

COMCEC COORDINATION OFFICE

Ankara, Türkiye

06 May 2024

Effective Management of National Quality Infrastructure for Trade

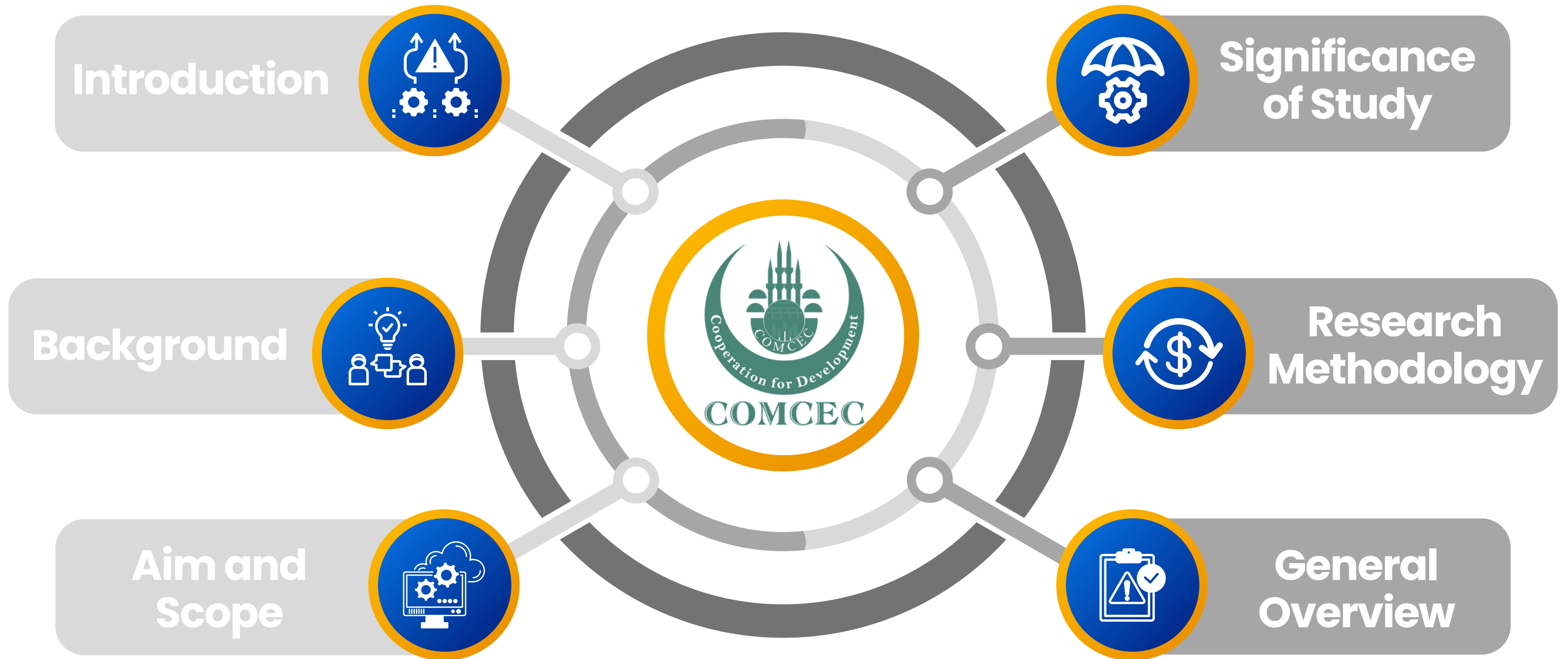


**THE 22nd MEETING OF THE COMCEC
TRADE WORKING GROUP
May 06, 2024, Virtual Meeting**

Ph.D Maria R. HAN

www.ibtteam.com

OVERVIEW OF THE PRESENTATION



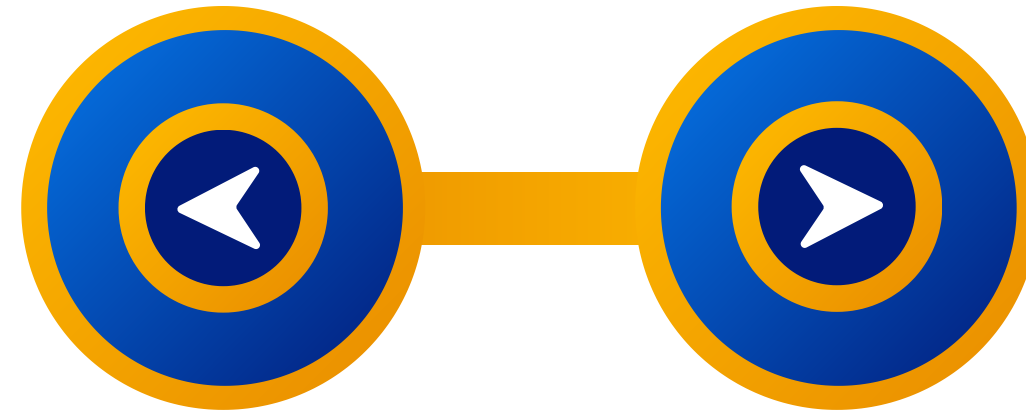
INTRODUCTION



SECTION 1

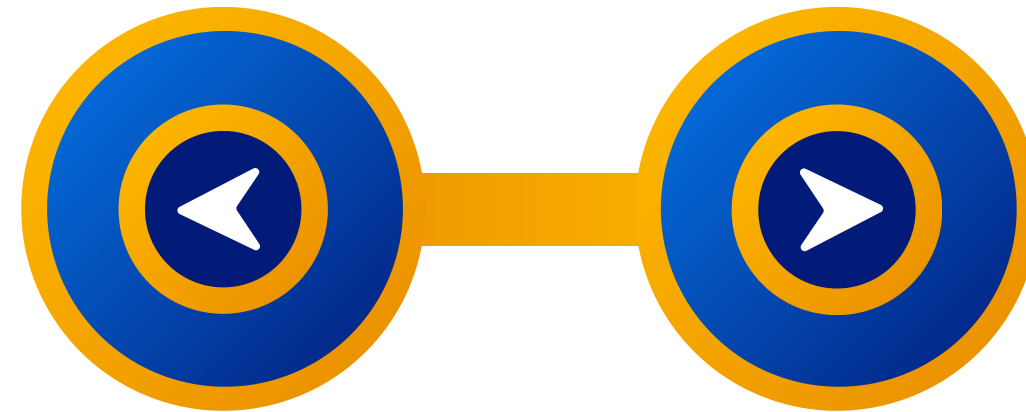
INTRODUCTION

Brief mention of National Quality Infrastructure (NQI)



