

COMCEC COORDINATION OFFICE

Ankara, Türkiye

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# Digital Transformation of Payment Systems in OIC Member Countries

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## SECTION 1 – INTRODUCTION

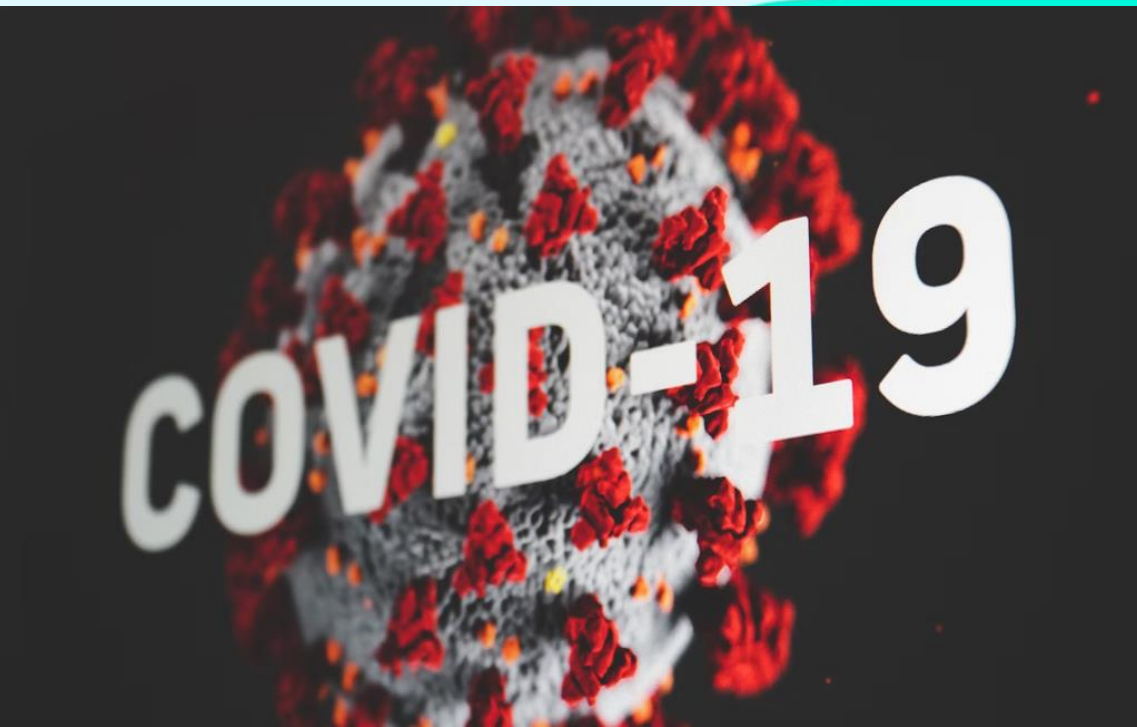
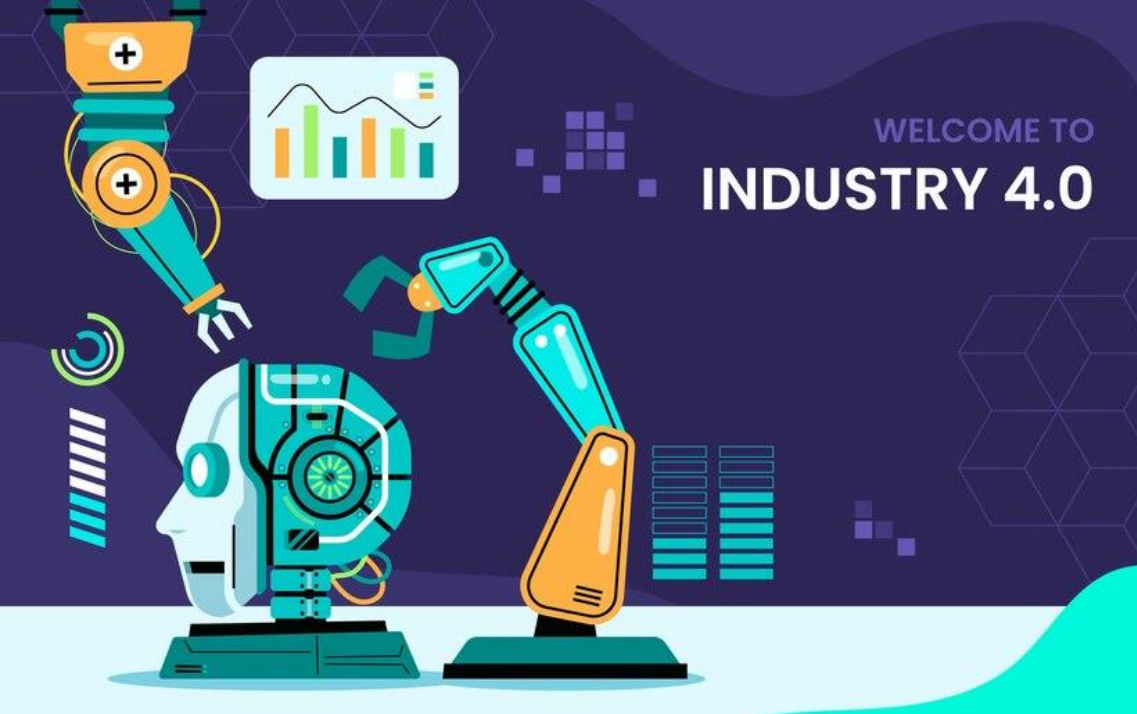
- 1.1 Background
- 1.2 Aim and Scope
- 1.3 Significance of Study
- 1.4 Research Methodology
- 1.5 General Overview

