

# e-Governance Conference 2019

21 May 2019 | Tallinn, Estonia



*Empowered lives.  
Resilient nations.*

## DIGITAL TRANSFORMATION AS SUSTAINABLE DEVELOPMENT PATHWAY



# Overview

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- **The global imperative**
  - The Sustainable Development Goals (SDGs)
  - Key trends and issues
- **Digital Transformation**
  - Key concepts and approaches
  - The Estonia-UNDP cooperation and framework
  - The digital transformation diagnostic tool
- **Key priorities and next steps**
  - Piloting of the tool, capacity building, multilevel/multistakeholder efforts
- **Dialogue [Q/A/Comments/Insights]**

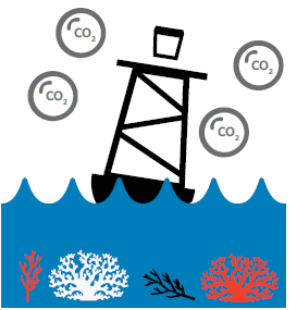
# The SDGs: Five years on



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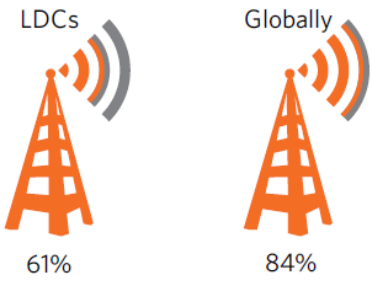
Open ocean sites show **current levels of acidity have increased by 26 per cent** since the start of the Industrial Revolution



**Economic losses attributed to disasters were over \$300 billion in 2017**






Proportion of population covered by a 3G mobile broadband network was **lower in the LDCs** in 2016



# All 232 SDG Indicators: What data is available?

This visualization shows for which of the 230 *Sustainable Development Goals (SDGs) Indicators* data is available at **SDG-Tracker.org**.

-  = Indicators for which recent global official metrics are available, or for which alternative good-quality cross-country source are available (e.g. estimates from independent research institutes).
-  = Indicators that do have official metrics, but for which available data is very incomplete or outdated. Yellow boxes also mark Indicators for which there are no official metrics, but for which closely related estimates are available that allow informative but imperfect monitoring.
-  = Indicators for which – to the best of our knowledge – global monitoring is not currently possible.

1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS
Extreme poverty	Undernourishment	Maternal mortality	Reading proficiency	Frameworks for gender	Safe drinking water	Electricity access	GDP per capita growth	Rural road access	Income growth inequality	Urban slum population	Sust consumption plans	Disaster deaths/injury	Marine pollution	Forest area	Homicide rate	Gov't revenue (% GDP)
National poverty lines	Food insecurity	Health staff at births	Children on-track	Violence by partner	Sanitation & handwashing	Access to clean fuels	GDP growth per employed	Passenger-freight volumes	Pop <50% median income	Public transport access	Material footprint	Disaster risk reduction	Marine ecosystems	Protected biodiversity sites	Conflict-related deaths	Domestic taxes
National poverty	Child stunting	Child mortality	Pre-primary participation	Violence by non-partner	Treated wastewater	Renewable energy	Informal employment	Manufacturing value	Discriminatory practices	Sustainable urbanization	Domestic consumption	Local disaster risk	Ocean acidification	Forest management	Violence prevalence	ODA (\$\$) from OECD
Social protection	Child wasting/obesity	Neonatal mortality	Access further education	Forced marriage	Ambient water quality	Energy intensity	Material footprint	Manufacturing employment	Labour share of GDP	Urban planning Mgmt	Global food loss	Integration climate policies	Fish stock levels	Degraded land	Public safety	Foreign Direct Investment
Basic services	Prod per labour unit	New HIV infections	ICT skills	Genital mutilation	Water use efficiency	Clean energy investment	Domestic consumption	Small-scale industry value	Financial soundness	Cultural heritage	Hazardous waste agreement	Climate change education	Marine protected areas	Mountain biodiversity	Violence against children	Personal remittances
Secure land rights	Small-scale farmer (\$\$)	Tuberculosis incidence	Disparities in edu access	Time on domestic work	Freshwater stress	Energy service investment	Hourly earnings	Small-scale industry credit	Equal int'l participation	Disaster deaths/injury	Hazardous waste	Climate capacity-building	Illegal/unregulated fishing	Red List Index	Human trafficking	Debt service
Disaster deaths	Sustainable production	Malaria incidence	Literacy & numeracy	Women in parliament	Integrated water Mgmt		Unemployment rate	CO <sub>2</sub> emissions intensity	Migration recruitment cost	Disaster losses (\$)	Recycling rates	Green Climate Fund (\$\$)	Sustainable fishery income	Genetic resource sharing	Sexual violence	Investment for LDCs
Disaster costs (\$)	Genetic resources	Hepatitis B incidence	Edu for sust development	Women in management	Transboundary cooperation		Youth education/training	R&D spending	Planned migration policy	Solid waste management	Corporate sust reports	Support for Mgmt plans	Research for marine tech	Wildlife poaching	Victim reports of crime	Science/tech cooperation
Disaster risk reduction	Local breed extinction	Neglected tropical disease	Inclusive & safe schools	Own health decisions	Water ecosystems		Child labour	R&D researchers	Differential tariffs	Urban air pollution	National sust plans		Small-scale fisher support	Invasive alien species	Unsentenced detainees	Broadband subscriptions
Local disaster risk	Agri orientation index	Non-communicable (NCD)	ODA (\$\$) for scholarships	Sexual health access	ODA (\$\$) for water		Occupational injuries	ODA (\$\$) for infrastructure	Development assistance	Open city spaces	Sustainable lifestyles		Implementing int'l sea law	Biodiversity planning	Illicit financial flows	Sustainable technologies
Poverty reduction prog	ODA (\$\$) to agri	Suicide mortality	Qualified teachers	Female land ownership	Local sanitation Mgmt		Compliance labour rights	High-tech industry value	Remittance costs	Safe city spaces	Support sust production			ODA (\$\$) for biodiversity	Seized or surrendered arms	Internet use
Gov't spending	Agri export subsidies	Substance use treatment		Female land rights			Tourism GDP contribution	Mobile network coverage		Urban planning	Sustainable tourism			ODA (\$\$) for forests	Bribery in public	SDG support
Inflows to poverty red	Food price anomaly	Alcohol intake		Mobile phone ownership			Sustainable tourism jobs			Integrated risk Mgmt	Fossil fuel subsidies			Wildlife poaching	Bribery in business	Tariff rates
		Road traffic injuries		Tracking gender equality			Financial services access			Local risk Mgmt					Gov't expenditure in budget	Developing nation exports
		Family planning					Financial account access			Sustainable buildings					Public service satisfaction	Developing nation tariffs
		Adolescent births					Aid for Trade								Institutional representation	Macroeconomic dashboard
		Healthcare coverage					Youth employment strategy								Inclusive decision-making	Policy for sust development
		Health expenditure													Inclusive int'l participation	National results framework
		Air pollution deaths													Birth registration	Multistakeholder progress
		Water, sanitation deaths													Journalist & media killings	Society partnerships
		Unintentional poisoning													Public information access	Statistical capacity
		Tobacco use													Human rights institutions	Statistical legislation
		Vaccine coverage													Public discrimination	National statistical plans
		ODA (\$\$) to health														Statistical capacity resource
		Medicine availability														Census completeness
		Health workers														
		Emergency preparedness														