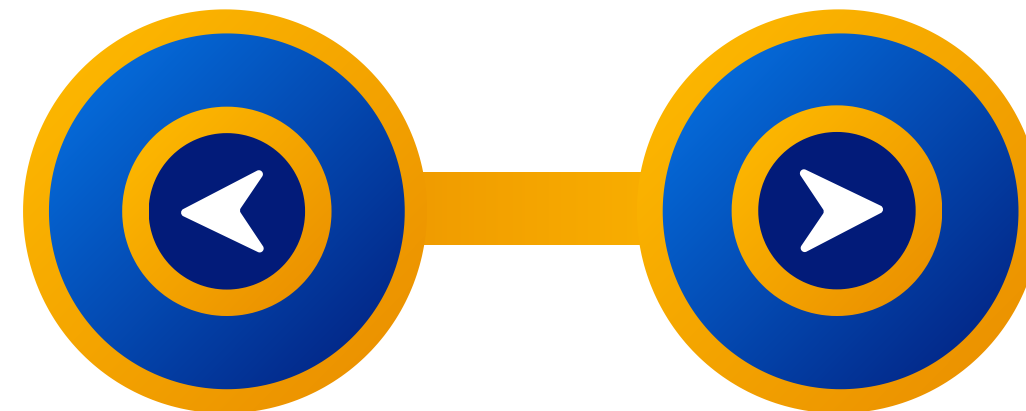
Metrology in the Global Arena

Overview of metrology and its significance



The Emergence of Metrology

Role of NQI and Metrology in International Trade



Current Trends and Future Directions in Metrology

INTRODUCTION



BACKGROUND

BACKGROUND

Standardization

Standardization in OIC involves the development, establishment, and implementation of standards that ensure the quality, safety, and efficiency of products, services, and systems.

Metrology

Metrology, the science of measurement, plays a fundamental role in OIC's NQI systems. It ensures that measurements are accurate, consistent, and internationally recognized, which is critical for trade, industry, health, and environmental protection.



Accreditation

Accreditation in OIC involves formal recognition of bodies' competence to perform specific tasks. Accreditation is vital for ensuring that conformity assessments are impartial and meet international standards.

Conformity Assessment

Conformity assessment in OIC includes activities that determine whether products, services, or systems meet specified requirements. These activities encompass testing, inspection, and certification.

Aim and Scope

Aim and Scope



Literature Review

Literature review on the developing Effective Management of National Quality Infrastructure for Trade within the Organization of Islamic Cooperation



Practices

Good/best practices of Quality Infrastructure for Trade worldwide and in the OIC Member Countries through desk reviews, surveys, and field visits



Analysis

Analysis of existing policies, institutional frameworks, strategies, regulations, and best practices



Establishment

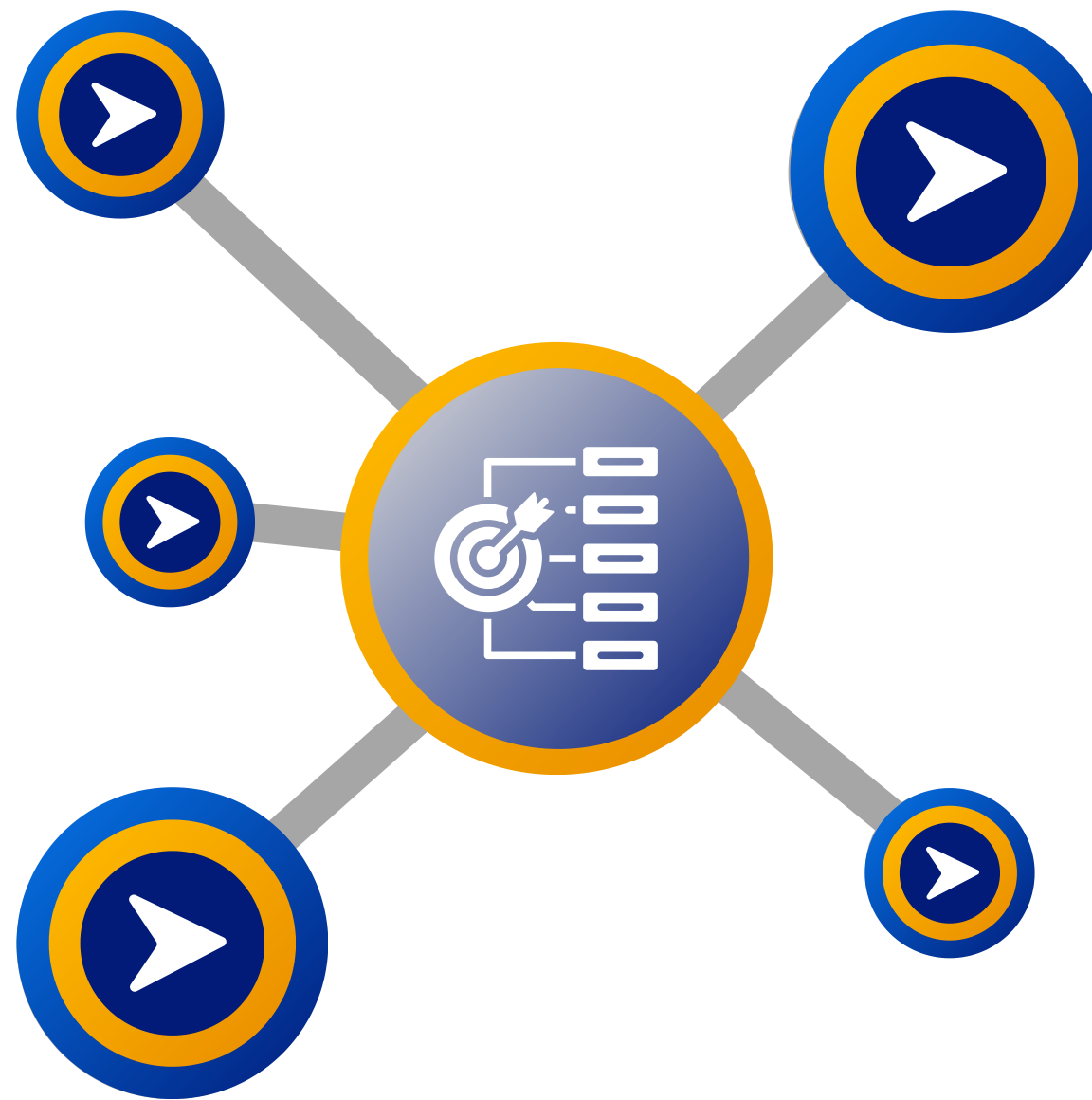
Establishment of practical and actionable recommendations