# INTRODUCTION


## SECTION 1



# 1.1 BACKGROUND



## IR 4.0 & COVID-19



The onset of the **Fourth Industrial Revolution** and most recently **Covid-19 pandemic** where almost everyone was forced to utilize technology in all economic activities have further deepened the unfeigned relevance of technology in economic developments across the world.

## LAWS & POLICIES AMENDMENTS



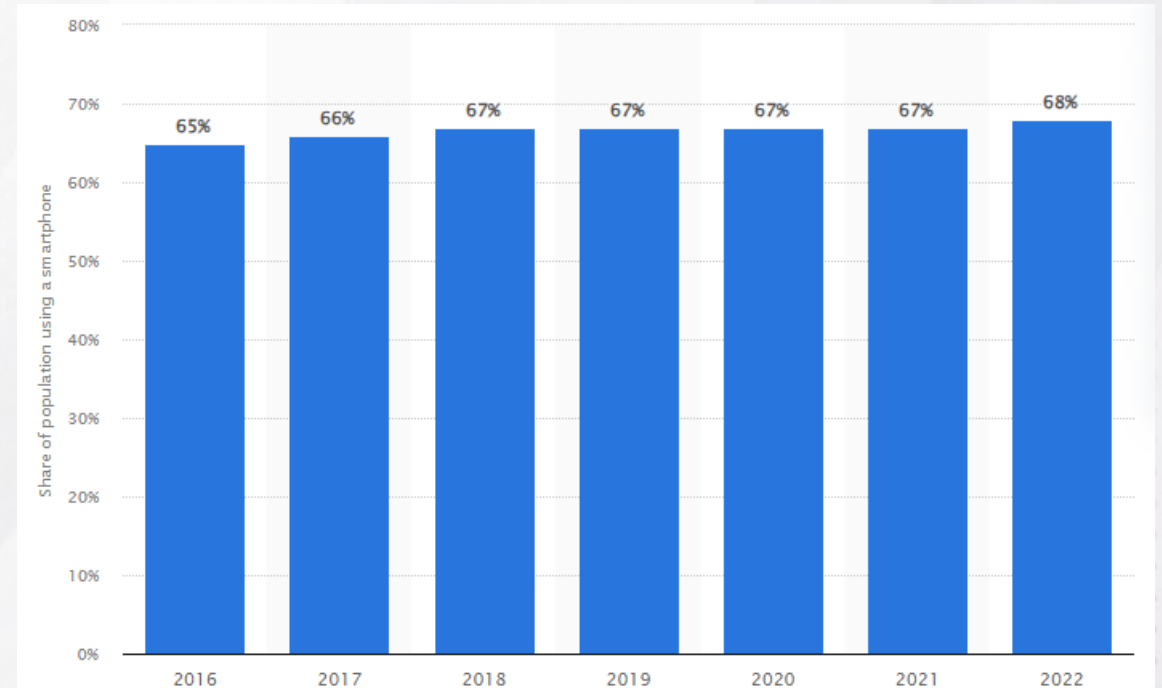
The increasing unbridled proliferation of technological advancement across various sectors of the economy has created a situation where **state actors continue to amend existing laws and policies** to address the risks associated with such developments and protect the citizenry.