You find all data on [SDG-Tracker.org](https://sdg-tracker.org), a sister project of [OurWorldinData.org](https://ourworldindata.org). In case you are aware of relevant data we have not included yet please let us know via [SDG-Tracker.org](https://sdg-tracker.org).

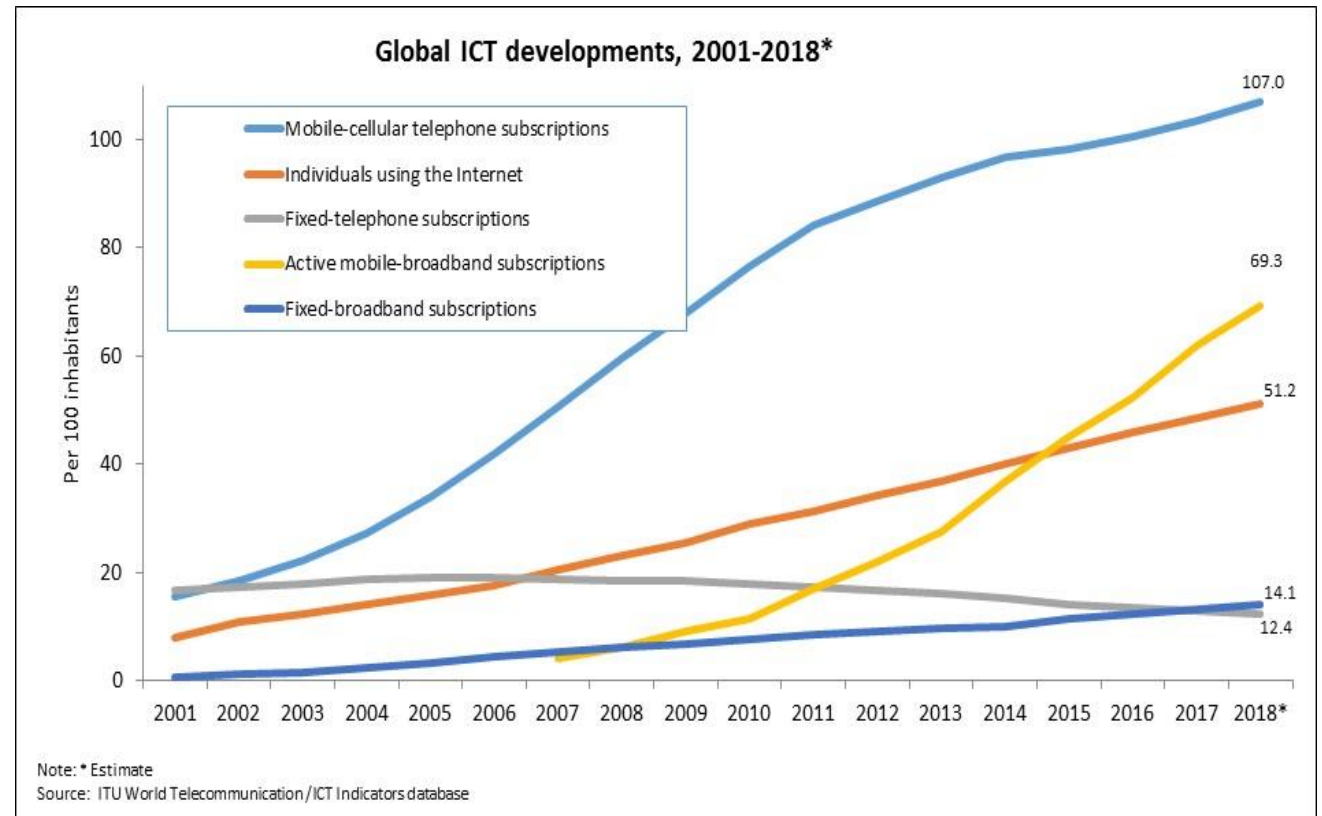
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# Key trends and issues



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- Quickening Fourth Industrial Revolution (implications)
- Quickly evolving societies and economies
- Increasingly digital and urban (~70% by 2050)
- Rising risks: inequality, violence and conflict, environmental pressures, etc.
- Risks to the promise to “leave no one behind”