Aim and Scope

Conceptual Framework and Methodology

Overview and Analysis of object across the globe and in the OIC Member

Countries (Survey and Forecasting Analysis)



In-depth assessment of the subject practices in five selected countries

Field Visits: United Arab Emirates, Kazakhstan, Senegal

Desk Based Analysis: Italy and, USA

Policy Recommendations/Guideline for OIC Member Countries

Aim and Scope

OIC Member Countries among Top Global NQI and Metrology

Several OIC member countries are recognized for their advanced NQI and metrology systems and can be considered leaders, at least within the OIC or in their respective regions. These countries include:

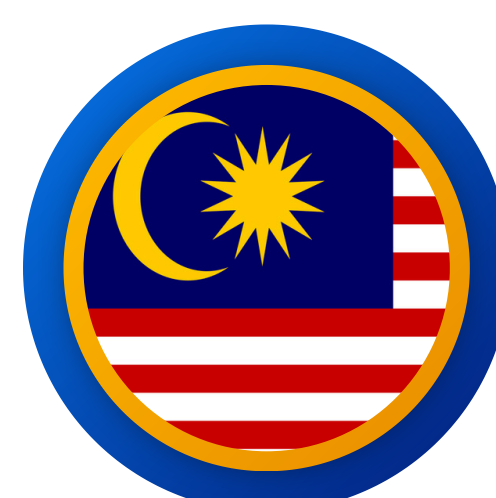
Saudi Arabia

United Arab Emirates

Turkey

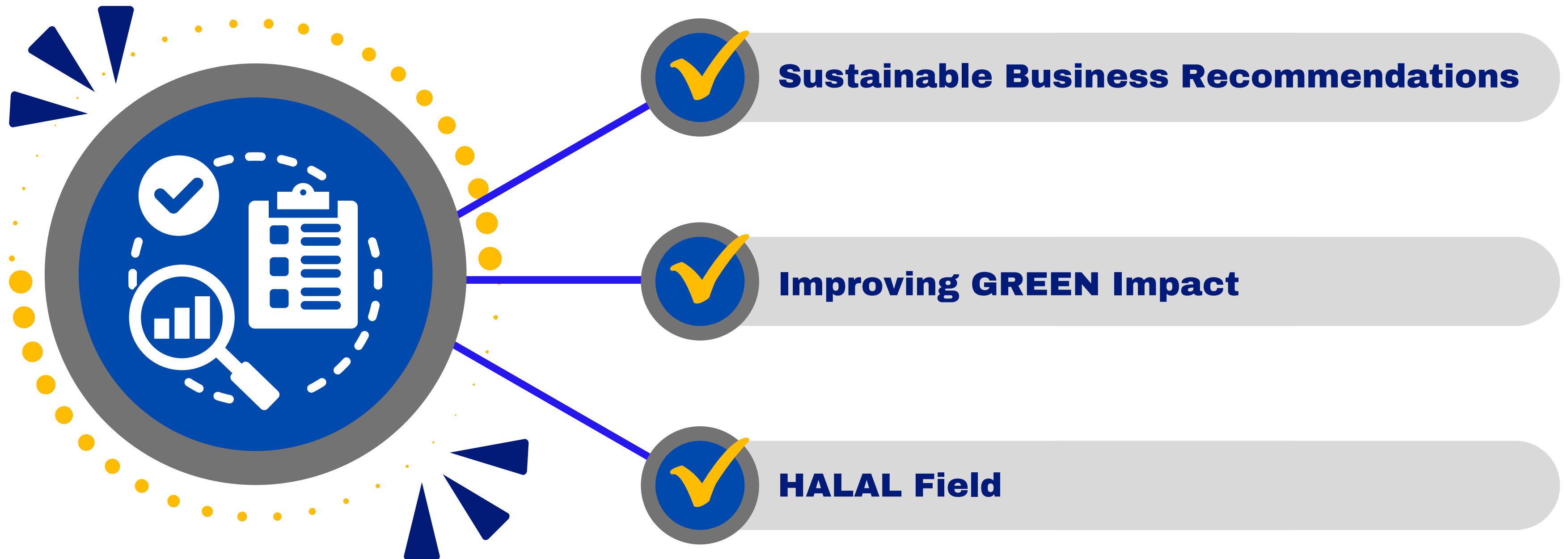
Malaysia

Indonesia



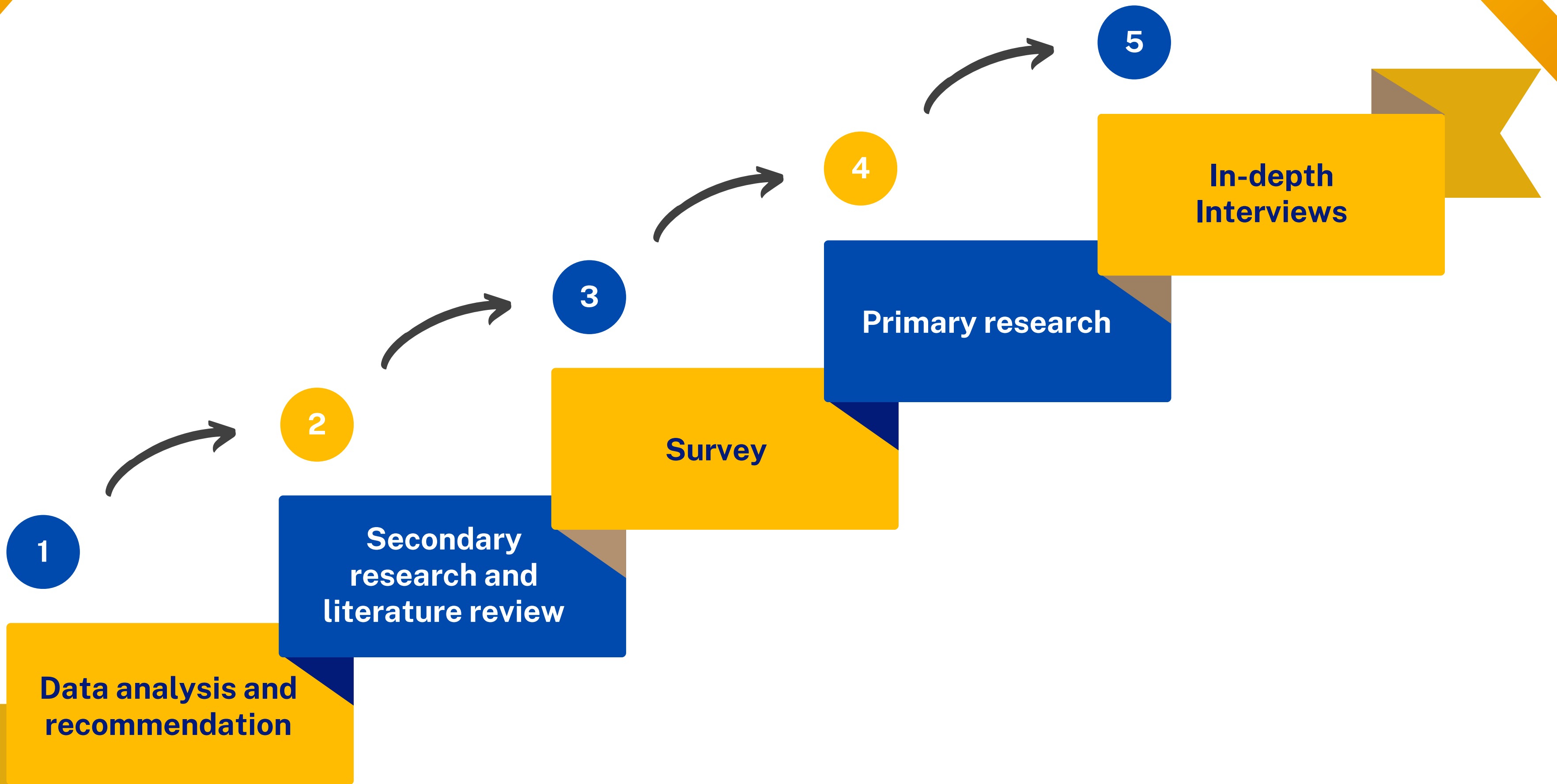
Significance of Study

Significance of Study



Research Methodology

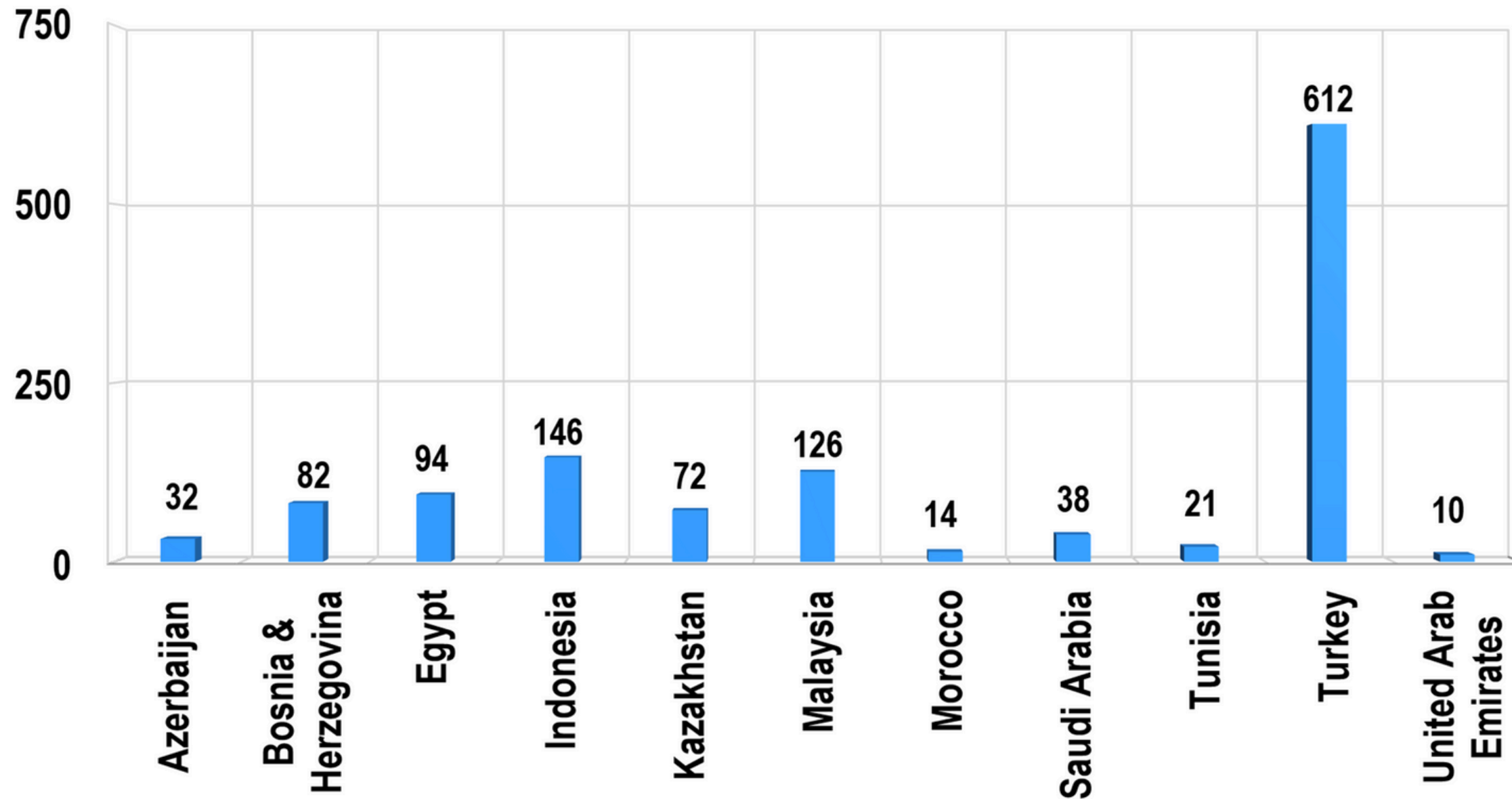
Research Methodology



Research Methodology

Current Capabilities of OIC Countries (57)