## GLOBAL SMARTPHONE PENETRATION RATE

- As of 2022, the global smartphone penetration rate was about **68%** relative to the global population of **7.4 billion people**
- In terms of smartphone subscriptions, an estimated **6.3 billion** subscriptions were recorded in the same year (Laricchia, 2023)
- These statistics are relevant in estimating the **potentials of e-commerce** and the **utilization of such platforms**

## GLOBAL E-COMMERCE SALES

- In 2019, global e-commerce sales were estimated at **\$26.7 trillion**
- A **dramatic rise in the number of sales** by 2020 when the pandemic hit the world
- In 2020, **19%** of total retail sales globally came from e-commerce which was a **16% increase** from 2019



Source: [www.statista.com](http://www.statista.com)

# INTRODUCTION

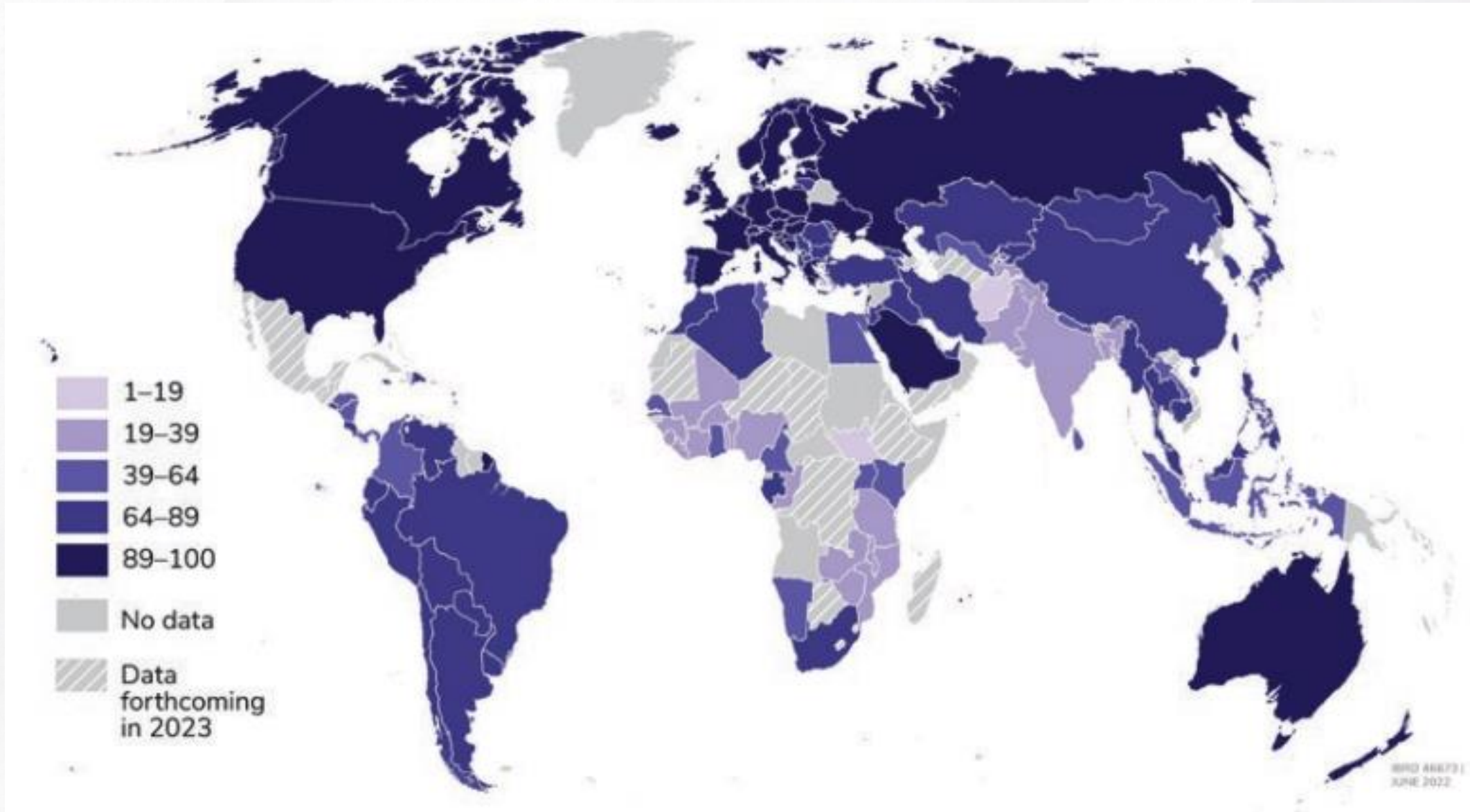
**Table 1: Online retail sales, selected economies, 2018-2020**