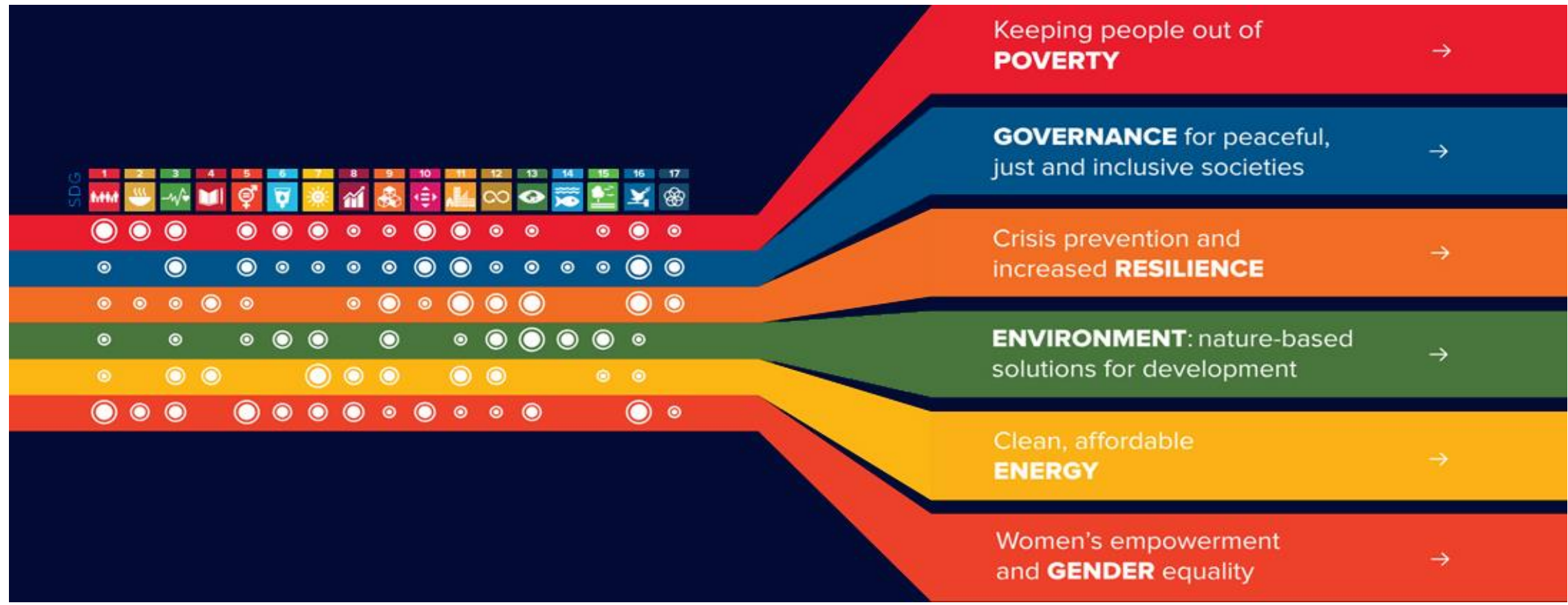




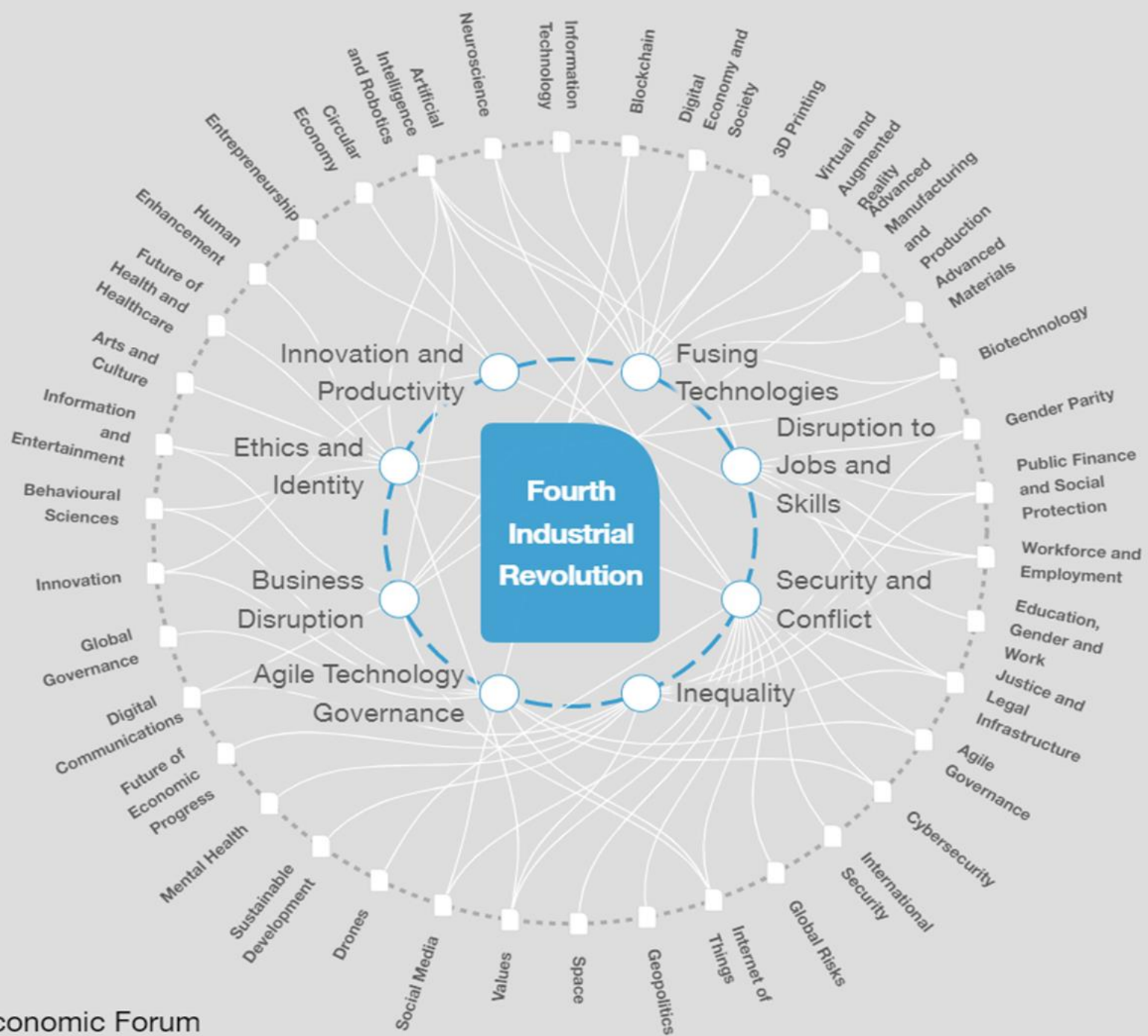
# Accelerating progress towards 2030



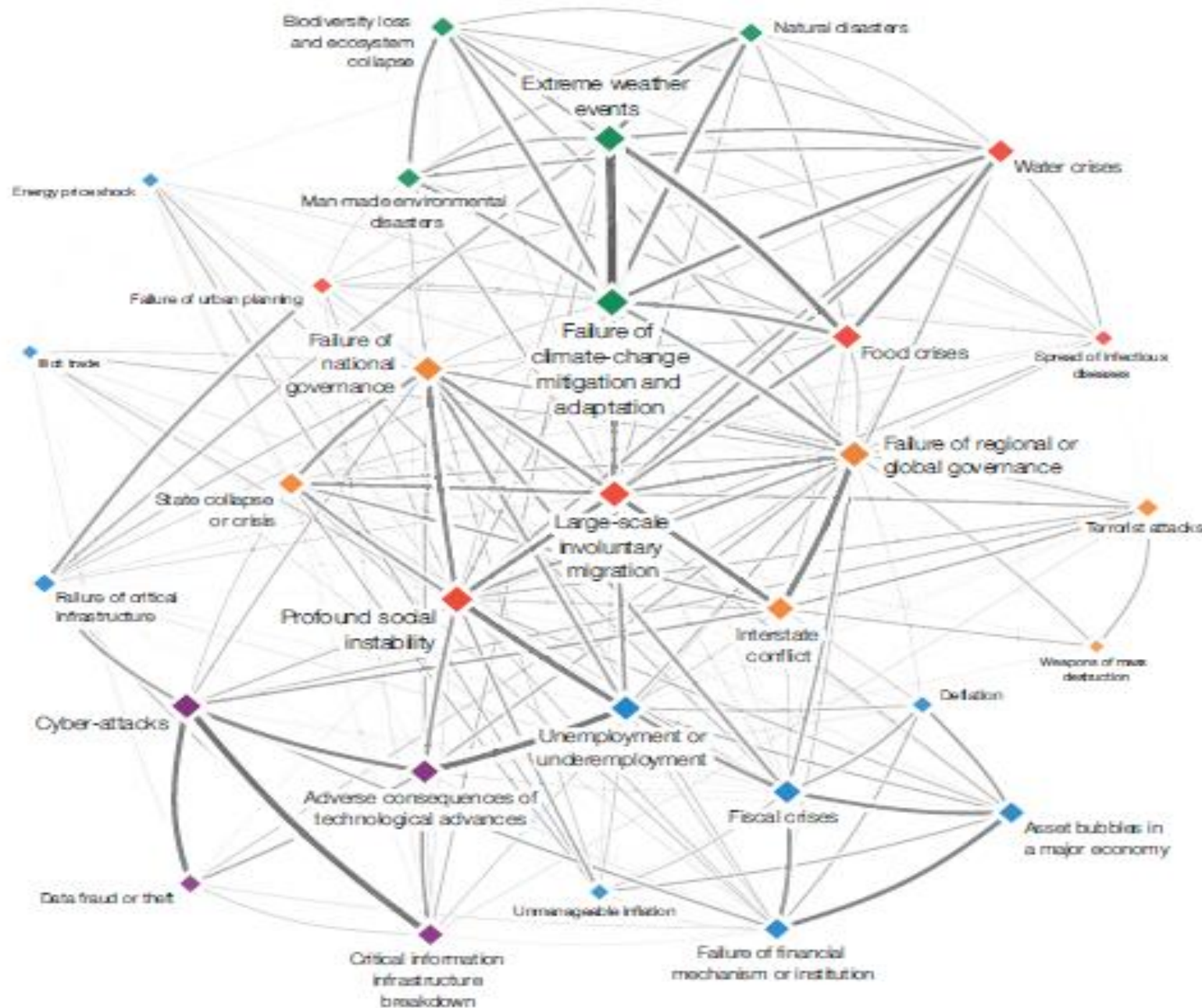
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# Digital Transformation



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*No room for  
“random  
acts of  
digital”*



# Digital transformation as sustainable development pathway

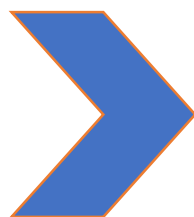


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*Digital strategies  
to achieve the SDGs*

*Transforming digital  
landscapes to transform  
societies and economies  
for sustainable future*



# Estonia-UNDP cooperation & framework



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- Leveraging shared goals and strengths
- Priorities: development of a diagnostic tool; capacity building (internal UNDP and programme countries, knowledge exchange, network-building, etc.; e-Identity and Smart Cities

On the ground in about 170 countries and territories, UNDP works to eradicate poverty while protecting the planet. We help countries develop strong policies, skills, partnerships and institutions so they can sustain their progress.

we have built a digital society and so can you

Named 'the most advanced digital society in the world' by Wired, ingenious Estonians are pathfinders, who have built an efficient, secure and transparent ecosystem that saves time and money. e-Estonia invites you to follow the digital journey.

# The diagnostic tool



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## Components

- Rapid Integrated Assessment (RIA): applied in over 65 countries (national and subnational)
- Digital Landscape Survey
- Accelerator and Bottleneck Assessment (ABA)

\* *Towards a digital transformation roadmap*



## Smart Governance

Benefit from our knowledge and experience to make informed choices for transformation of digital governance in your country or city.



[https://undg.org/sdg\\_toolkit](https://undg.org/sdg_toolkit) <https://www.undp.org/> <https://ega.ee/>

# Rapid Integrated Assessment

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- Assess the level of alignment of digital/ICT targets within a country's national development framework with the SDG targets, and identify the gaps.
