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## LKYSPP-ADB Internship Programme

# ASEAN at 50: What does the Fourth Industrial Revolution mean for ASEAN Economic Integration?

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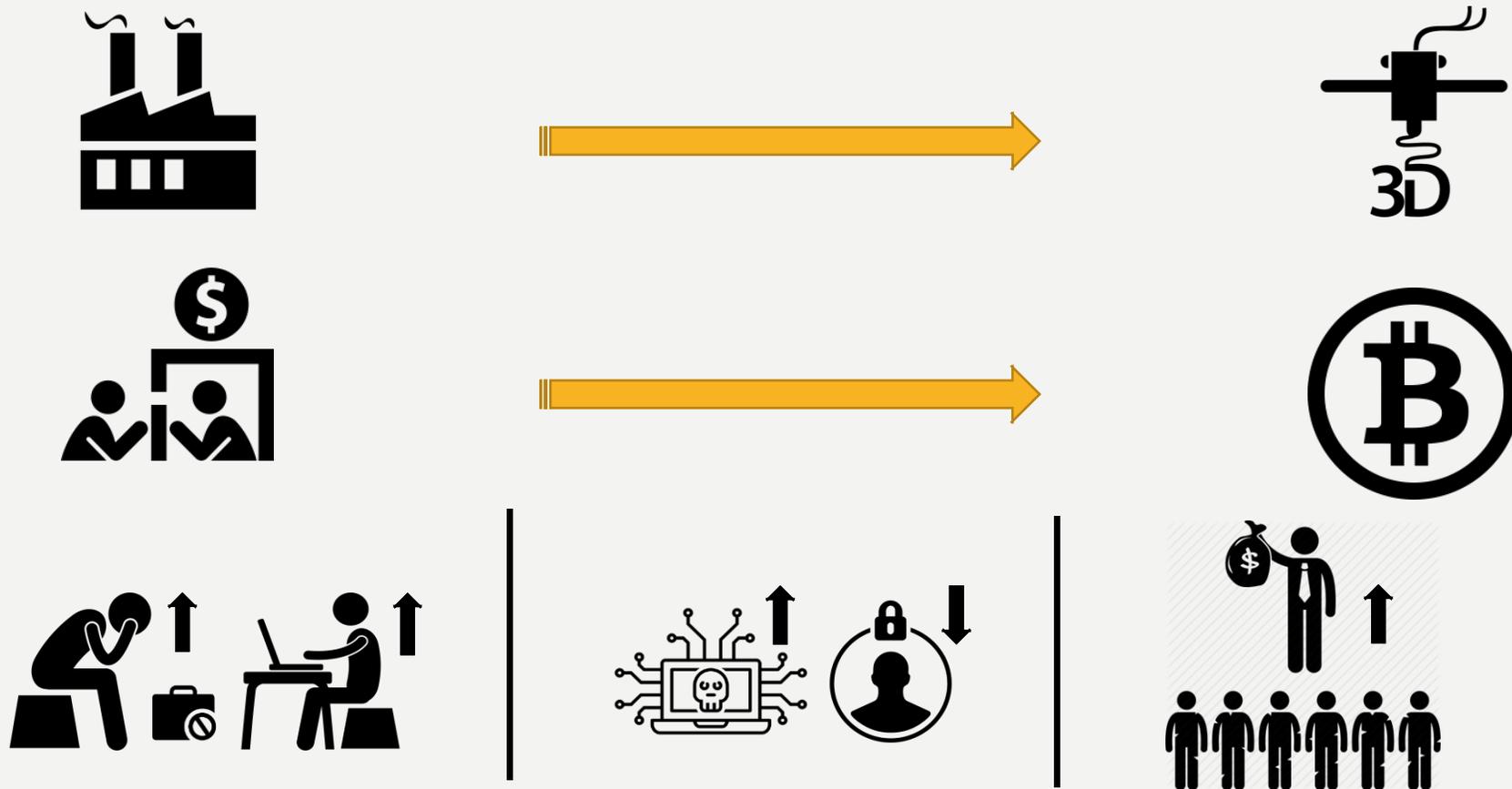
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# 1. 4IR and its potential impacts on ASEAN economies

The **Fourth Industrial Revolution (4IR)** is “a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres” – Professor Klaus Schwab

The speed, breadth, and depth of disruptive changes caused by the 4IR are unprecedented.