Economy	Online retail sales (\$ billions)			Retail sales (\$ billions)			Online share (% of retail sales)		
	2018	2019	2020	2018	2019	2020	2018	2019	2020
Australia	13.5	14.4	22.9	239	229	242	5.6	6.3	9.4
Canada	13.9	16.5	28.1	467	462	452	3.0	3.6	6.2
China	1,060.4	1,233.6	1,414.3	5,755	5,957	5,681	18.4	20.7	24.9
Korea (Rep.)	76.8	84.3	104.4	423	406	403	18.2	20.8	25.9
Singapore	1.6	1.9	3.2	34	32	27	4.7	5.9	11.7
United Kingdom	84.0	89.0	130.6	565	564	560	14.9	15.8	23.3
United States	519.6	598.0	791.7	5,269	5,452	5,638	9.9	11.0	14.0
<b>Economies above</b>	<b>1,770</b>	<b>2,038</b>	<b>2,495</b>	<b>12,752</b>	<b>13,102</b>	<b>13,003</b>	<b>14</b>	<b>16</b>	<b>19</b>

Source | UNCTAD, based on national statistics offices.

# INTRODUCTION

- This illustrates the number of adults with access to the internet (%) in **2021** globally
- Globally, **70%** of adults have internet access
- Higher internet penetration rate means higher potential of global e-commerce sales



