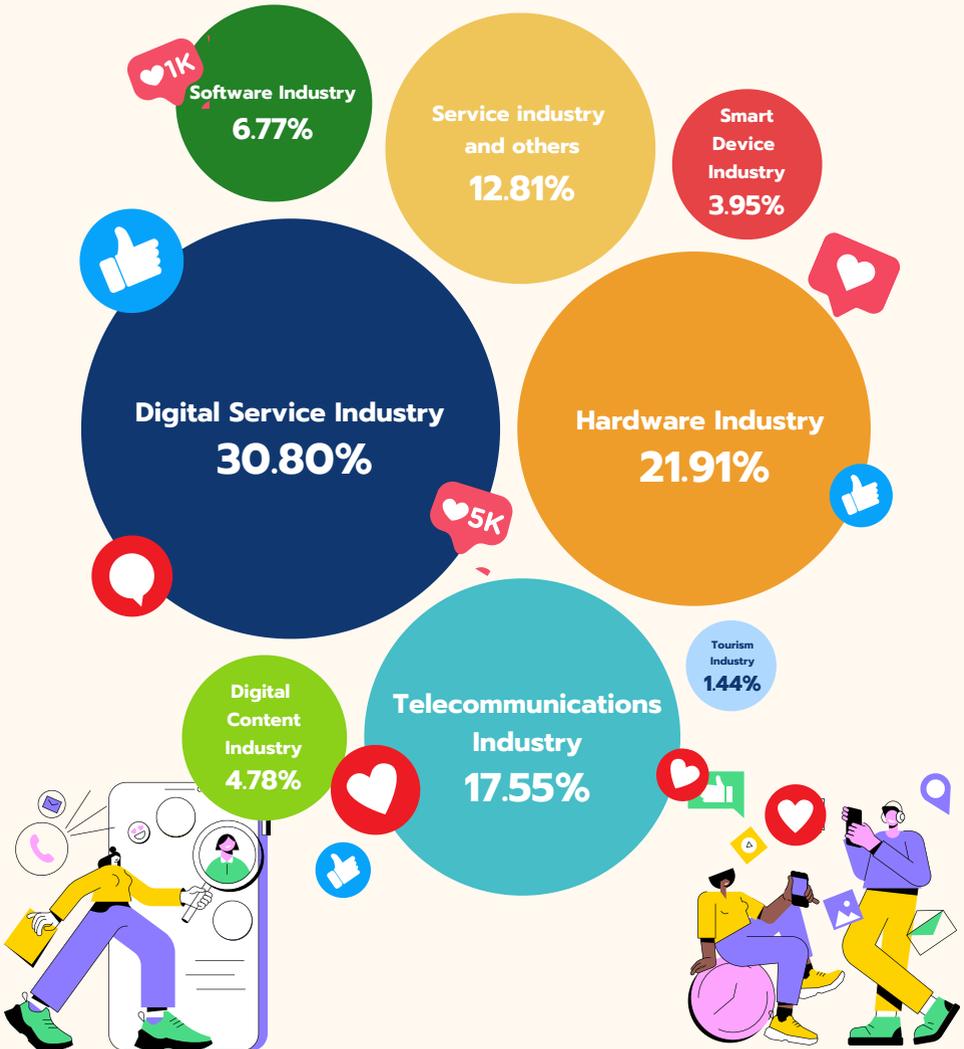
Digital Economy Value Added Share by Enterprise Size



Small and Medium Enterprises (SME)

Share of Value Added

SMEs accounted for 34.19% of total production value in 2024, with 30.80% from digital service industry, 21.91% from hardware industry, and 17.55% from telecommunications industry.



Value Added by Industries within Small Enterprises

The value added by small enterprises in the 8 categories of the digital economy showed **the top three industries as digital services industry (275,983.51 million Baht), hardware industry (140,192.48 million Baht), and telecommunications industry (100,856.08 million Baht),** while the tourism industry had the lowest value added.

(Million Baht)



Digital Service Industry



275,983.51



Hardware Industry



140,192.48



Telecommunications Industry



100,856.08



Service Industry and Others



98,550.27



Software Industry



52,350.44



Smart Devices Industry



35,860.88



Digital Content Industry



32,638.51



Tourism Industry



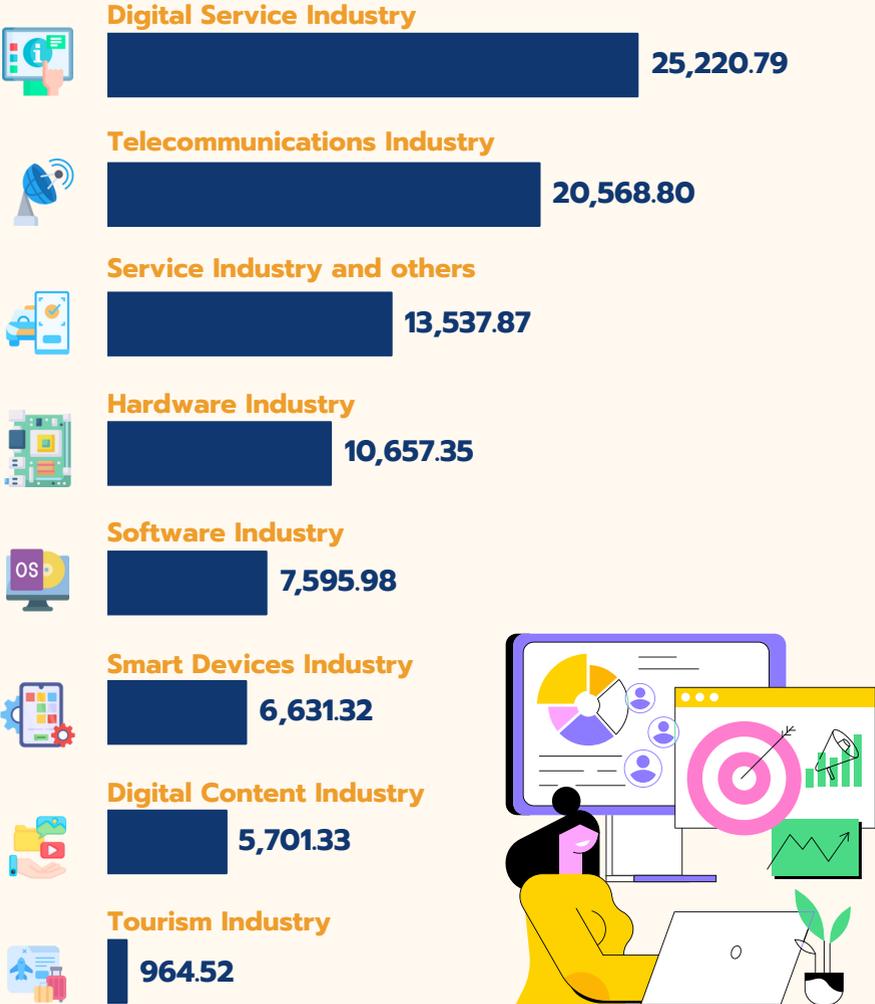
7,711.77



Value Added by Industries within Medium Enterprises

The value added by medium enterprises in the 8 categories of the digital economy revealed **the top three industries as digital services industry (25,220.79 million Baht), telecommunications industry (20,568.80 million Baht), and services and other industries (13,537.87 million Baht).**

(Million Baht)



Value Added by Industries within Large Enterprises

The value added by large enterprises in the 8 categories of the digital economy revealed **the top three industries as the hardware industry (593,361.81 million baht), digital services industry (431,405.06 million baht), and telecommunications industry (361,354.19 million baht), respectively.**

(Million Baht)



Hardware Industry



593,361.81



Digital Service Industry



431,405.06



Telecommunications Industry



361,354.19



Smart Devices Industry



110,846.33



Service Industry and Others



82,044.41



Digital Content Industry



15,158.59



Software Industry



10,765.80



Tourism Industry



2,073.11



Digital Economic Value

by Income

The Digital Economy Value, calculated using the income approach, totaled 2,442,031.23 million Baht in 2024e. By production factor income, labor compensation accounted for 1,689,711.84 million Baht (69.19%), mixed income was 152,615.37 million Baht (6.25%), and operating surplus totaled 132,672.99 million Baht (5.43%). Additionally, net production taxes contributed 165,404.43 million Baht (6.77%), and depreciation accounted for 301,626.59 million Baht (12.35%).