- Identify:
  - Linkages across targets as made explicit in national plans
  - Relevant indicators as captured in national plans
  - Landscape of entities responsible for specific targets
- Primary audience: the Government, including line ministry/department in charge of development planning.



# Methodology: Main steps



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1. Gather national/sub-national development plans and relevant sector strategies, including digital/ICT strategies
2. Desk review of planning documents to identify:
  - and exclude SDG targets not relevant to the assessment based on country context
  - digital/ICT targets within development plans and sector strategies that align with SDG targets
  - relevant gaps in alignment i.e. the SDG targets that are not addressed by the digital/ICT targets
  - intersectoral linkages and institutions responsible for digital/ICT target implementation
3. Prepare observations document based on assessment

SDGs Goals/Targets	Thematic Area/Sector, as Identified in Key Government Planning Documents	National Development Plan Identify closest Goal/Target presented in Document addressing the issues in the corresponding SDG Goal/Target	Identify National Indicators for the Specific Targets	Institution Responsible for Target implementation (line ministries)	Any relevant comment related to this priority target area in the National Development Plan?
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all					
8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Information and Communication Technology & Media	Contribution to GDP and number of job created <sup>263</sup>	✓ No. of Bhutanese employed (IT/ ITES) by gender	Ministry of Information and Communications	
Goal 13. Take urgent action to combat climate change and its impacts					
13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	Hydromet	Improved availability & access to reliable, high quality hydro-meteorological data <sup>166</sup>  Delivery of hydrological and related environmental information & services to the public, government and other users enhanced <sup>158</sup>	✓ Central Data base system with GIS (Nos)  ✓ Access to online hydrological information (%)	Ministry of Economic Affairs	