Total Number of CMCs Published on the BIPM KCDB
(SMIIC MC Members)



CIPM MRA
Signatory OIC
Countries : 21

Albania
Azerbaijan
Bangladesh
Bosnia and Herzegovina
Egypt
Indonesia
Iran (Islamic Republic of)
Iraq
Kazakhstan
Kuwait
Malaysia
Morocco
Oman
Pakistan
Qatar
Saudi Arabia
Sudan
Syrian Arab Republic
Tunisia
Türkiye
United Arab Emirates
Uzbekistan

Source: BIPM KCDB, Date: October 20, 2022

<https://www.bipm.org/kcdb/cmc/statistics/public>

Research Methodology

CASE STUDIES: COUNTRY SELECTION CRITERIA

CRITERIA

- I. United Arab Emirates
- II. Kazakhstan
- III. Senegal
- IV. USA
- V. Italy

DESCRIPTION

- OIC member countries
- Geographic groups: African, Arab, and Asian
- Legal system/regime
- Development level of NQI systems
- Technical Barriers to Trade (TBT)

APPROACH

- COMCEC List
- International Bureau of Weights and Measures (BIPM)
- European Cooperation for Accreditation (EA)
- International Organization for Standardization (ISO)
- Asia-Pacific Metrology Program (APMP)

Research Methodology

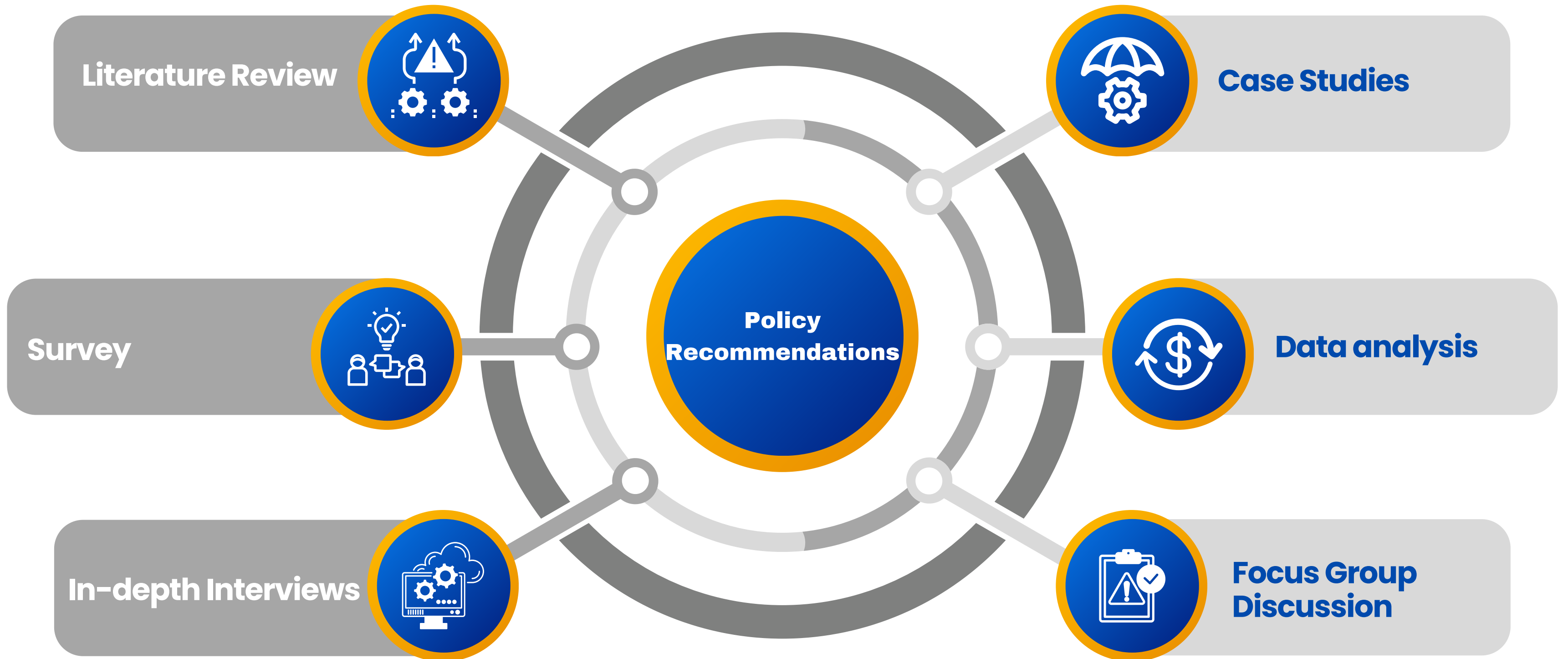
A sample table for level development analysis of NQI and Metrology.