# 1. 4IR and its potential impacts on ASEAN economies (Cont'd)

\$625  
billion

could be injected annually into the ASEAN economies in 2030 (ASEAN, 2016).

AEC

AEC: Single market and production base with free flow of goods and services, investment, capital, and skilled labor.

4IR: Digital single market and service base with free flow of data.

# Methodology

Research question: What does the 4IR mean for ASEAN economic integration?

Sub-research questions:

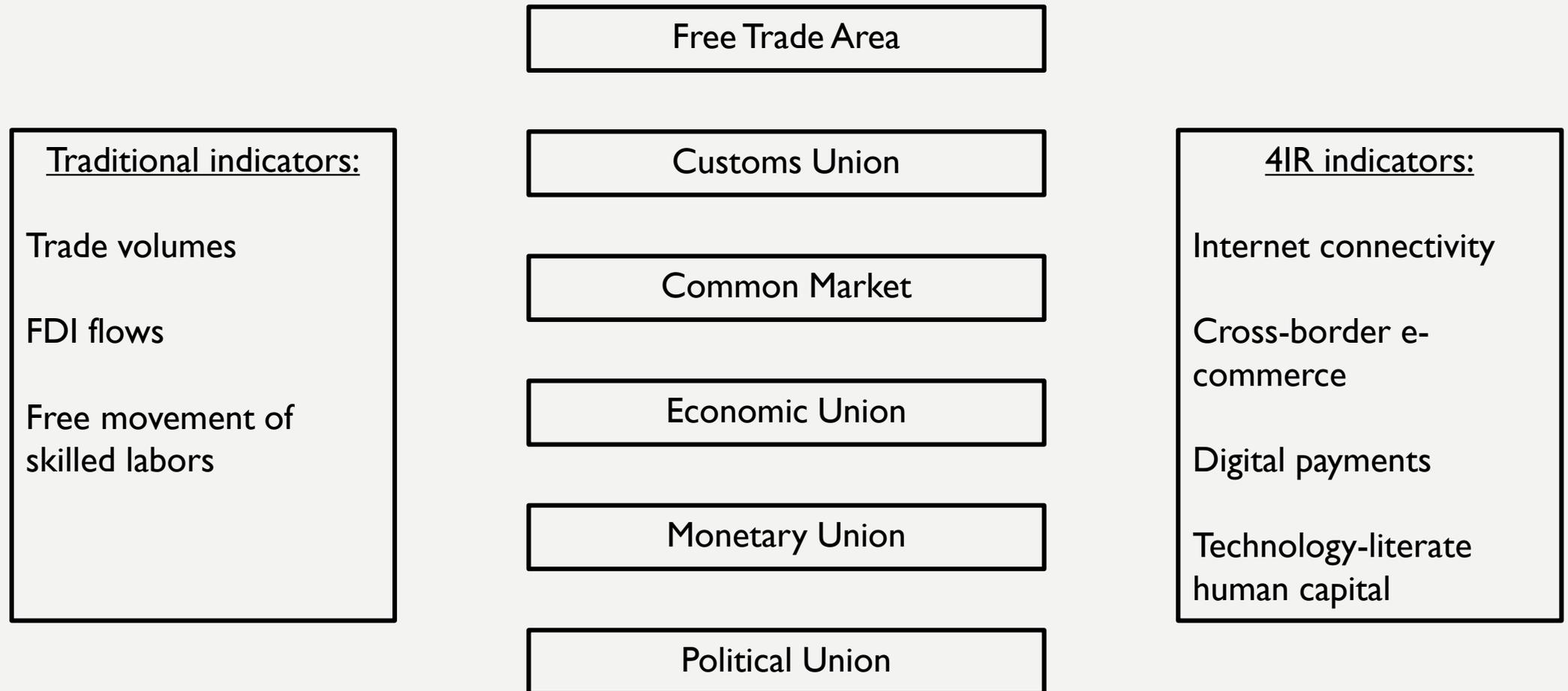
- What impact areas should ASEAN focus on to promote regional economic integration?
- What institutional model should ASEAN consider?