# Diagnostic Tool: SDG Profile

#	Policy Area/ Sector	SDG-1: Poverty					SDG-2: Hunger					SDG-3: Health					SDG-4: Education							SDG-5: Gender					SDG-6: Water and Sanitation										
		1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.1	4.2	4.3	4.4	4.5	4.6	4.7	5.1	5.2	5.3	5.4	5.5	5.6	6.1	6.2	6.3	6.4	6.5	6.6
1.	Education		X <sup>1</sup>				X <sup>2</sup>	X <sup>3</sup>													X <sup>4</sup>	X <sup>5</sup>	X <sup>6</sup>	X <sup>7</sup>	X <sup>8</sup>	X <sup>9</sup>	X <sup>10</sup>	X <sup>11</sup>			X <sup>12</sup>		X <sup>13</sup>	X <sup>14</sup>					
2.	Health		X <sup>15</sup>				X <sup>16</sup>	X <sup>17</sup>				X <sup>18</sup>	X <sup>19</sup>	X <sup>20</sup>	X <sup>21</sup>	X <sup>22</sup>	X <sup>23</sup>	X <sup>24</sup>	X <sup>25</sup>														X <sup>26</sup>	X <sup>27</sup>	X <sup>28</sup>	X <sup>29</sup>			
3.	HR Development& Management		X																																				
4.	Employment		X <sup>30</sup>																																				
5.	Renewable Natural Resources		X <sup>31</sup>				X <sup>32</sup>	X <sup>33</sup>																															
6.	Tourism						X <sup>34</sup>																	X <sup>35</sup>															
7.	Trade, Industries & Mining						X <sup>36</sup>													X <sup>37</sup>																X <sup>38</sup>			
8.	Hydropower, Renewable Energy and Hydromet																																						
9.	ICT and Media																																						
10.	Transport																	X <sup>39</sup>																					
11.	Roads & Bridges																																						
12.	Construction						X <sup>40</sup>																					X <sup>41</sup>				X <sup>42</sup>			X <sup>43</sup>	X <sup>44</sup>			
13.	Human Settlement and Housing						X <sup>45</sup>																					X <sup>46</sup>						X <sup>47</sup>	X <sup>48</sup>				
14.	Emerging Social Challenges	X <sup>49</sup>		X <sup>50</sup>	X <sup>51</sup>						X <sup>52</sup>	X <sup>53</sup>													X <sup>54</sup>		X <sup>55</sup>	X <sup>56</sup>	X <sup>57</sup>	X <sup>58</sup>		X <sup>59</sup>		X <sup>60</sup>	X <sup>61</sup>				
15.	Sports																								X <sup>62</sup>		X <sup>63</sup>								X <sup>64</sup>	X <sup>65</sup>			
16.	Preservation and Promotion of Culture		X <sup>66</sup>																		X <sup>67</sup>				X <sup>68</sup>		X <sup>69</sup>												
17.	Conservation of Environment																																			X <sup>70</sup>		X <sup>71</sup>	X <sup>72</sup>
18.	Good Governance																							X <sup>73</sup>			X <sup>74</sup>												