Country/Region	OIC Member	Geographic Group	Legal System	Development Level	International Standards Adoption
United Arab Emirates	Yes	Arab	Mixed (Common Law + Sharī'ah)	Mature	High
Türkiye	Yes	Asian	Civil Law	Mature	Developing
Nigeria	Yes	African	Mixed (Common Law + Sharī'ah)	Developing	Infancy
Malaysia	Yes	Asian	Mixed (Common Law + Sharī'ah)	Moderate	Developing
USA	No	United States	Common Law	Very Mature	High

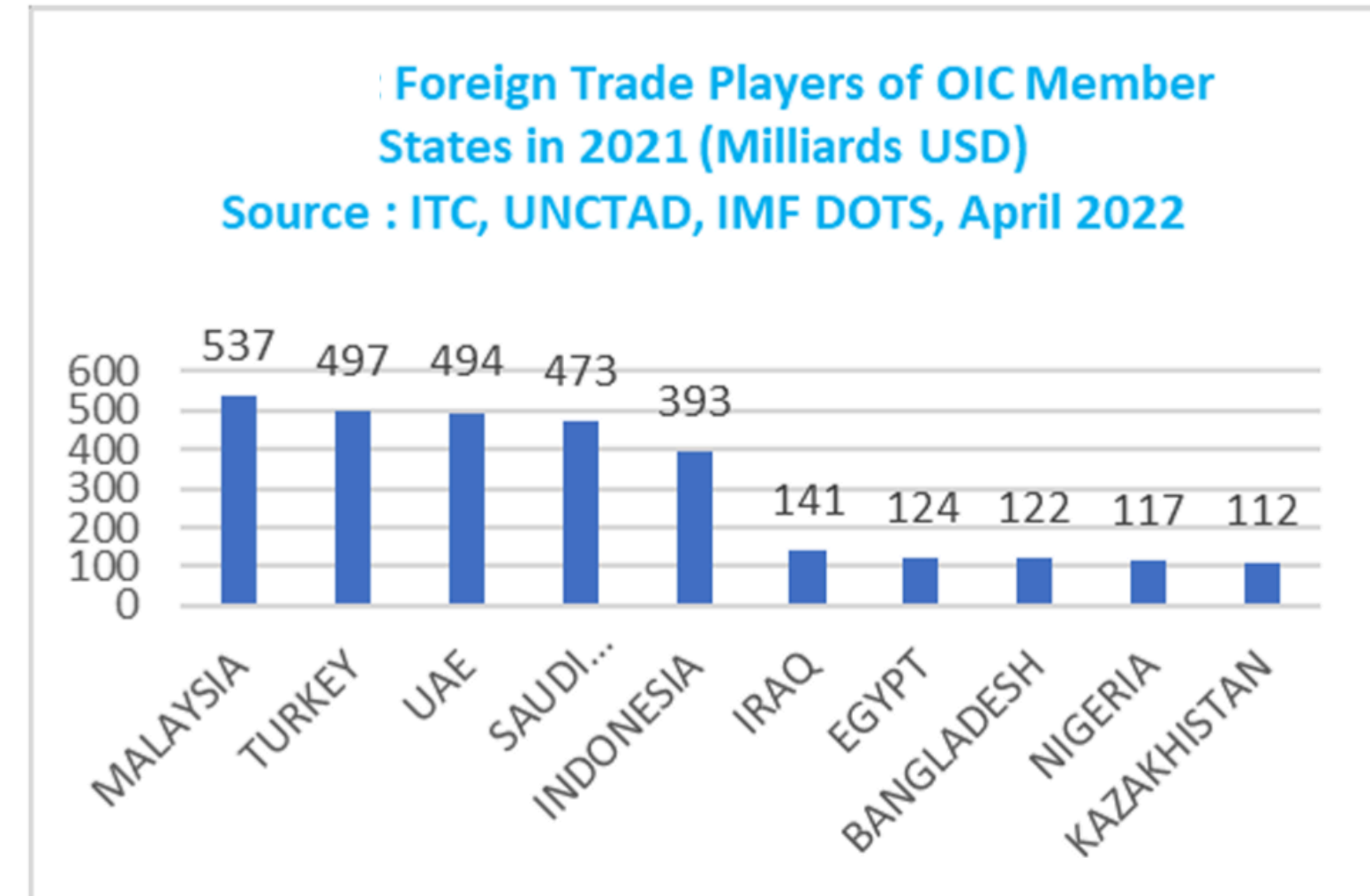
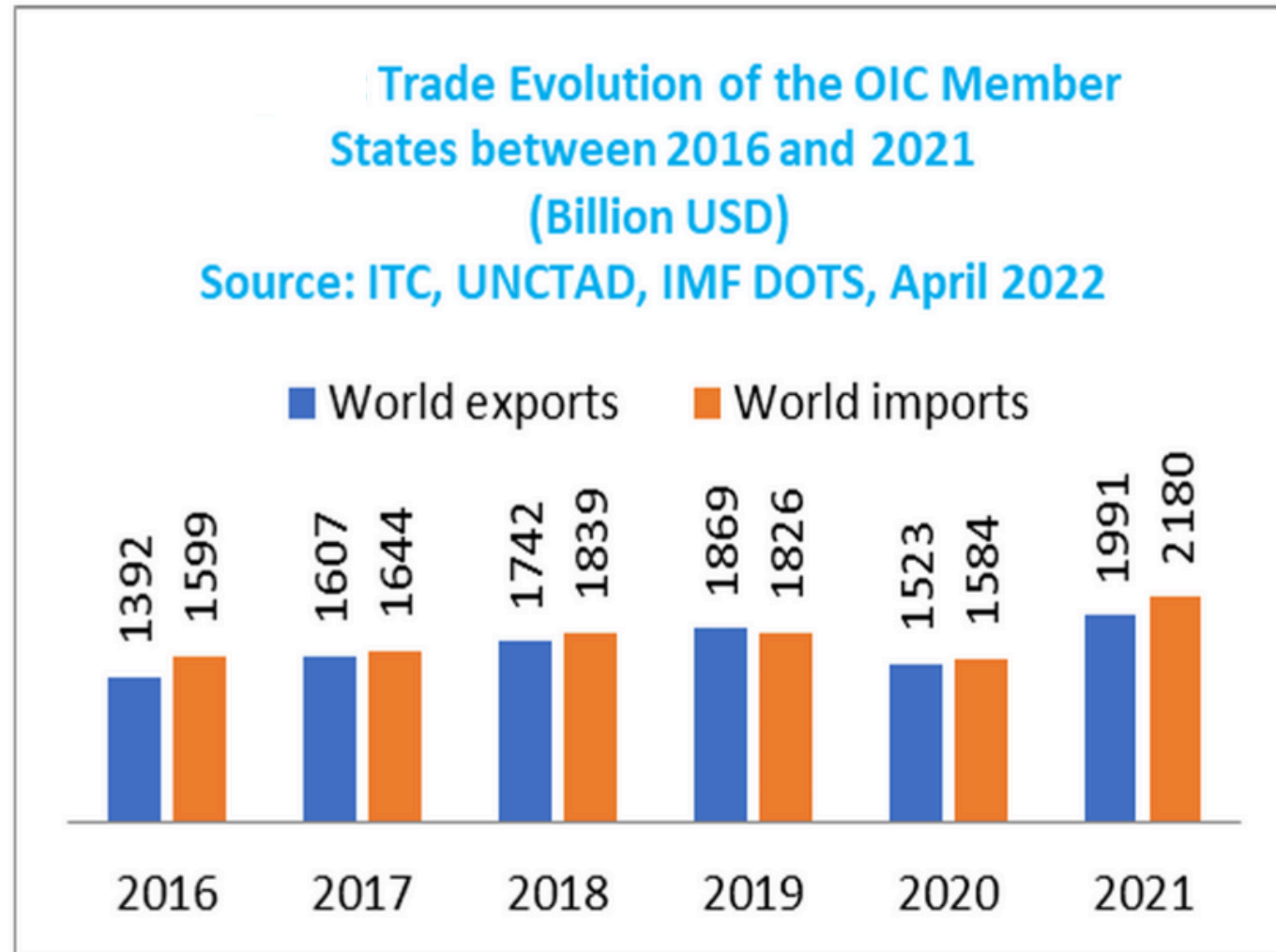
Source: Authors