Conceptual framework:

- Regional economic integration indicators:
  - Traditional: Trade volumes, FDI flows, and free movement of skilled labors.
  - 4IR: Internet connectivity, cross-border e-commerce, digital payment, and technology-literate human capital.
- Institutional structure: Aspirations and goals, governance structure, and funding models

# 4IR impacts on regional economic integration

Balassa's six stages of regional integration:



# ASEAN's readiness for 4IR

## Regional efforts

Main strategic plan: Master Plan on ASEAN Connectivity 2025 (MPAC) 2025 to promote sustainable infrastructure, digital innovation, seamless logistics, regulatory excellence, and people mobility

Main facilitating body: ASEAN Connectivity Coordinating Committee (ACCC)

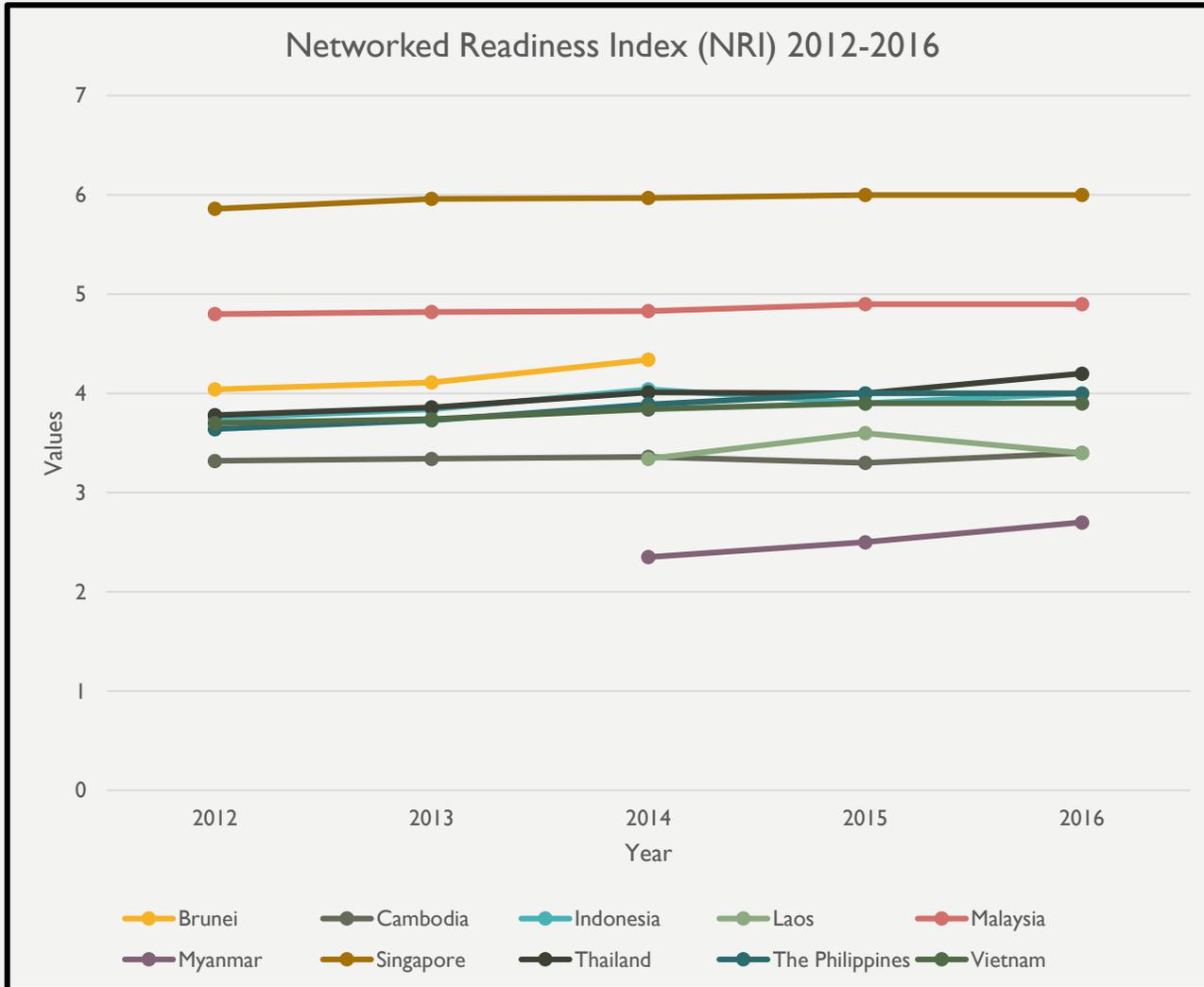
Structure:

- Members: Permanent representatives to ASEAN or appointed representatives.
- Reporting mechanisms: Reports on a regular basis to ASEAN Coordinating Council.
- Decision-making: Consensus.
- Meeting: Twice a year.
- Sub-committee: Based on specific areas of work.
- Funding model: ASEAN Secretariat budget.

# ASEAN's readiness for 4IR (Cont'd)

<p><u>Internet connectivity:</u></p> <p>Networked Readiness Index: Increasing albeit slow progress</p> <p>Usage sub-index: Growing internet usage among four most populous members</p>	<p><u>Cross-border e-commerce:</u></p> <p>Gov't capacities: Different customs clearance time</p> <p>Regulations: Different VAT and non-VAT systems</p> <p>Businesses: E-commerce businesses are on the rise</p>
<p><u>Digital payments:</u></p> <p>Gov't strategies: Mixed strategic plans on blockchain</p> <p>Usage: Low public awareness on digital payments and high reluctance to share financial information online</p>	<p><u>Technology-literate human capital:</u></p> <p>Gov't strategies: Only Singapore, Malaysia, and the Philippines have digital strategies</p> <p>Education systems: Traditional school curriculums and insufficient ICT equipment for students</p>

# ASEAN's readiness for 4IR (Cont'd)



Country	Growth rate
Brunei	3.07%
Cambodia	0.9%
Indonesia	3.27%
Lao PDR	-2.85%
Malaysia	2.21%
Myanmar	1.77%
Singapore	1.45%
Thailand	4.6%
The Philippines	4.4%
Vietnam	1.22%

# EU's readiness for 4IR

## 4IR indicators – EU

<p><u>Internet connectivity:</u></p> <p>Strategic plan: European Gigabit Society</p> <p>Governance bodies: European Platform of National Initiatives and European Electronic Communication Code</p>	<p><u>Cross-border e-commerce:</u></p> <p>Strategic plan: EU-wide e-commerce regulations package</p> <p>Governance bodies: Body of European Regulators of Electronic Communications</p>
<p><u>Digital payments:</u></p> <p>Strategic plan: Interchange Fees Regulation</p> <p>Governance bodies: European Retail Payment Board</p>	<p><u>Technology-literate human capitals:</u></p> <p>Awareness raising: DigComp 2.0</p> <p>Re-skilling: Youth Guarantee and Upskilling Pathways</p>

# Institutional models for regional integration during 4IR

EU - European Platform of National Initiatives (EPNI)