SDG targets addressed by multiple sectors

SDG targets addressed by one sector

SDG targets not addressed



# Profile per 5 Ps of the 2030 Agenda



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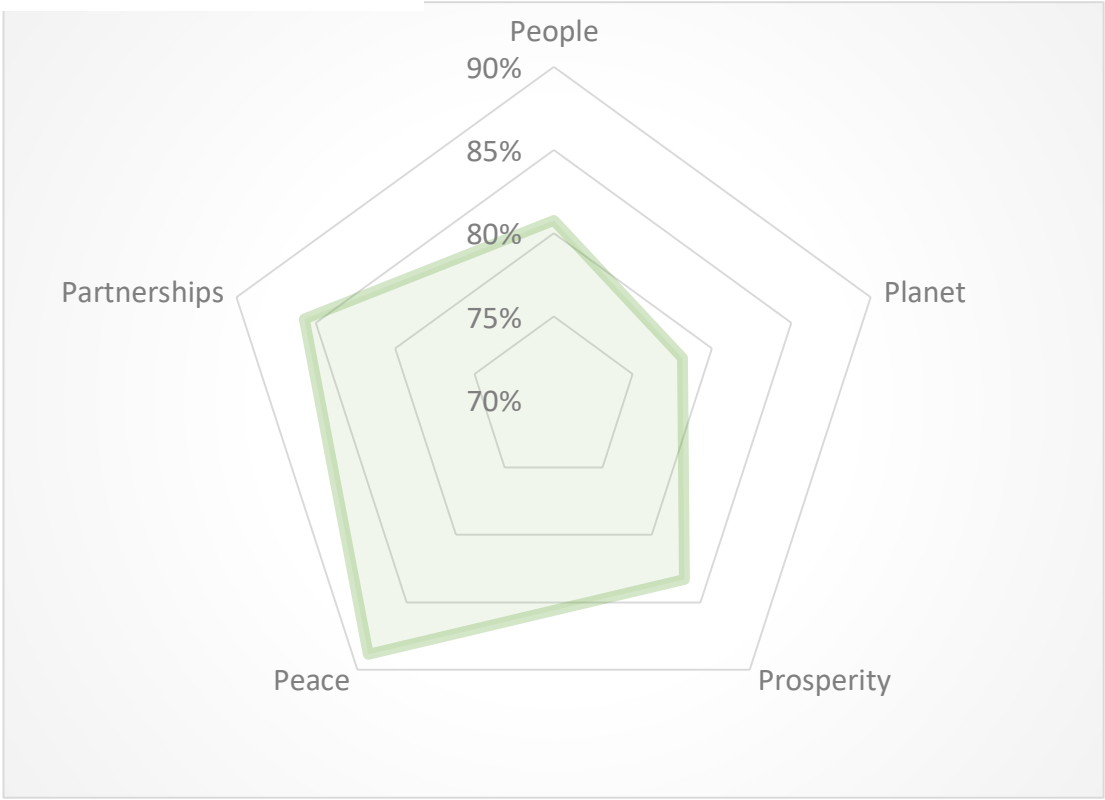
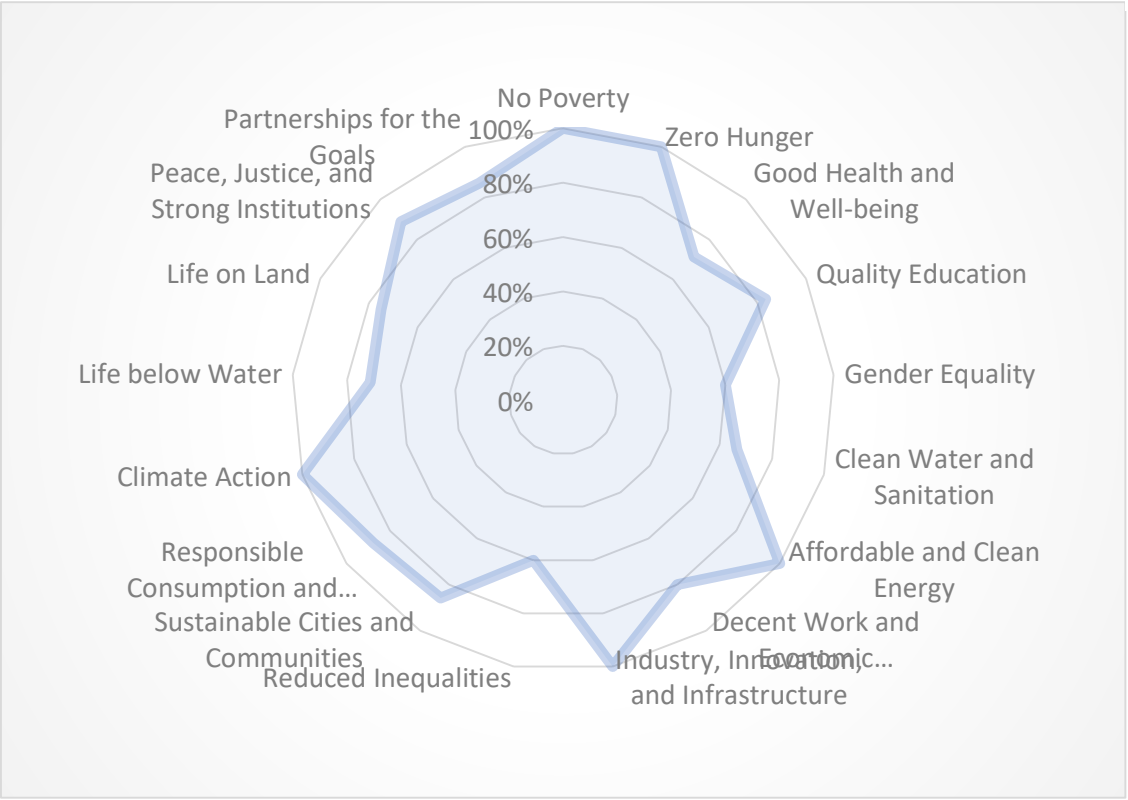
Policy Document Analysis					
Goal #	Short Title	# Targets	# Targets Covered	# Targets w Indicators	% Targets Covered
1	No Poverty	5	3	3	60%
2	Zero Hunger	5	3	2	60%
3	Good Health and Well-being	8	4	2	50%
4	Quality Education	7	1	1	14%
5	Gender Equality	6	4	3	67%
6	Clean Water and Sanitation	5	3	3	60%
7	Affordable and Clean Energy	3	2	2	67%
8	Decent Work and Economic Development	7	7	4	100%
9	Industry, Innovation, and Infrastructure	4	3	1	75%
10	Reduced Inequalities	4	3	3	75%
11	Sustainable Cities and Communities	3	2	2	67%
12	Responsible Consumption and Production	8	5	2	63%
13	Climate Action	3	2	1	67%
14	Life below Water	7	1	1	14%
15	Life on Land	6	3	1	50%
16	Peace, Justice, and Strong Institutions	6	4	2	67%
17	Partnerships for the Goals	7	2	0	29%
				People	45%
				Planet	44%
				Prosperity	45%
				Peace	46%
				Partnerships	15%