(Million Baht)



Labor Compensation

1,689,711.84



Depreciation

301,626.59



Net Production Tax

165,404.43



Mixed Income

152,615.37



Operating Surplus

132,672.99



Factor Income Share in Digital Economy in 2024e

Labor Compensation
69.19%

Depreciation
12.35%

Net Production Tax
6.77%

Mixed Income
6.25%

Operating Surplus
5.43%



Analyzing the components of income by industries, **the hardware industry recorded the highest labor compensation at 523,681.95 million Baht, while the tourism industry had the lowest at 9,854.39 million Baht.**

Considering mixed income, **the telecommunications industry had the highest value at 132,966.45 million Baht, followed by the digital services industry at 108,418.20 million Baht.** In contrast, the digital content industry and the tourism industry reported negative values (losses) of 236,792.53 million Baht and 82.70 million Baht, respectively.

Digital Economic Value by Expenditure

1 Household Final Consumption Expenditure

Household Final Consumption Expenditure on Digital Goods and Services at current market prices



531,681.16
Million Baht



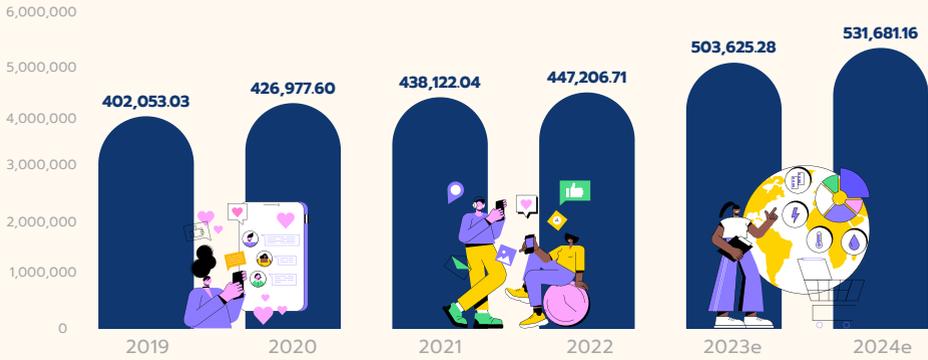
Growth Rate

5.57%
from 2023e

In 2024e, **final household consumption expenditure on digital goods and services at current market prices totaled 531,681.16 million baht**, representing a growth of 5.57% compared to 2023e.

Household Final Consumption Expenditure on Digital Goods and Services from 2019-2024e

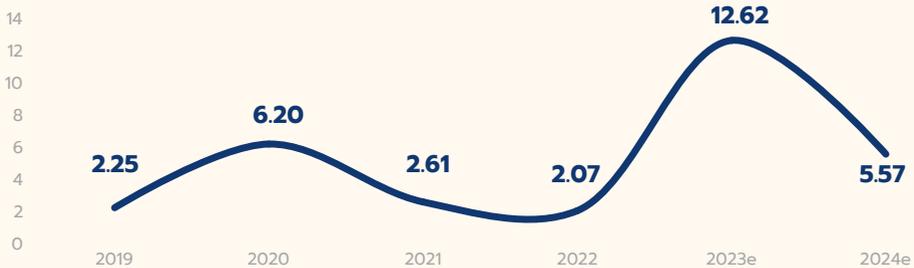
(Million Baht)



Growth in Household Digital Consumption from 2019-2024e

Growth Rate (%)

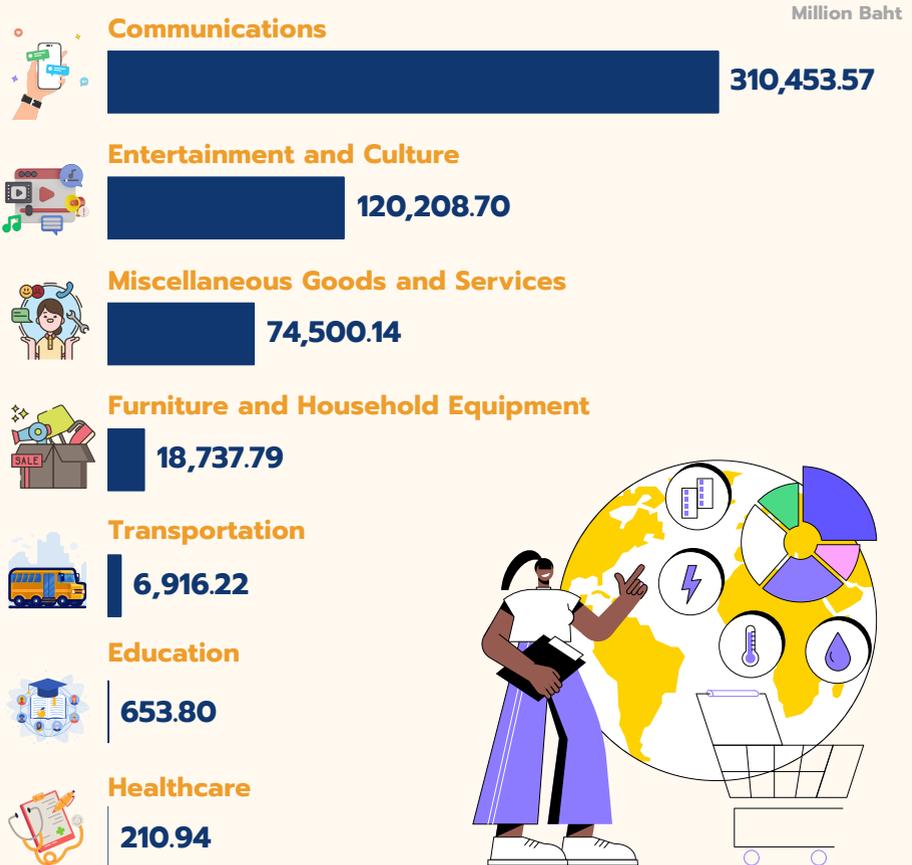
Y on Y (%)



“ In 2024e, household final consumption expenditure on digital goods and services at current market prices grew by 5.57%, driven primarily by growth in entertainment and culture (5.87%). Other sectors grew as follows: health (7%), furnishings and household equipment (5.77%), communications (5.59%), miscellaneous goods and services (5.38%), education (3.28%), and transportation (1.37%). ”