Source: Gallup World Poll

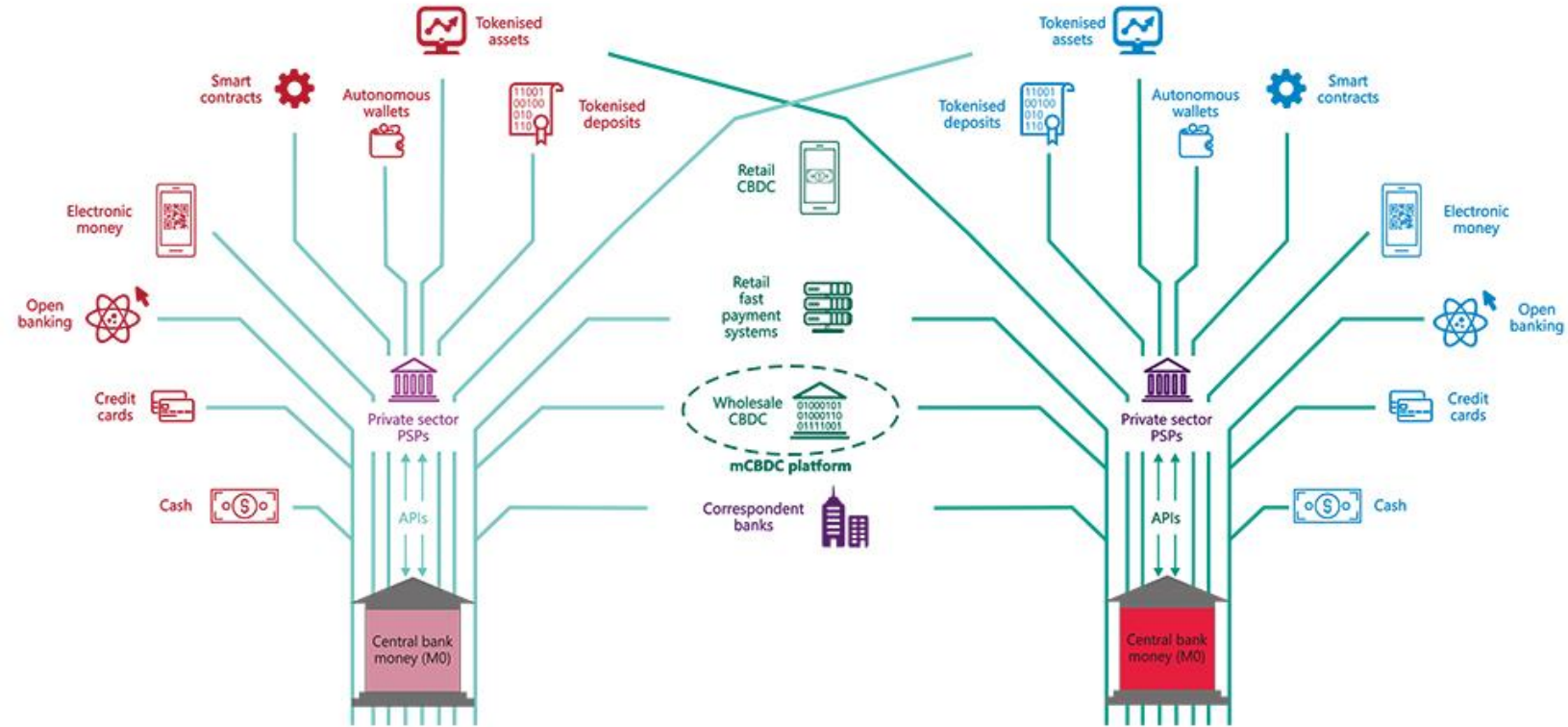


## PAYMENT SYSTEM EVOLUTION

- Starting with the **barter system** during the ancient times, **payment systems have evolved** through exchange of commodities;
  - grains, livestock or precious metals;
  - metal coins and paper money;
  - banknotes;
  - cheques, electronic funds transfer, credit and debit cards;
  - online banking and internet payment gateways;
  - mobile payments and digital wallets;
  - real-time payments and instant settlement;
  - cryptocurrencies;
  - Open banking APIs;
  - tokenization;
  - Central Bank Digital Currencies (CBDCs)

A strong canopy supports the global monetary (eco)system

Graph 8



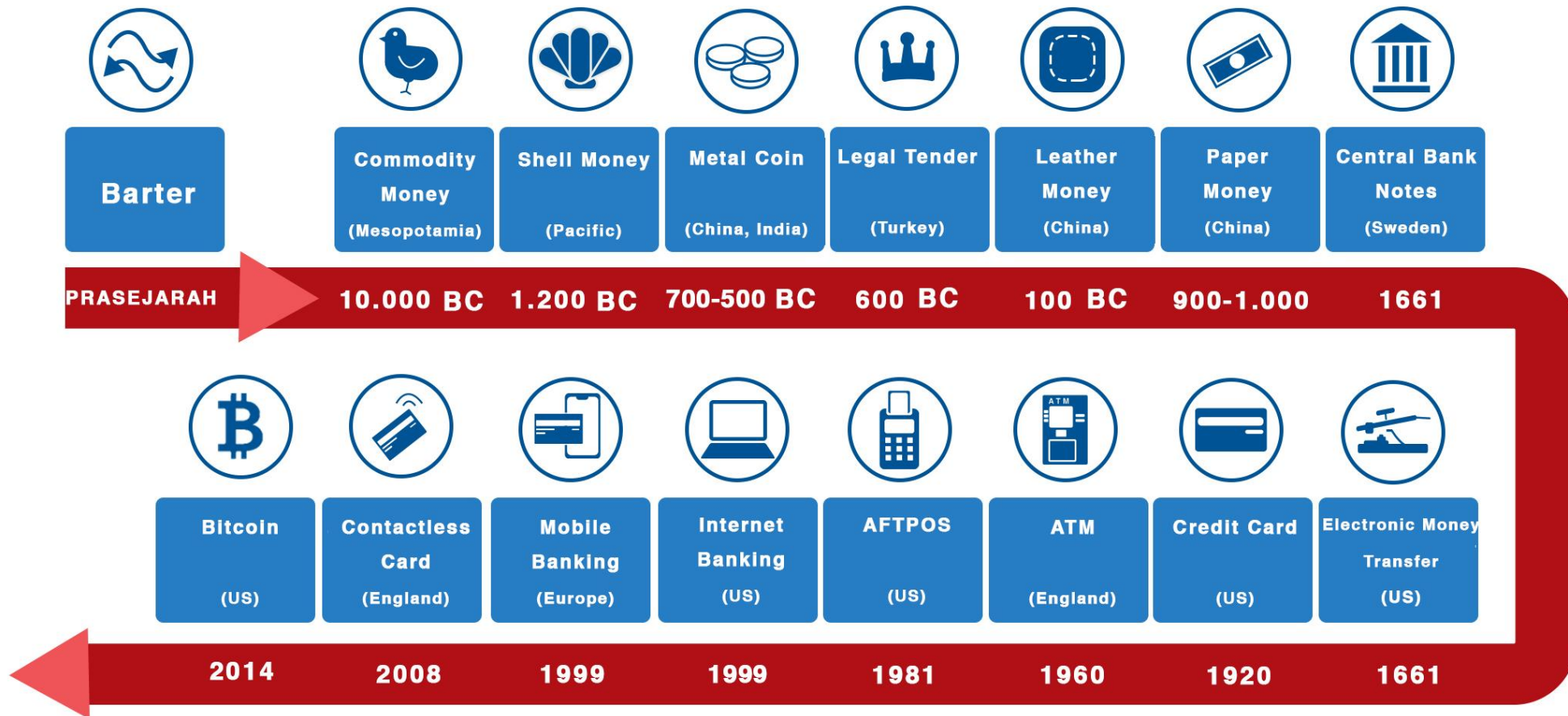
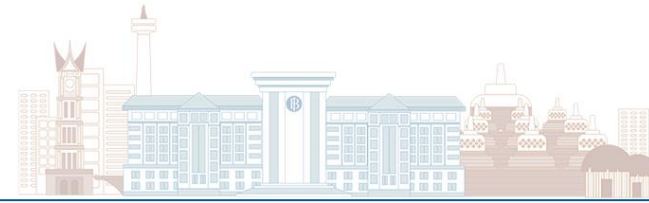
API = application programming interface; CBDC = central bank digital currency; PSP = payment service provider.