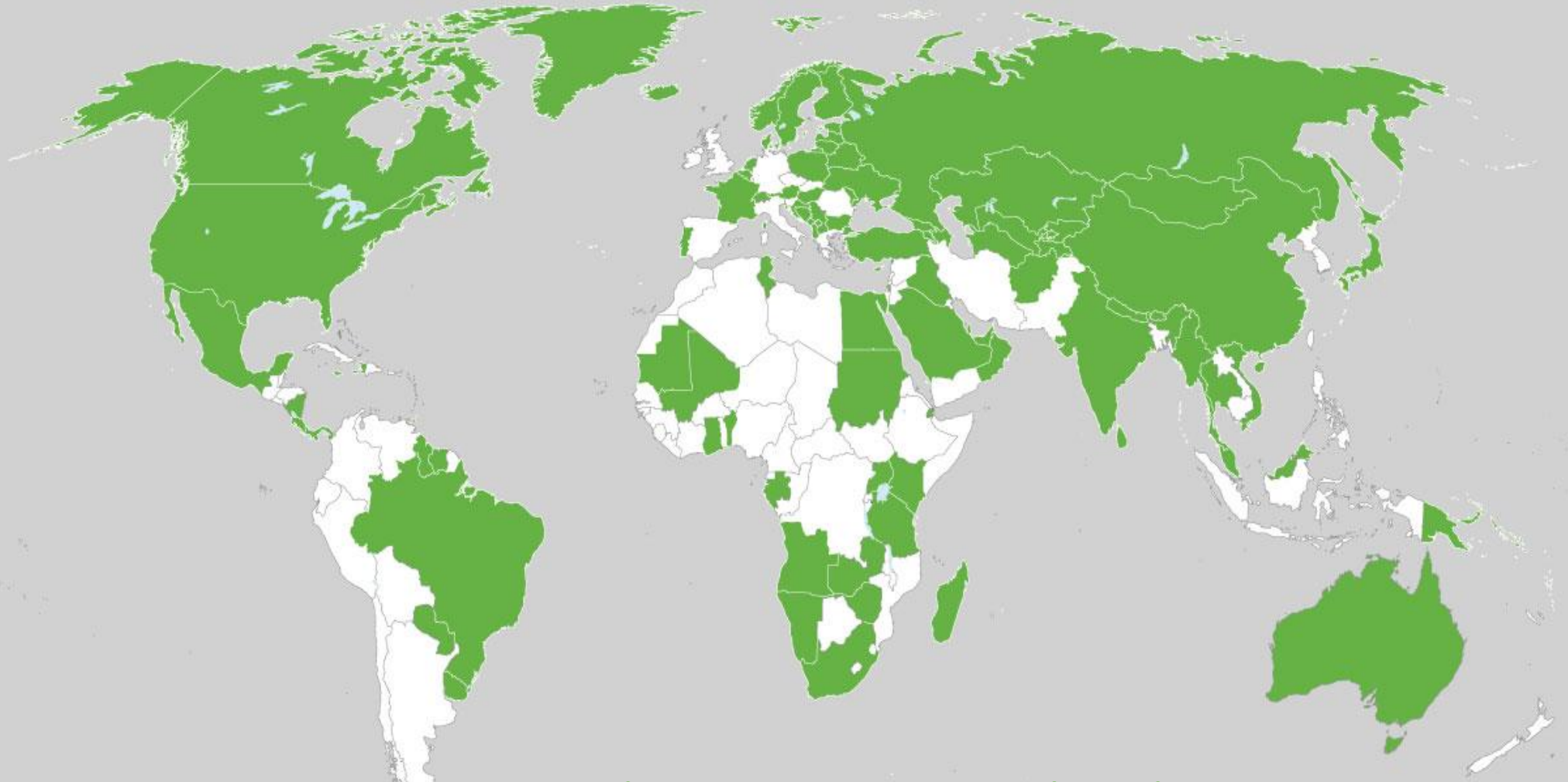


# Balance across 17 SDGs and 5 pillars



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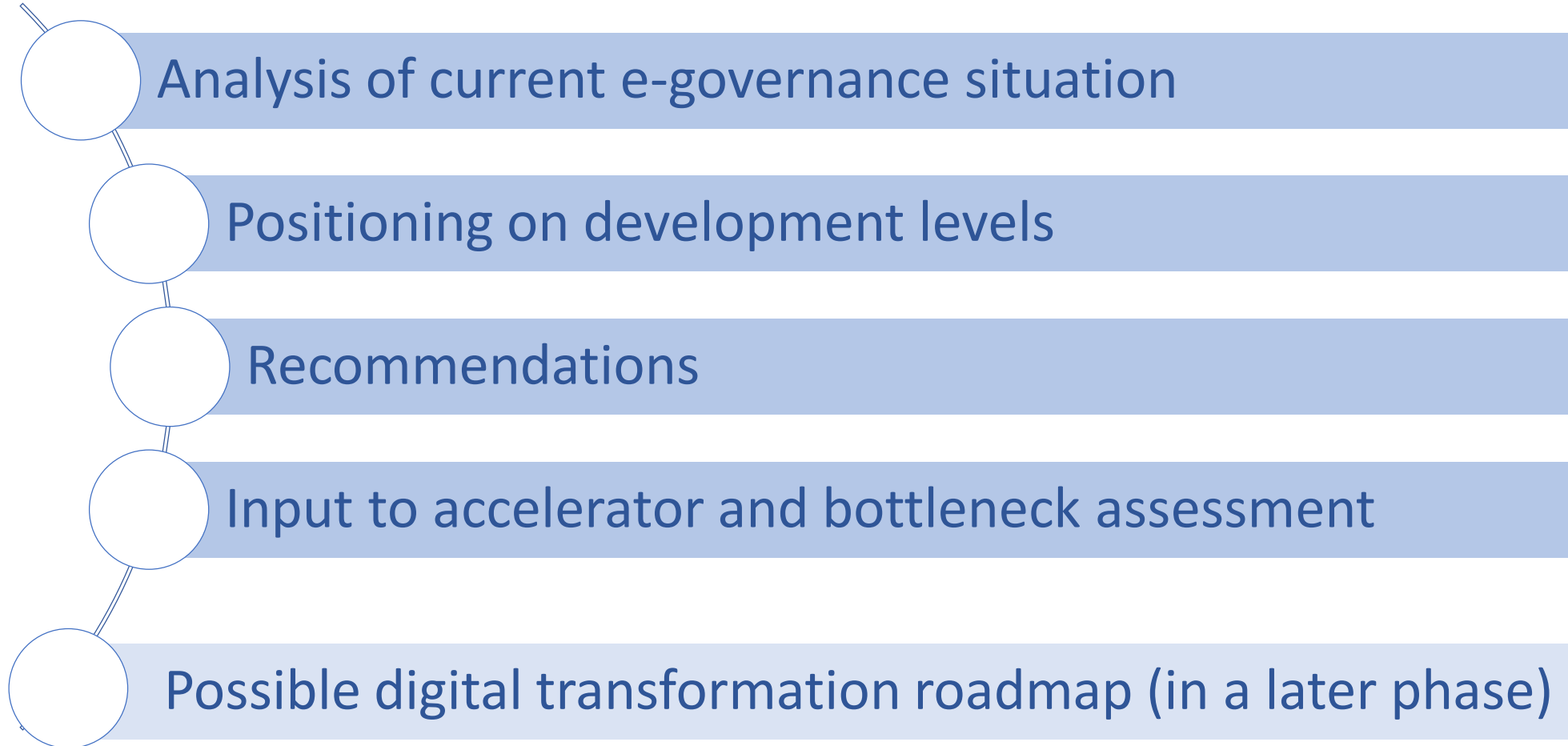
130+ countries, 200+ organisations  
5500+ participants in training events