<p><u>Aspirations and goals:</u></p> <p>Accomplish Digital Single Market via policy guidance and facilitation of project financing</p>	<p><u>Governance structure:</u></p> <p>Biannual high-level roundtables and annual European Stakeholder forum</p>
<p><u>Decision-making procedures for the fund:</u></p> <p>Horizon 2020 Advisory Groups conducted consultations and inform the Commissioner who drafts the fund</p>	<p><u>Sources of funding:</u></p> <p>EU budget allocated for research and innovation programs under Horizon 2020, and member states (by a factor of 10)</p>
<p><u>Management, implementation, and evaluation:</u></p> <p>Shared management and implementation, and internal as well as independent audits</p>	<p><u>Areas of spending:</u></p> <p>Administrative: Staff and logistics for all EU institutions</p> <p>Operational: Policy research and projects</p>

# Institutional models for regional integration during 4IR (Cont'd)

OECD-WEF - Sustainable Development Investment Partnership (SDIP)

<p><u>Aspirations and goals:</u></p> <p>\$100 billion annually: Use Blended Finance to attract private investments for infrastructure projects</p>	<p><u>Governance structure:</u></p> <p>Monthly Project Investment Review Group (PRG) reviews and policy advisory based on successful investment cases</p>
<p><u>Decision-making procedures for the fund:</u></p> <p>Projects submission, PRG reviews, projects presentation, and bilateral negotiations between investors and investees</p>	<p><u>Sources of funding:</u></p> <p>Public, private, and philanthropic investments based on projects</p>
<p><u>Management and implementation:</u></p> <p>OECD and WEF manage administrative spending, and members implement blended finance via supporting mechanisms and direct funding for different market segments</p>	<p><u>Areas of spending:</u></p> <p>Clean energy, telecommunication, water and sanitation, agriculture, climate adaptation, transportation, and health</p>

# Recommendations

## Possible options

Multi-stakeholders platform for analysis and advisory purposes:

No revision and use existing funding structure

Platform linked with specific action programs:

Would need new bodies for specific action programs and possibly new funding model

Platform linked with specific action programs implemented through existing ASEAN institutions:

Would require general reforms of ASEAN and new funding models

# Recommendations (Cont'd)

Institutional model

<p><u>Aspirations and goals:</u></p> <p>Transform the ACCC to be more responsive with diverse funding sources</p>	<p><u>Governance structure:</u></p> <p>Platform of current ACCC members and interested philanthropic and private actors. Biannual meetings and policy advisory</p>
<p><u>Decision-making procedures for funding:</u></p> <p>ASEAN Secretariat budget and members' pool resources for project investments</p>	<p><u>Sources of funding:</u></p> <p>ASEAN Secretariat budget allocated to ACCC, AIF, national gov'ts' contribution, and investments from philanthropies and firms</p>
<p><u>Management, implementation, evaluation:</u></p> <p>ACCC manages administrative spending, members implement blended finance, and steering committee evaluates national policies and project reports and publishes annual reports for businesses and public viewings</p>	<p><u>Areas of spending:</u></p> <p>Administrative and operational spending based on projects in areas of internet connectivity, cross-border e-commerce, digital payments, and technology-literate human capitals</p>

# Recommendations (Cont'd)

Focus areas

<p><u>Internet connectivity:</u></p> <p>Infrastructure improvement and management</p> <p>Spectrum allocations</p> <p>Include private actors in ASEAN level meetings to build trust and attract investments</p>	<p><u>Technology-literate human capitals:</u></p> <p>Reform traditional curriculums to include ICT and cognitive-oriented courses</p> <p>Increase re-skilling efforts for both youths and elderlies</p>
<p><u>Digital payments:</u></p> <p>Consider blockchain as alternative to inter-bank transfer</p> <p>Establish specialized cybersecurity task forces to couple with blockchain usage</p>	<p><u>Cross-border e-commerce:</u></p> <p>Base VAT and non-VAT rates for intra-ASEAN cross-border trades</p> <p>Equal enforcement of tax collection for both domestic and international businesses</p>

Thank you  
Feedbacks and comments are appreciated