Source: BIS.

# INTRODUCTION



## EVOLUTION OF PAYMENT SYSTEM



## OIC MEMBER COUNTRIES'S HUGE POTENTIALS AT THE GLOBAL STAGE

- OIC member countries as a bloc is the **largest international body** after the United Nations
- OIC has huge potentials to revolutionize the global payment systems
- **Cross-border collaboration**: robust digital payment systems infrastructure
- Potential to promote economic activities among OIC member countries
- A need for functioning payment systems across member countries
- Need for the regulatory and supervisory authorities to **ensure proper regulation of an increasingly diversified global hi-tech payment systems landscape**



## 1.2 AIM AND SCOPE OF THE STUDY

# AIM AND SCOPE OF THE STUDY



## AIM 1

To analyze and elaborate **payment systems in different jurisdictions**, with a particular focus on the initiatives in OIC Member Countries and the **need for digitalization** in payment systems,



## AIM 2

To analyze and elaborate **emerging technologies** on digital payment systems



## AIM 3

To analyze and elaborate **key components** and **parties involved** in the digital transformation



## AIM 4

To analyze and elaborate the **challenges and prospects** of digital payment systems in OIC Member Countries

## 1.3 SIGNIFICANCE OF THE STUDY

# SIGNIFICANCE OF THE STUDY



Practical **policy recommendations** to the OIC Member countries

Improving **cooperation among central banks** in terms of digital payment systems

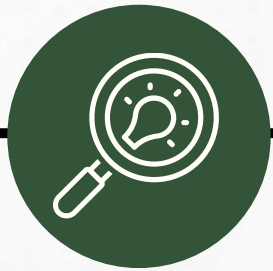


Identification of key best practices and prospects for **policy reforms**

## 1.4 RESEARCH METHODOLOGY



## DESIGN THINKING APPROACH



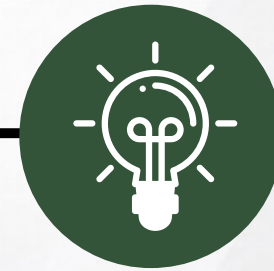
### Discovery

- Comprehensive literature review
- **Conceptual framework** for the analysis on digital payment systems, its significance and challenges



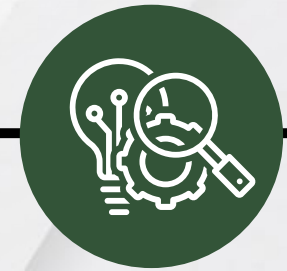
### Interpretation

- **Detailed analysis** on digital payment system, innovative solutions and challenges
- Complemented by **data collected** through interviews and field visits



### Ideation

- **Semi-structured interviews** with experts from various segments, including regulators, financial institutions, and industry experts