Digital Consumer Spending by Category in 2024e

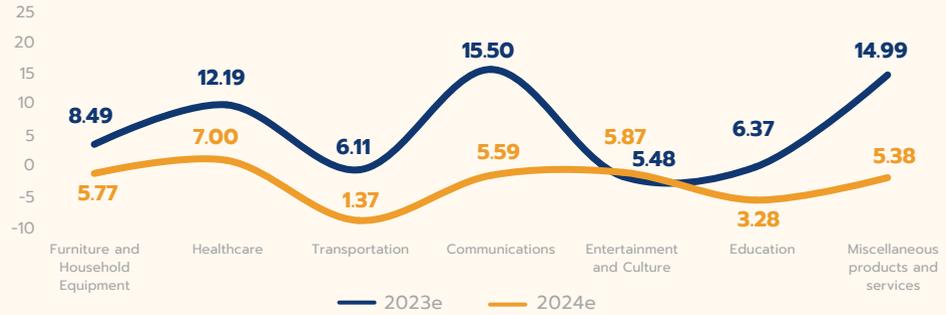
Based on a household sample survey used as an estimation framework, **final household consumption expenditure on digital goods and services at current market prices in 2024e totaled 531,681.16 million Baht**, an increase of 28,055.88 million Baht from 2023e. This includes expenditures across various categories as follows:



Growth in Digital Consumer Spending by COICOP in 2023e–2024e

Growth Rate (%)

Y on Y (%)



Share of Digital Consumer Spending by Category in 2024e

58.39%
Communications



22.61%
Entertainment
and Culture

14.01
Miscellaneous
Goods and
Services

0.04%
Healthcare

0.12%
Education

1.30%
Transportation

3.52
Furniture and
Household
Equipment

Digital Economic Value by Expenditure

2 Government Final Consumption Expenditure

Government Final Consumption Expenditure on Digital Goods and Services

at current market prices



20,469.62

Million Baht



Growth Rate

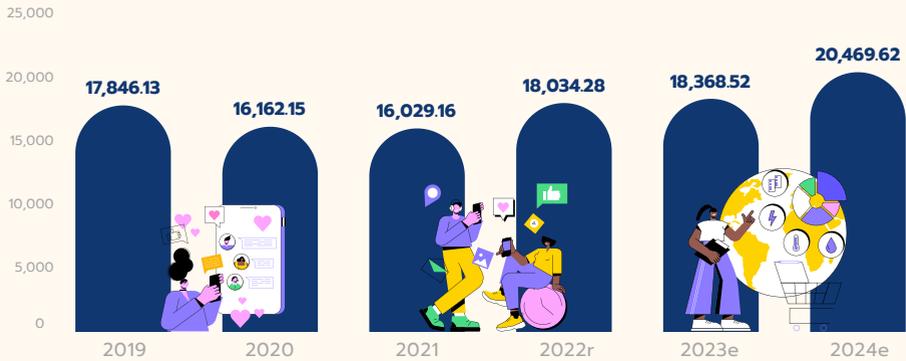
11.44%

from 2023e

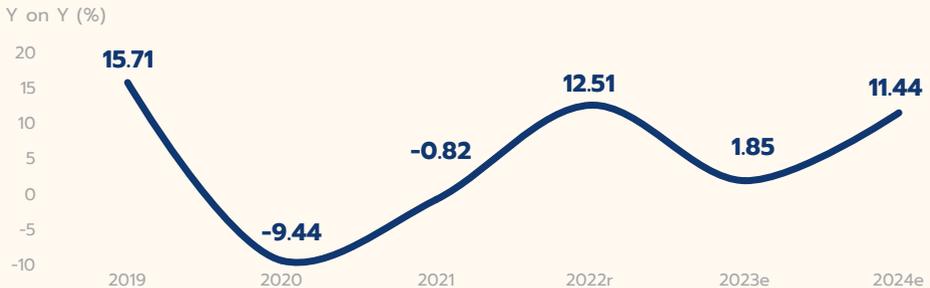
“ In 2024e, final government consumption expenditure on digital goods and services at current market prices totaled **20,469.62 million Baht**, representing a growth of 11.44% compared to 2023e. ”

Government Final Consumption Expenditure on Digital Goods and Services from 2019–2024e

(Current Market Prices (Miliion Baht))



Government Digital Spending Growth, 2019-2024e



“ In 2024e, final government consumption expenditure on digital goods and services at current market prices totaled 20,469.62 million baht, growing by 11.44%. This growth was driven by increased spending on supplies and materials (13,385.98 million baht, up 14.74%) and utilities (7,083.64 million baht, up 5.69%). ”

Digital Economic Value by Expenditure

3 Gross Fixed Capital Formation (GFCF)

Method 1: Measuring Gross Fixed Capital Formation (GFCF) in the Digital Economy. This involves assessing annual investment in fixed assets, either purchased or self-produced by business units, with a lifespan of at least one year. These assets include land, buildings, machinery, tools, high-value software, and other fixed assets.

Gross Fixed Capital Formation in the Digital Economy



592,375.44
Million Baht

Growth Rate
11.63%
from 2023e

In 2024e, gross fixed capital formation in digital economy (Method 1) at current market prices totaled **592,375.44 million Baht, growing by 11.63% from 2023e**. Key components include investment in machinery and equipment, valued at 222,262.43 million Baht, followed by buildings at 120,130.24 million Baht, and contracted development of software and applications, totaling 46,960.66 million Baht.

Digital Economic Value by Expenditure

3 Gross Fixed Capital Formation (GFCF)

Method 2: Measuring gross fixed capital formation at the national level by including only capital goods that serve as the primary mechanisms for digital communication systems, as well as computer processing. This includes items such as computer equipment and peripherals, communication tools and devices, software and computer programs, smart devices, and scientific instruments with embedded systems.

Gross Fixed Capital Formation in the Digital Economy

90,020.91
Million Baht

Growth Rate
2.77%
from 2023e



In 2024e, gross fixed capital formation in the digital economy (Method 2) at current market prices totaled **90,020.91 million Baht**, growing by **2.77% from 2023e**. Key contributors were the hardware industry, valued at 76,153.91 million Baht, followed by the smart devices industry at 10,209.41 million Baht, and the software industry, totaling 1,937.49 million Baht.

Digital Economic Value by Expenditure

4 Exports and Imports in the Digital Economy

Digital Goods and Services Exports



2,597,776.42

Million Baht

Growth Rate

24.16%

from 2023e

In 2024e, the export value of digital goods and services totaled **2,597,776.42 million Baht**, consisting of 1,579,708.51 million Baht from digital goods exports and 1,018,067.90 million Baht from digital services exports.

Digital Goods and Services Imports



2,389,209.51

Million Baht

Growth Rate

3.87%

from 2023e

In 2024e, the import value of digital goods and services totaled **2,389,209.51 million Baht**, consisting of 1,637,982.92 million Baht for digital goods imports and 751,226.59 million Baht for digital services imports.

Overview of Digital GDP

by Expenditure Approach in 2024e

Digital GDP by Expenditure Approach at Current Market Prices



1,353,093.13
Million Baht

Growth Rate
5.71%
from 2023e

“ In 2024e, Digital GDP by expenditure approach at current market prices totaled 1,353,093.13 million baht. Final household consumption accounted for 39.29%, down from 46.72% in 2023e, remaining a key driver of the digital economy. Gross fixed capital formation increased from 49.23% in 2023e to 43.78% in 2024e, while government final consumption accounted for 1.70% of digital spending in 2023e, projected to decline slightly to 1.51% in 2024e.

Meanwhile, in terms of imports of goods and services, since Thailand remains reliant on capital goods from abroad, including both hardware and packaged software, the value of digital goods and services imports increased in both 2023e and 2024e.