General Overview

General Overview



General Overview



TRADE TRENDS OF OIC MEMBER STATES

The countries driving this growth are Malaysia, Türkiye, United Arab Emirates, Indonesia, Saudi Arabia, Egypt, Iraq, Bangladesh, Nigeria, and Qatar with a decline in trade of more than 5 billion USD for each country during this period. The main actors of the foreign trade of the OIC Member States are Malaysia, Turkey, United Arab Emirates, Indonesia, Saudi Arabia, Egypt, Iraq, Bangladesh, Nigeria, and Qatar, which accounted for about 72.17% of this trade in 2021. Exports and imports grew by 6.53% and 19.40%, respectively, in 2021 compared to 2019.

General Overview

Specific Challenges

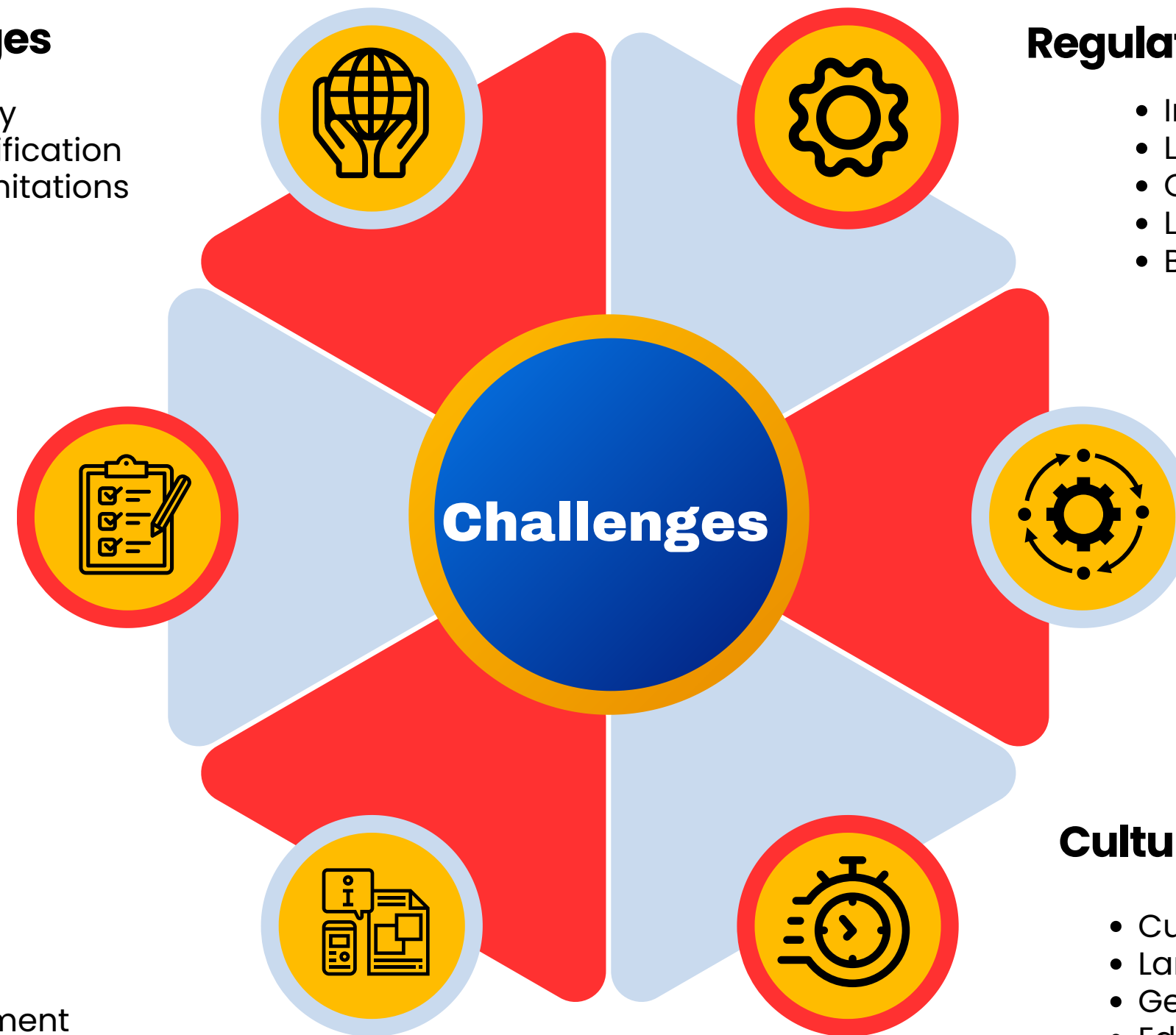
- Political Instability
- Economic Diversification
- Infrastructure Limitations