### Experimentation

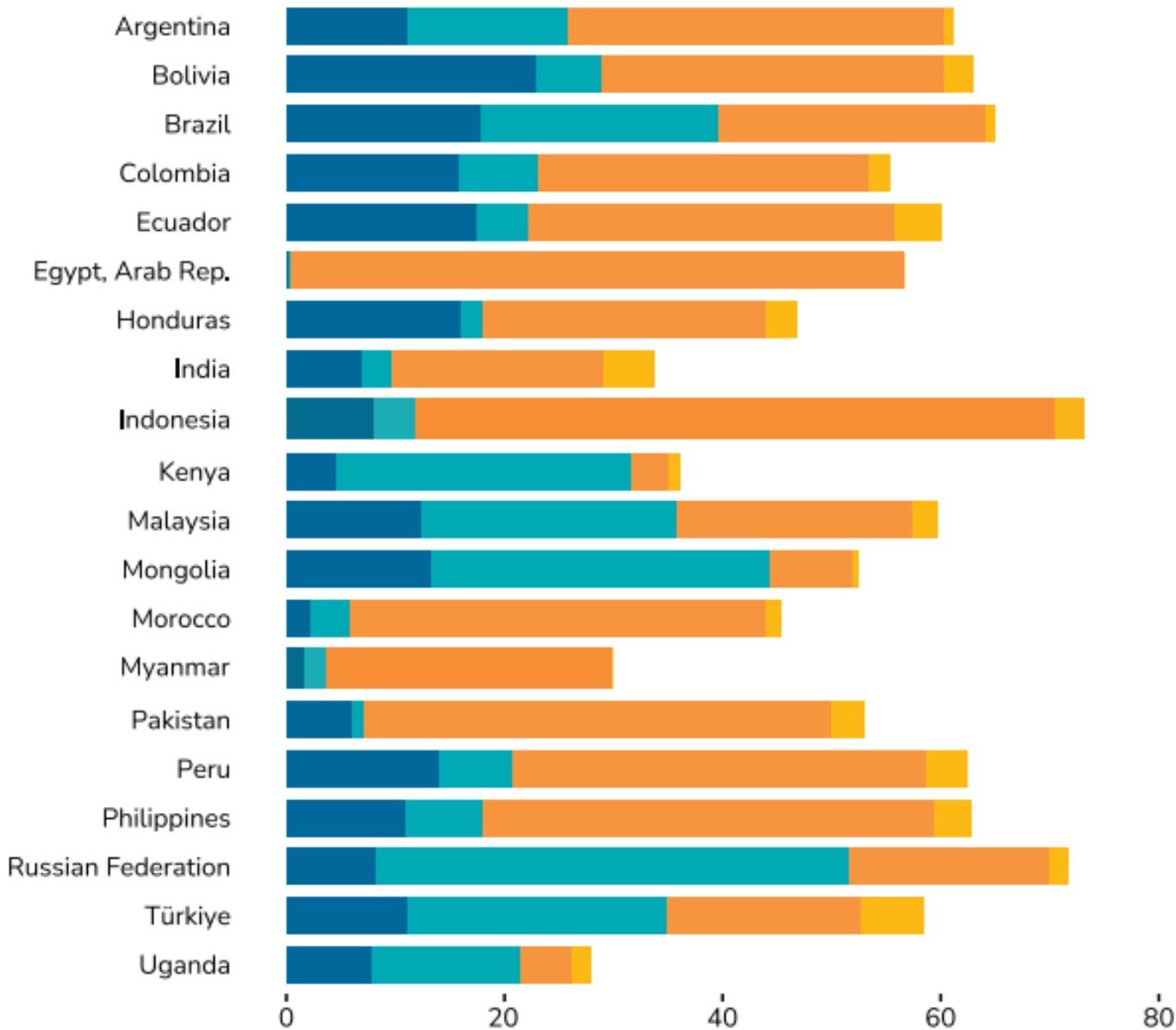
- Stakeholders engagement
- Policy development
- Scalable solutions

## CASE STUDIES: COUNTRY SELECTION CRITERIA

CRITERIA	DESCRIPTION	APPROACH
I	OIC member countries	COMCEC List
II	Geographic groups: African, Arab, and Asian	COMCEC List
III	Legal system/regime	World Factbook
IV	Development level of digital payment systems	World Bank (Global Findex 2021)

*Source: Annex 1 of ToR "The Official 3 Regional Groups of the OIC Member States" & other sources*

# ANALYSIS OF DEVELOPMENT LEVEL OF DIGITAL PAYMENT SYSTEMS



■ From an account for the first time after the start of COVID-19  
■ From an account, but not for the first time after the start of COVID-19  
■ In cash only     ■ Using other method

- This figure illustrates the methods of **how adults paying utility bills (%) in 2021**
- This figure shows that the methods used by adults in developing economies to make utility payments **varied widely**
- **Malaysia** and **Türkiye's** numbers reveal that they are **more mature** in terms of digital payment development levels.
- In **2021**, only **22%** of Malaysians and **18%** of the Turkish people paid their **utility bills using cash**.
- Conversely, the proportion who paid their utility bills via a mobile phone or through an account ranged between **23%** to **36%** for Malaysians and **21%** to **35%** for the Turks.

Source: Global Findex Database 2021

## ANALYSIS OF DEVELOPMENT LEVEL OF DIGITAL PAYMENT SYSTEMS

Case Country	OIC Member	Geographic Group	Legal System	Digital Payment Development Level
Malaysia	Yes	Asian	Mixed (Common Law + Sharī'ah)	Mature
Morocco	Yes	Arab	Mixed (Common Law + Sharī'ah)	Infancy
Mozambique	Yes	African	Civil Law	Developing
Türkiye	Yes	Asian	Civil Law	Mature
United Kingdom	No	European	Common Law	Very Mature

Source: Authors

## 1.5 GENERAL OVERVIEW

# GENERAL OVERVIEW

## INTRODUCTION

- Overview of the study, definitions of key terms & outline of the remaining chapters in the report.