Overview of Digital GDP by Expenditure

Digital GDP by Expenditure Approach :

$$GDE = C + I + G + (X-M)$$

GDE in 2024e = 1,353,093.13 million baht

C : Household Final Consumption Expenditure

Household Final Consumption Expenditure
at current market prices

531,681.16 million Baht

accounted for **39.29%**

Household Final Consumption Expenditure
Using Chain Volume Measure (CVM)

(Reference Year = 2017)

528,694.70 million Baht

Growth Rate **5.17%**



I : Gross Fixed Capital Formation

Gross Fixed Capital Formation
at current market prices

592,375.44 million Baht

accounted for **43.78%**

Gross Fixed Capital Formation
Using Chain Volume Measure (CVM)

(Reference Year = 2017)

92,310.29 million Baht

Growth Rate **3.09%**



X : Exports of Goods and Services (+)
at current market prices

2,597,776.42 million Baht

accounted for **19.19%**

X : Exports of Goods and Services (+)
Using Chain Volume Measure (CVM)

2,413,033.54 million Baht

Growth Rate **24.16%**

(Reference Year = 2017)

M : Imports of Goods and Services (-)

at current market prices

2,389,209.51 million Baht accounted for **176.57%**

M : Imports of Goods and Services (-)

Using Chain Volume Measure (CVM)

2,092,443.77 million baht Growth rate **3.87%**
(Reference Year = 2017) accounted for **15.41%**

X-M : Net Exports of Goods and Services
at current market prices **208,566.91 million Baht**

X-M : Net Exports of Goods and Services

Noted : Export and Import data of Jan 2025



Government Final
Consumption Expenditure
at current market prices

20,469.62 million Baht

accounted for **1.51%**

Government Final
Consumption Expenditure
Using Chain Volume Measure (CVM)

19,940.40 million Baht

(Reference Year = 2017)

Growth Rate **11.04%**



G : Government Final Consumption Expenditure

Overview of Digital GDP at Current Market Prices by Expenditure

	2017	2018	2019	2020	2021	2022	2023e	2024e
Value (Million baht)								
C : Household Final Consumption Expenditure	356,889.19	393,224.68	402,053.03	426,977.60	438,122.04	447,206.71	503,625.28	531,681.16
G : Government Final Consumption Expenditure	16,408.96	15,423.38	17,846.13	16,162.15	16,029.15	18,034.28	18,368.52	20,469.62
I : Gross Fixed Capital Formation	153,265.54	165,651.49	182,249.66	179,036.41	192,319.22	322,560.49	530,638.07	592,375.44
X : Goods and Services Exports (+)	2,381,293.44	2,377,962.38	2,289,043.78	2,036,322.51	2,280,160.64	2,090,505.29	2,180,005.60	2,597,776.42
M : Goods and Services Imports (-)	1,868,855.61	1,986,467.82	1,879,826.04	1,714,214.94	2,049,537.09	2,108,588.53	2,154,750.48	2,389,209.51
X-M : Net Exports of Goods and Services	512,437.83	391,494.56	409,217.74	322,107.57	230,623.55	-18,083.24	25,255.12	208,566.91
GDE	1,039,001.52	965,794.11	1,011,366.56	944,283.73	877,093.97	769,718.24	1,077,886.99	1,353,093.13
Share (%)								
C : Household Final Consumption Expenditure	34.35	40.72	39.75	45.22	49.95	58.10	46.72	39.29
G : Government Final Consumption Expenditure	1.58	1.60	1.76	1.71	1.83	2.34	1.70	1.51
I : Gross Fixed Capital Formation	14.75	17.15	18.02	18.96	21.93	41.91	49.23	43.78
X : Goods and Services Exports (+)	229.19	246.22	226.33	215.65	259.97	271.59	202.25	191.99
M : Goods and Services Imports (-)	179.87	205.68	185.87	181.54	233.67	273.94	199.91	176.57
X-M : Net Exports of Goods and Services	49.32	40.54	40.46	34.11	26.29	-2.35	2.34	15.41
GDE	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00



Overview of Real Digital GDP

Using Chain Volume Measure (CVM) (Reference Year = 2017)

by Expenditure

	2017	2018	2019	2020	2021	2022	2023e	2024e
Value (Million baht)								
C : Household Final Consumption Expenditure	356,889.19	392,725.37	401,939.05	427,860.70	438,648.82	445,746.43	502,704.87	528,694.70
G : Government Final Consumption Expenditure	16,408.96	15,390.76	17,777.04	16,175.44	16,012.78	17,718.54	17,957.87	19,940.40
I : Gross Fixed Capital Formation	133,013.57	140,782.29	44,114.20	44,660.81	57,280.23	85,533.08	89,543.21	92,310.29
X : Goods and Services Exports (+)	2,381,293.47	2,338,903.83	2,222,408.24	1,961,051.24	2,113,114.83	1,892,375.28	1,943,450.07	2,413,033.54
M : Goods and Services Imports (-)	1,868,855.61	1,915,788.25	1,739,646.12	1,511,356.69	1,700,489.68	1,605,369.69	2,014,578.09	2,092,443.77
Growth Rate (%)								
C : Household Final Consumption Expenditure		10.04	2.35	6.45	2.53	1.61	12.78	5.17
G : Government Final Consumption Expenditure		-6.21	15.5	-9.01	-1.01	10.65	1.35	11.04
I : Gross Fixed Capital Formation		5.84	-68.66	1.24	28.26	49.32	4.69	3.09
X : Goods and Services Exports (+)		-1.78	-4.98	-11.76	7.75	-10.45	2.70	24.16
M : Goods and Services Imports (-)		2.51	-9.19	-13.12	12.51	-5.59	25.49	3.87



Applications of Statistical Data in the Digital Economy

1 Monitoring Economic Situations and Behavior



Key summary data, such as the proportion of the digital economy in GDP, is a specialized statistic widely used by analysts, politicians, the media, businesses, and the public. This data, which reflects overall trends in the sector, can be utilized to assess and, consequently, evaluate the success or failure of economic policies implemented by both the public and private sectors.

In addition, it includes key indicators from accounting measures, such as budget surplus/deficit, income distribution, sectoral investment shares, and trade balance.



National accounts data serve as a foundation for measuring short-term indicators, such as monthly industrial indices. Applying this data to production or consumption sectors enables the interpretation and evaluation of significant economic changes, whether improvements or declines. Reporting is most effective on an annual basis, as the compilation of accounts and statistical tables is typically limited to once a year.

2 Macroeconomic Analysis



Digital economy data facilitates the examination of causes and mechanisms within the economic system. This analysis can be integrated into the estimation of parameters representing functional relationships among various economic variables. Econometric modeling, utilizing time series data on both value and volume compiled within the national accounts framework, supports this process. This method aligns closely with the approach used in macroeconomic analyses of a nation's overall economy.



In the short term, economic policies can be formulated based on an assessment of recent behaviors and the current economic situation, along with accurate perspectives or forecasts regarding future developmental trends derived from the analysis of periodically reported digital economic data. Short-term forecasting is generally conducted using econometric models that can describe future scenarios.

For medium- or long-term policymaking, time series statistical data may be considered. The development of economic policies and plans must be set within the context of economic strategies for relevant sectors and activities. This approach aims to establish appropriate targets and indicators for evaluating the success of policies and plans implemented by various sectors.



Economic policy making and decision taking require the use of data within the national accounts system. Investment plans of major corporations rely on data that can be used to make long-term forecasts about future economic developments.