Technological Challenges

- Lack of Advanced Technology
- Inadequate Technological Infrastructure
- Insufficient Local Expertise
- Limited Research and Development (R&D)
- Dependence on Foreign Technology

Financial Challenges

- Limited Budget Allocations
- Dependency on External Funding
- Inefficient Funding Mechanisms
- High Costs of Technology and Equipment
- Economic Instability



Regulatory Challenges

- Inconsistent Regulatory Frameworks
- Lack of Coordination and Cooperation
- Outdated Regulatory Policies
- Limited Enforcement Capabilities
- Bureaucratic Red Tape

Human Resource Challenges

- Shortage of Skilled Professionals
- Limited Access to Training and Development
- Brain Drain
- Inadequate Educational Programs
- Cultural and Gender Barriers

Cultural and Social Challenges

- Cultural Resistance to Change
- Language Barriers
- Gender Roles and Participation
- Education and Awareness

General Overview

Specific Challenges

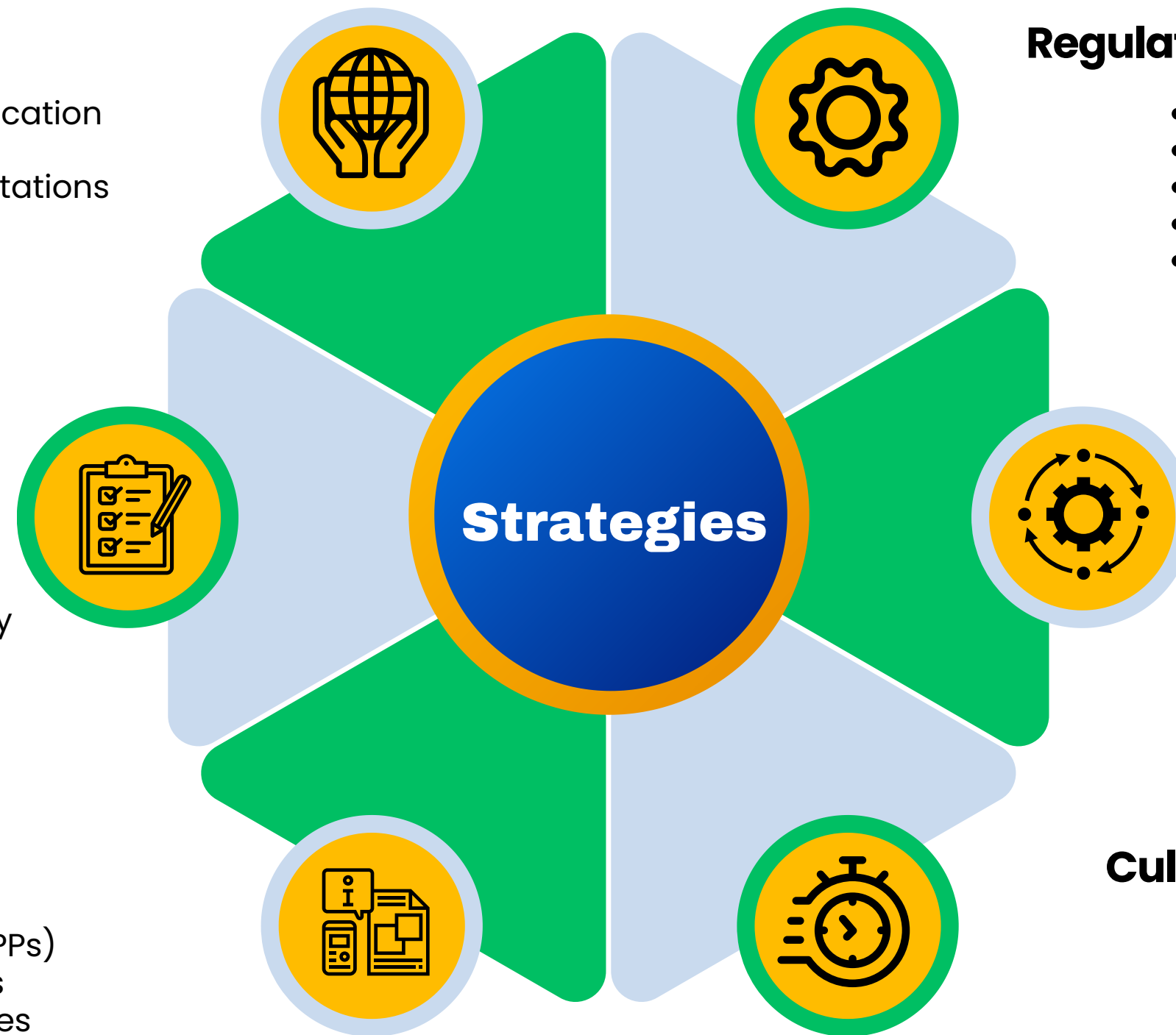
- Economic Diversification
- Political Instability
- Infrastructure Limitations

Technological Challenges

- Investment in Technological Infrastructure
- Strengthen Local Expertise
- Foster Research and Development
- Reduce Dependency on Foreign Technology
- Leverage Digital Technologies

Financial Challenges

- Increase Government Investment
- Foster Public-Private Partnerships (PPPs)
- Utilize International Grants and Loans
- Implement Cost-Efficient Technologies
- Strengthen Financial Management



Regulatory Challenges

- Harmonization of Standards
- Strengthen Regulatory Cooperation
- Modernize Regulatory Frameworks)
- Enhance Enforcement Mechanisms
- Reduce Bureaucratic Red Tape

Human Resource Challenges

- Enhance Education and Training
- Foster Partnerships for Knowledge Exchange
- Address Brain Drain
- Improve Educational Infrastructure
- Promote Inclusivity in the Workforce

Cultural and Social Challenges

- Culturally Sensitive Change Management
- Promoting Inclusivity and Diversity
- Education and Public Awareness Campaigns
- Language Localization and Standardization
- Leveraging Technology to Bridge Cultural Gaps

Thanks for your participation

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