## DIGITAL PAYMENT SYSTEMS

- General overview and historical evolution of payment systems and discussion of digital payment systems

## GLOBAL, REGIONAL AND LOCAL TRENDS

- Comprehensive and detailed analysis of payment systems and relevant innovative applications in OIC Member Countries

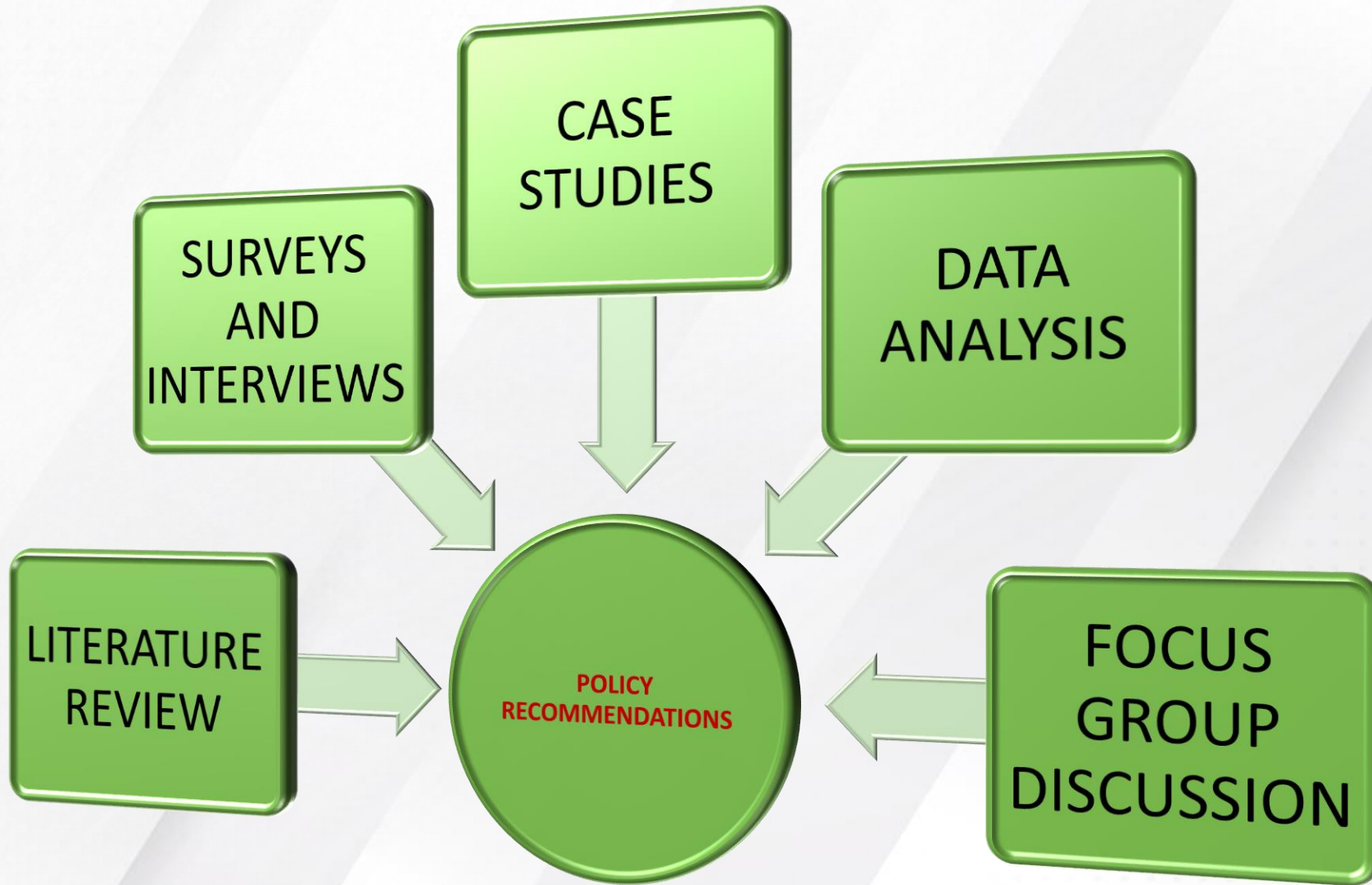
## CASE STUDIES

- Case studies on five countries, one of which is a non-OIC country, based on the level of financial sector development and digitalization

## POLICY RECOMMENDATIONS

- Practical policy recommendations and the possibility of an OIC-wide collaboration in establishing a digital payment system platform for cross-border transactions

# GENERAL OVERVIEW



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30 April 2024

Thank You