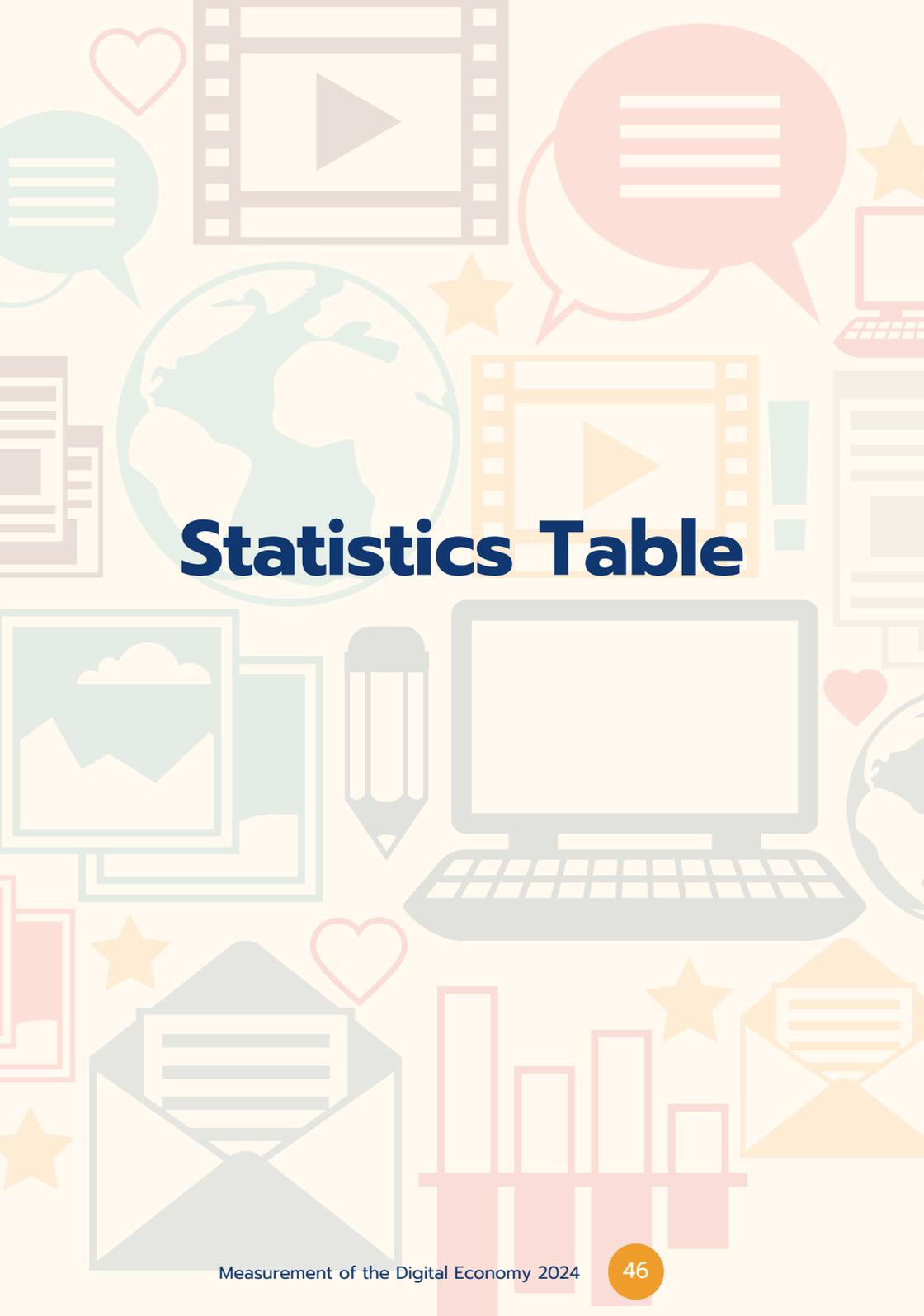
3 International Comparison



The reporting of international digital economy data follows standardized national accounts in terms of concepts, definitions, and classifications. These standards allow for widely accepted comparisons across countries, such as gross product values, proportions to GDP, and structural statistics like investment ratios, taxation, or government expenditure on investment relative to GDP

Such comparisons are used by economists, journalists, and analysts to evaluate a country's economic performance relative to other similar economies. These data significantly influence political acceptance, popularity, and assessments of development success, which are linked to a country's policies and developmental strategies implemented over time.

The database includes national accounts datasets for groups of countries, enabling econometric analysis through time-series and cross-sectional data to provide a broader perspective.



Statistics Table

Table 1 Digital Economy Value as a Percentage of GDP (2017-2024e)

Current Market Prices (Million Baht)	2017	2018	2019	2020	2021	2022	2023e	2024e
Digital Economy Production Value (Gross Output)	3,105,866.86	3,702,702.88	4,087,203.65	3,910,890.43	4,348,135.33	5,159,421.59	5,484,878.51	5,864,323.84
Digital Economy Value Added	1,394,422.73	1,764,837.22	2,047,714.37	1,832,515.44	2,049,531.57	2,237,500.71	2,303,528.32	2,442,031.23
Digital Economy Growth Rate (Value Added)		26.56	16.03	-10.51	11.84	9.17	2.95	6.01
Nominal GDP (GDP at current prices)	15,488,664.00	16,373,340.00	16,889,169.00	15,661,294.00	16,186,633.00	17,378,002.00	17,954,667.00	18,603,100.00
Digital Economy Share of GDP (%)	9.00	10.78	12.12	11.70	12.66	12.88	12.83	13.13
GDP Growth Rate (Current Prices, %)		5.71	3.15	-7.27	3.37	7.35	3.32	3.61

Table 2 Digital Industry Value by Industries at Current Prices (Million Baht)

Industry	Gross Output (Million Baht)				Value Added (Million Baht)			
	2017	2018	2019	2020	2017	2018	2019	2020
Digital Service Industry	675,607.04	1,075,618.65	1,172,931.55	1,035,909.15	395,205.24	619,366.94	710,342.06	488,268.51
Digital Content Industry	89,949.20	89,263.69	92,796.18	86,323.64	38,403.02	37,617.05	43,923.53	30,011.82
Hardware Industry	1,003,563.58	1,030,338.12	1,091,313.75	1,212,236.06	423,603.72	428,361.31	441,044.70	612,674.19
Telecommunications Industry	716,139.90	835,002.69	967,019.21	910,062.83	239,027.55	360,658.67	464,871.23	455,280.20
Smart Devices Industry	168,609.41	206,644.64	235,603.12	212,792.79	55,522.80	81,310.48	89,243.77	86,329.28
Service Industry and Others	306,784.32	306,657.15	355,963.46	312,357.14	149,069.22	137,952.37	199,182.52	103,381.80
Software industry	94,862.72	103,624.68	118,204.54	112,697.86	66,015.55	68,734.06	75,577.61	46,514.76
Tourism industry	50,350.69	55,553.26	53,371.84	28,510.96	27,575.62	30,836.35	23,528.95	10,054.89
Total	3,105,866.86	3,702,702.88	4,087,203.65	3,910,890.43	1,394,422.73	1,764,837.22	2,047,714.37	1,832,515.44

Table 2 Digital Industry Value by Industries at Current Prices (Million Baht) (Continued)

Industry	Gross Output (Million Baht)			
	2021	2022	2023e	2024e
Digital Service industry	1,094,751.98	1,292,225.71	1,225,969.21	1,295,886.62
Digital Content Industry	83,251.37	96,376.29	108,350.89	122,382.58
Hardware industry	1,516,681.96	1,862,216.27	1,945,477.29	2,060,057.35
Telecommunications industry	957,043.16	1,153,326.27	1,245,806.87	1,374,052.16
Smart Devices industry	271,658.44	293,529.90	404,820.68	435,250.60
Service industry and others	274,398.33	300,823.95	380,113.07	396,860.89
Software industry	129,944.21	138,114.22	144,256.73	147,045.00
Tourism industry	20,405.88	22,808.98	30,083.77	32,788.63
Total	4,348,135.33	5,159,421.59	5,484,878.51	5,864,323.84

Value Added (Million Baht)			
2021	2022	2023e	2024e
514,839.38	541,342.86	696,875.68	732,609.36
29,350.15	32,972.21	47,148.39	53,498.43
765,325.15	636,833.65	711,578.86	744,211.64
473,778.65	730,673.37	438,823.04	482,779.08
117,137.61	74,524.00	143,578.18	153,338.54
88,915.64	157,855.64	186,673.32	194,132.56
53,873.59	57,542.92	69,093.05	70,712.22
6,311.40	5,756.06	9,757.80	10,749.40
2,049,531.57	2,237,500.71	2,047,714.37	2,442,031.23

**Table 3 Digital Industry Gross Output by Industries and Enterprise Size, 2024e
(Million Baht)**

Industry	Gross Output (Million Baht)			
	Small	Medium	Large	Total
Digital Service Industry	511,457.26	54,486.19	729,943.17	1,295,886.62
Digital Content Industry	74,057.24	13,860.18	34,465.16	122,382.58
Hardware Industry	355,159.19	47,441.53	1,657,456.63	2,060,057.35
Telecommunications Industry	260,050.47	62,411.63	1,051,590.07	1,374,052.16
Smart Devices Industry	51,911.46	20,633.75	362,705.38	435,250.60
Service Industry and Others	206,606.60	28,800.80	161,453.49	396,860.89
Software Industry	108,314.28	16,066.23	22,664.49	147,045.00
Tourism Industry	23,360.99	3,043.73	6,383.91	32,788.63
Total	1,590,917.49	246,744.04	4,026,662.31	5,864,323.84

**Table 4 Digital Industry Value Added by Industries and Enterprise Size, 2024e
(Million Baht)**

Industry	Value Added (Million Baht)			
	Small	Medium	Large	Total
Digital Service Industry	275,983.51	25,220.79	431,405.06	732,609.36
Digital Content Industry	32,638.51	5,701.33	15,158.59	53,498.43
Hardware Industry	140,192.48	10,657.35	593,361.81	744,211.64
Telecommunications Industry	100,856.08	20,568.80	361,354.19	482,779.08
Smart Devices Industry	35,860.88	6,631.32	110,846.33	153,338.54
Service Industry and Others	98,550.27	13,537.87	82,044.41	194,132.56
Software Industry	52,350.44	7,595.98	10,765.80	70,712.22
Tourism Industry	7,711.77	964.52	2,073.11	10,749.40
Total	744,143.95	90,877.96	1,607,009.31	2,442,031.23

Table 5 Digital Economy and GDP in Chain Volume Measure (Base Year 2017)

	2017	2018	2019	2020
Real Digital Economy Values (Chain Volume Measure, 2017 Prices)				
Digital Economy Value Added (2017 Prices)	1,394,422.73	1,768,680.65	2,048,720.16	1,840,651.26
Gross Domestic Product (2015 Prices)	10,259,941.00	10,693,205.00	10,919,319.00	10,258,696.00
Growth Rate (%)				
Digital Economy Value Added (2017 Prices)		26.84	15.83	-10.16
Gross Domestic Product (2015 Prices)		4.22	2.11	-6.05

	2021	2022	2023e	2024e	Average for 2017–2024
Real Digital Economy Values (Chain Volume Measure, 2017 Prices)					
Digital Economy Value Added (2017 Prices)	2,062,298.74	2,225,966.72	2,287,220.20	2,417,794.64	2,005,719.39
Gross Domestic Product (2015 Prices)	10,417,928.00	10,686,750.00	10,902,382.00	11,185,843.93	10,665,508.24
Growth Rate (%)					
Digital Economy Value Added (2017 Prices)	12.04	7.94	2.75	5.71	8.71
Gross Domestic Product (2015 Prices)	1.55	2.58	2.02	2.60	1.29

Table 6 Digital Economy Factor Income, 2017-2024e (Million Baht)

	Income (Million Baht)				Share (%)			
	2017	2018	2019	2020	2017	2018	2019	2020
Labor Income	737,682.76	945,970.46	967,642.61	816,337.51	52.90	53.60	47.25	44.55
Excess from Business	408,686.51	477,785.96	533,405.72	581,644.40	29.31	27.07	26.05	31.74
Mixed income	40,467.11	90,871.41	270,608.48	147,976.51	2.90	5.15	13.22	8.08
Net Production Tax	83,614.78	97,221.92	109,545.71	107,035.40	6.00	5.51	5.35	5.84
Depreciation	123,971.56	152,987.48	166,511.85	179,521.62	8.89	8.67	8.13	9.80
Total	1,394,422.73	1,764,837.22	2,047,714.37	1,832,515.44	100.00	100.00	100.00	100.00

	Income (Million Baht)				Share (%)			
	2021	2022	2023e	2024e	2021	2022	2023e	2024e
Labor Income	936,382.14	1,404,179.11	1,576,878.49	1,689,711.84	45.69	62.76	68.45	69.19
Excess from Business	669,028.27	299,196.25	158,520.20	132,672.99	32.64	13.37	6.88	6.25
Mixed income	122,799.81	103,491.98	135,633.15	152,615.37	5.99	4.63	5.89	5.43
Net Production Tax	120,577.71	143,175.05	154,545.67	165,404.43	5.88	6.40	6.71	6.77
Depreciation	200,743.64	287,458.32	277,950.81	301,626.59	9.79	12.85	12.07	12.35
Total	2,049,531.57	2,237,500.71	2,303,528.32	2,442,031.23	100.00	100.00	100.00	100.00

Table 7 Digital Economy Factor Income by Industries, 2024e (Million Baht)

Industry	Labor Income	Excess from Business	Mixed Income	Net Production Tax	Depreciation	Total
Digital Service industry	411,501.66	129,399.67	108,418.20	43,551.37	39,738.47	732,609.36
Digital Content industry	250,172.52	1,039.01	-236,792.53	2,827.84	36,251.60	53,498.43
Hardware industry	523,681.95	0.00	93,297.85	64,481.10	62,750.74	744,211.64
Telecommunications industry	190,371.73	0.00	132,966.45	29,867.78	129,573.11	482,779.08
Smart Devices industry	94,026.13	0.00	34,629.63	13,196.99	11,485.79	153,338.54
Service industry and others	150,484.17	2,978.16	15,808.05	8,703.86	16,158.32	194,132.56
Software industry	59,619.28	0.00	4,370.44	2,699.43	4,023.07	70,712.22
Tourism Industry	9,854.39	-743.85	-82.70	76.06	1,645.49	10,749.40
Total	1,689,711.84	132,672.99	152,615.37	165,404.43	301,626.59	2,442,031.23

Table 8 Household Final Consumption Expenditure on Digital Products by COICOP, 2018-2024e

COICOP	Classification	2018	2019	2020	2021	2022	2023e	2024e
05	Furniture and Household Equipment	12,836.19	13,861.52	12,185.38	16,108.62	16,328.85	17,715.05	18,737.79
06	Healthcare	131.77	144.83	139.94	143.35	175.71	197.14	210.94
07	Transportation	6,942.17	8,239.36	7,647.67	6,962.69	6,429.55	6,822.65	6,916.22
08	Communications	218,890.37	213,087.93	246,220.36	254,914.96	254,550.011	294,017.80	310,453.57
09	Entertainment and Culture	103,793.125	109,012.75	107,397.24	105,494.31	107,645.89	113,542.60	120,208.70
10	Education	430.97	545.05	583.08	633.38	595.13	633.03	653.80
12	Miscellaneous products and services	50,200.09	57,161.58	52,803.93	53,864.72	61,481.56	70,697.11	74,500.141
Total		393,224.68	402,053.03	426,977.60	438,122.04	447,206.71	503,625.28	531,681.16

Table 9 Government Final Consumption Expenditure on Digital Products and Services, 2020-2024e

Government Final Consumption	Current Prices (Million Baht)				
	2020	2021	2022	2023e	2024e
1. Expenses and Materials	10,137.55	10,324.98	10,943.02	11,666.29	13,385.98
2. Utility Expenses	6,024.61	5,704.18	7,091.26	6,702.24	7,083.64
Total	16,162.15	16,029.16	18,034.28	18,368.52	20,469.62

Government Final Consumption	Growth Rate (%)				
	2020	2021	2022	2023e	2024e
1. Expenses and Materials	-7.11	1.85	5.99	6.61	14.74
2. Utility Expenses	-13.10	-5.32	24.32	-5.49	5.69
Total	-9.44	-0.82	12.51	1.85	11.44

Table 10 Gross Fixed Capital Formation in Digital Economy Activities, 2017-2024e (Current Prices)

	Land	Buildings and Structures	Tools and Machinery	Packaged Software	High-Value Software Development Costs (Websites and Applications)	Other Assets	Total
The Value at Current Prices (Million Baht)							
2017	10,129.47	26,989.14	92,162.17	4,595.50	2,795.15	16,594.11	153,265.54
2018	10,580.82	27,831.85	101,591.38	5,453.32	3,232.55	16,961.57	165,651.49
2019	12,212.43	31,675.31	110,646.06	6,026.07	4,554.61	17,135.17	182,249.66
2020	10,421.46	25,976.91	116,860.76	5,983.57	3,717.07	16,076.65	179,036.41
2021	10,961.35	28,982.99	122,324.90	6,104.53	3,870.46	20,074.98	192,319.22
2022	15,832.18	58,613.07	193,637.60	16,423.72	11,103.16	26,950.78	322,560.49
2023e	50,592.41	108,931.76	202,423.04	77,186.29	40,887.74	50,616.84	530,638.07
2024e	57,598.36	120,130.24	222,262.43	89,026.55	46,960.66	56,397.19	592,375.44

Table 10 Gross Fixed Capital Formation in Digital Economy Activities, 2017-2024e (Current Prices) (continued)

	Land	Buildings and Structures	Tools and Machinery	Packaged Software	High-Value Software Development Costs (Websites and Applications)	Other Assets	Total
Share (%)							
2017	6.61	17.61	60.13	3.00	1.82	10.83	100.00
2018	6.39	16.80	61.33	3.29	1.95	10.24	100.00
2019	6.70	17.38	60.71	3.31	2.50	9.40	100.00
2020	5.82	14.51	65.27	3.34	2.08	8.98	100.00
2021	5.70	15.07	63.61	3.17	2.01	10.44	100.00
2022	4.91	18.17	60.03	5.09	3.44	8.36	100.00
2023e	9.53	20.53	38.15	14.55	7.71	9.54	100.00
2024e	9.72	20.28	37.52	15.03	7.93	9.52	100.00

Table 11 Gross Fixed Capital Formation by Industries, 2017-2024e (Million Baht)

Industry	2017	2018	2019	2020	2021	2022	2023e	2024e
Digital Content Industry	205.10	252.43	242.11	302.18	297.63	383.22	357.69	400.55
Hardware Industry	39,296.63	40,202.60	38,258.40	38,208.67	48,721.51	72,974.79	74,496.06	76,153.91
Telecommunications Industry	347.78	590.80	577.87	617.27	686.99	1,096.80	1,240.78	1,319.55
Smart Devices Industry	2,985.60	3,350.33	3,551.67	3,494.68	4,173.32	7,961.59	9,652.62	10,209.41
Software Industry	256.70	278.71	307.97	342.77	437.04	1,517.90	1,846.07	1,937.49
Total	43,091.80	44,674.88	42,938.01	42,965.58	54,316.50	83,934.31	87,593.22	90,020.91

Share (%)

Digital Content Industry	0.48	0.57	0.56	0.70	0.55	0.46	0.41	0.44
Hardware Industry	91.19	89.99	89.10	88.93	89.70	86.94	85.05	84.60
Telecommunications Industry	0.81	1.32	1.35	1.44	1.26	1.31	1.42	1.47
Smart Devices Industry	6.93	7.50	8.27	8.13	7.68	9.49	11.02	11.34
Software Industry	0.60	0.62	0.72	0.80	0.80	1.81	2.11	2.15
Total	100.00							

Table 12 Gross Fixed Capital Formation in Chain Volume Measures (CVM), 2017-2024e

Item	Gross Fixed Capital Formation in Chain Index Format. (Million Baht)						Growth Rate (%)		
	2019	2020	2021	2022r	2023e	2024e	2022r	2023e	2024e
Reproduction of Recorded Media (18200)	200.54	241.82	212.26	235.90	176.02	193.65	11.14	-25.38	10.01
Manufacture of Electronic Equipment and Circuit Boards. (2610)	24,205.12	24,178.84	35,033.02	54,219.08	50,579.46	52,735.62	54.77	-6.71	4.26
Manufacture of Computers and Peripheral Equipment. (2620)	15,391.59	15,983.54	16,819.59	20,105.04	25,985.50	25,765.78	19.53	29.25	-0.85
Manufacture of Communication Equipment(2630)	749.43	837.96	960.25	1,387.06	1,511.09	1,619.54	44.45	8.94	7.18
Manufacture of Electronic Devices for consumer (2640)	1,167.50	1,456.42	1,243.87	1,894.23	2,000.37	2,015.76	52.29	5.60	0.77
Manufacture of Instruments for Measuring, Testing, Navigation, and Control Equipment (2651)	64.14	64.50	73.46	88.06	105.38	117.17	19.88	19.67	11.18
Manufacture of Watches and Clocks (2652)	173.90	197.20	164.44	328.07	447.81	423.67	99.51	36.50	-5.39
Manufacture of Irradiation Apparatus, Medical, and Therapeutic Electronic Instruments (2660).	43.51	41.82	40.94	50.65	50.24	47.60	23.73	-0.82	-5.26
Manufacture of Optical Instruments and Photographic Equipment, and Production of Magnetic and Optical Media (2670, 2680).	588.50	490.67	508.86	713.53	978.04	1,056.46	40.22	37.07	8.02
Manufacture of Lighting Equipment (2740).	554.15	259.13	548.55	740.68	785.36	758.89	35.03	6.03	-3.37

Table 12 Gross Fixed Capital Formation in Chain Volume Measures (CVM), 2019–2024e.
(continued)

Item	Gross Fixed Capital Formation in CVM (Million Baht)						Growth Rate (%)		
	2019	2020	2021	2022r	2023e	2024e	2022r	2023e	2024e
Manufacture of Domestic Appliances (2750)	540.59	448.06	1,000.65	2,964.24	4,126.70	4,582.18	196.23	39.22	11.04
Manufacture of Office Machinery and Equipment (2817)	81.64	84.73	88.71	516.32	468.12	465.07	482.03	-9.34	-0.65
Manufacture of Sports Goods (3230)	3.88	4.20	4.31	23.18	23.16	26.32	138.15	-0.10	13.62
Manufacture of Games and Toys (3240)	26.26	14.20	24.96	40.32	36.92	42.92	61.56	-8.44	16.24
Software Publishing (5820)	322.08	356.26	463.09	1,572.87	1,939.93	2,031.74	239.65	23.34	4.73
Total	44,114.20	44,660.81	57,280.23	85,533.08	89,543.21	92,310.29	49.32	4.69	3.09

Table 13 Digital Trade Balance: Exports and Imports of Digital Goods and Services, 2019-2024e (Million Baht)

Item	2019	2020	2021	2022	2023e	2024e
Export of Digital Goods and Services	2,289,043.78	2,036,322.51	2,280,160.64	2,090,505.29	2,180,005.60	2,597,776.42
Goods	1,468,583.53	1,490,396.09	1,785,523.62	1,524,595.57	1,443,856.08	1,579,708.51
Services	820,460.25	545,926.42	494,637.01	565,909.72	736,149.52	1,018,067.90
Import of Digital Goods and Services	1,879,826.04	1,714,214.94	2,049,537.09	2,108,588.53	2,154,750.48	2,389,209.51
Goods	1,312,958.15	1,280,778.33	1,593,302.95	1,485,702.19	1,490,629.11	1,637,982.92
HServices	566,867.90	433,436.61	456,234.14	622,886.35	664,121.36	751,226.59

Share (%)

Export of Digital Goods and Services	100.00	100.00	100.00	100.00	100.00	100.00
Goods	64.16	73.19	78.31	72.93	66.23	60.81
Services	35.84	26.81	21.69	27.07	33.77	39.19
Import of Digital Goods and Services	100.00	100.00	100.00	100.00	100.00	100.00
Goods	69.84	74.72	77.74	70.46	69.18	68.56
Services	30.16	25.28	22.26	29.54	30.82	31.44

Table 14 Digital Goods and Services Imports by Industries, 2019-2024e (Million Baht)

Industry	Value (Million Baht)						Growth Rate (%)		
	2019	2020	2021	2022r	2023e	2024e	2022r	2023e	2024e
Digital Services Industry	89,808.04	69,148.06	70,362.67	112,991.63	94,472.27	106,075.75	5.36	4.38	4.47
Digital Content Industry	29,804.45	11,401.95	9,998.05	20,566.26	88,816.51	100,230.55	0.98	4.12	4.20
Hardware Industry	609,927.96	604,097.89	757,380.34	784,303.88	795,503.72	874,142.00	37.20	36.92	36.59
Telecommunications Industry	454,723.09	427,593.38	496,937.15	406,513.45	173,017.02	191,254.45	19.28	8.03	8.00
Smart Devices Industry	433,354.09	422,301.55	517,934.36	536,800.77	542,314.27	595,923.90	25.46	25.17	24.94
Services and Others Industries	177,527.92	113,212.60	131,284.81	154,393.63	305,437.92	345,285.24	7.32	14.18	14.45
Software Industry	59,458.11	56,025.11	58,096.29	76,784.05	34,531.78	39,060.92	3.64	1.60	1.63
Tourism Industry	25,222.38	10,434.40	7,543.42	16,234.87	120,656.99	136,482.19	0.77	5.60	5.71
Total	1,879,826.04	1,714,214.94	2,049,537.09	2,108,588.53	2,154,750.48	2,389,209.51	100.00	100.00	100.00

Table 15 Digital Goods and Services Exports by Industries, 2019-2024e (Million Baht)

Industry	Value (Million Baht)						Growth Rate (%)		
	2019	2020	2021	2022r	2023e	2024e	2022r	2023e	2024e
Digital Services Industry	105,919.29	62,360.64	52,888.21	66,724.15	158,234.93	218,692.45	3.19	7.26	8.47
Digital Content Industry	31,842.94	12,097.82	9,621.79	16,226.48	106,106.73	144,193.29	0.78	4.87	5.55
Hardware Industry	828,258.47	820,926.64	974,969.81	742,103.43	674,157.66	737,589.16	35.50	30.92	28.39
Telecommunications Industry	417,160.39	440,040.38	480,048.86	495,976.93	268,315.20	304,108.85	23.73	12.31	11.71
Smart Devices Industry	443,085.29	457,869.83	545,636.02	513,545.58	509,353.45	557,278.52	24.57	23.36	21.45
Services and Others Industries	226,410.21	127,068.89	126,956.04	130,993.97	368,108.27	503,523.93	6.27	16.89	19.38
Software Industry	73,262.80	76,186.79	73,355.68	77,891.44	36,509.42	50,491.20	3.73	1.67	1.94
Tourism Industry	163,104.40	39,771.51	16,684.23	47,043.32	59,219.95	81,899.03	2.25	2.72	3.15
Total	2,289,043.78	2,036,322.51	2,280,160.64	2,090,505.29	2,180,005.60	2,597,776.42	100.00	100.00	100.00

Table 16 Digital Trade Balance: Real Value of Digital Goods and Services Exports and Imports (Million Baht)

Real Value (Million Baht)	2018	2019	2020	2021	2022r	2023e	2024e
Export of Digital Goods and Services	2,338,903.83	2,222,408.24	1,961,051.24	2,113,114.83	1,892,375.28	1,943,450.07	2,413,033.54
Digital Goods	1,529,191.55	1,410,139.21	1,415,215.69	1,623,512.28	1,344,993.01	1,252,635.68	1,466,100.08
Digital Services	809,712.29	818,074.70	550,014.80	328,158.66	222,756.48	194,257.29	233,997.26
Import of Digital Goods and Services	1,915,788.25	1,739,646.12	1,511,356.69	1,700,489.68	1,605,369.69	2,014,578.09	2,092,443.77
Digital Goods	1,419,906.37	1,289,159.14	1,195,503.89	1,391,513.44	1,201,276.70	1,288,692.51	1,346,070.54
Digital Services	495,881.87	450,467.15	330,234.58	333,684.57	409,148.70	691,181.48	708,785.07

Real GDP Growth Rate (%)							
Export of Digital Goods and Services		-4.98	-11.76	7.75	-10.45	2.70	24.16
Digital Goods		-7.79	0.36	14.72	-17.16	-6.87	17.04
Digital Services		1.03	-32.77	-40.34	-32.12	-12.79	20.46
Import of Digital Goods and Services		-9.19	-13.12	12.51	-5.59	25.49	3.87
Digital Goods		-9.21	-7.26	16.40	-13.67	7.28	4.45
Digital Services		-9.16	-26.69	1.04	22.62	68.93	2.55

Table 17 Thailand's Digital Economy Value and Growth, 2022-2024e

Current Prices (Million Baht)	2022	2023e	2024e
Narrow Digital Economy Value	2,237,501	2,303,528	2,442,031
Broad Digital Economy Value	4,072,251	4,192,422	4,444,497
Gross Domestic Product (GDP)	17,378,002	17,954,667	18,603,100
Narrow Digital Economy Share of GDP	12.88	12.83	13.13
Broad Digital Economy Share of GDP	23.43	23.35	23.88



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