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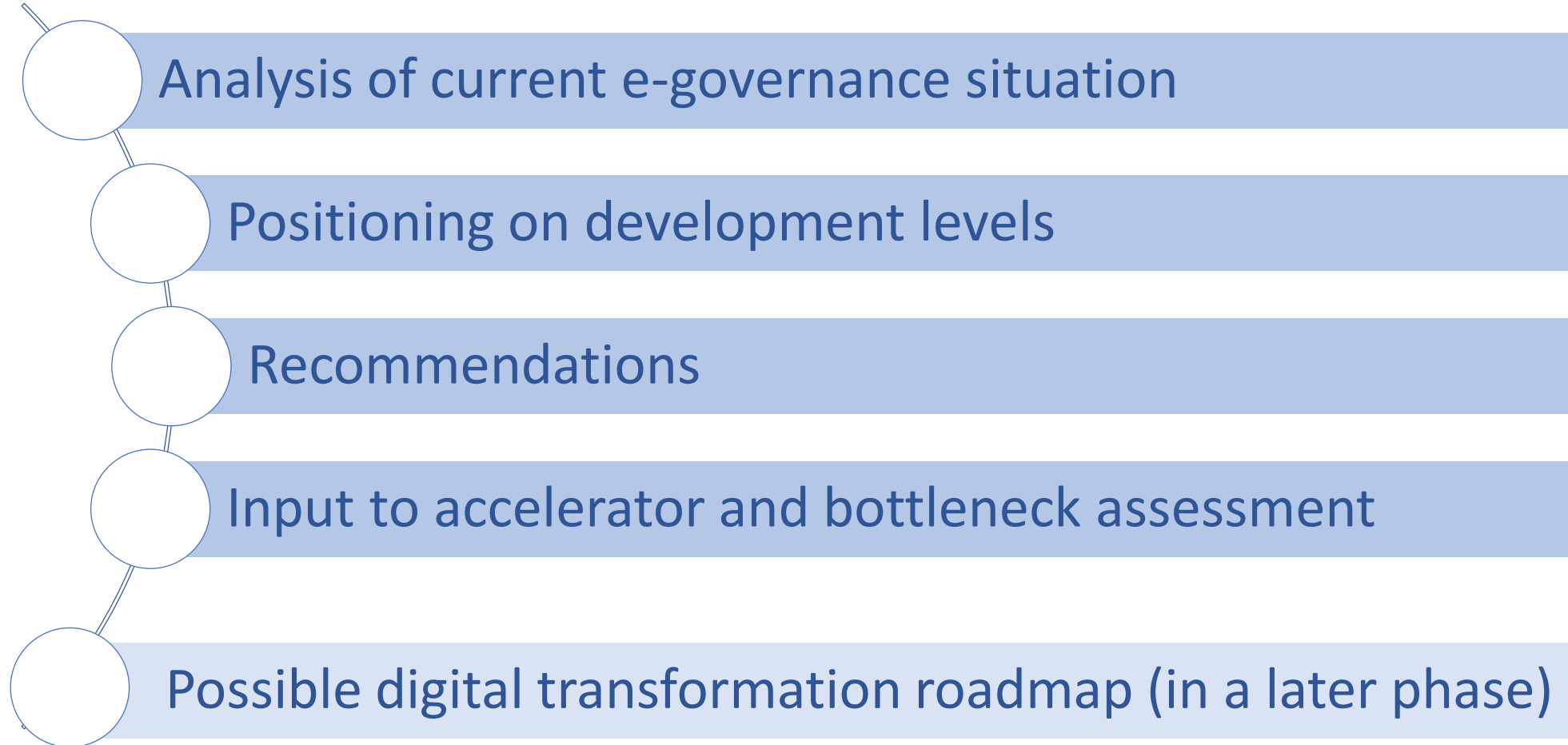
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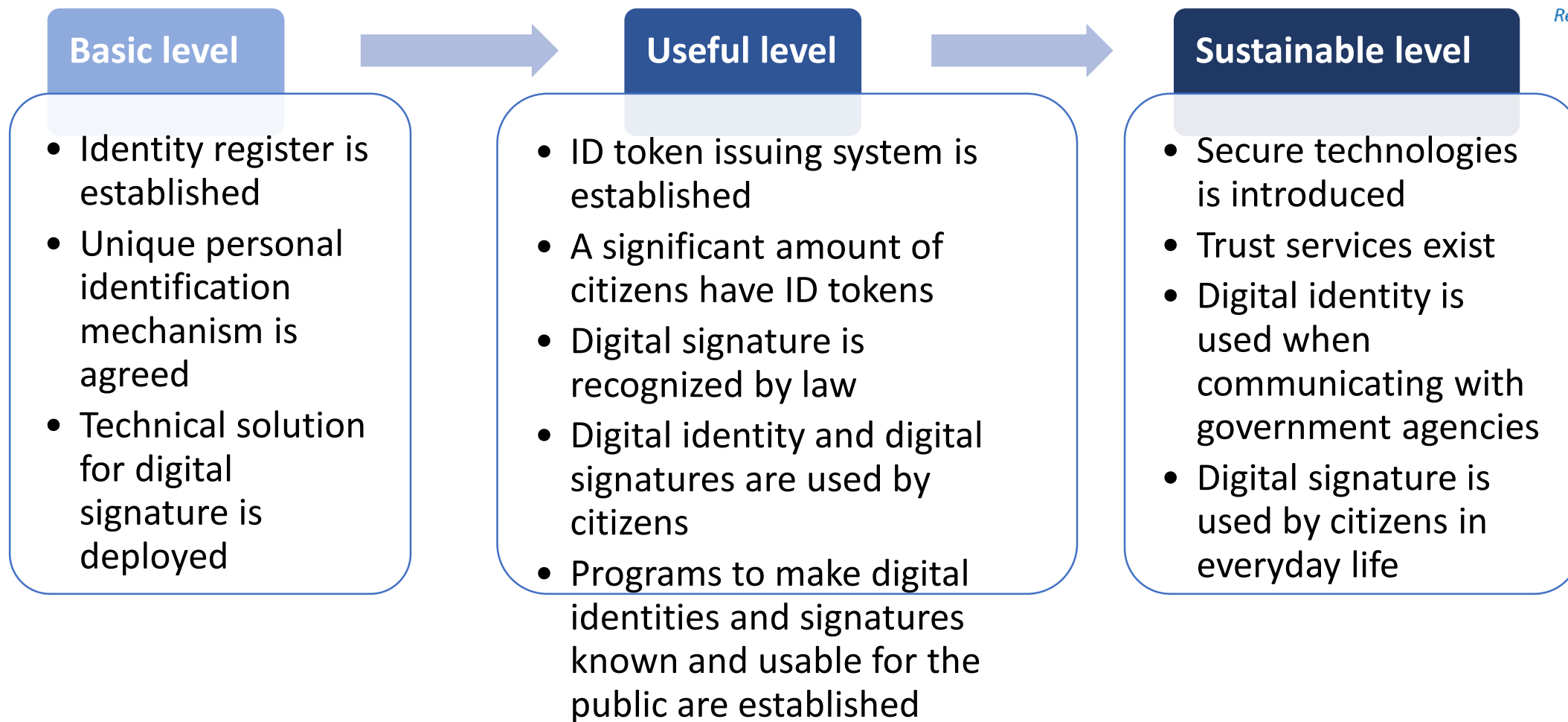
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# Example: Development levels of digital identity



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# ABA Methodology



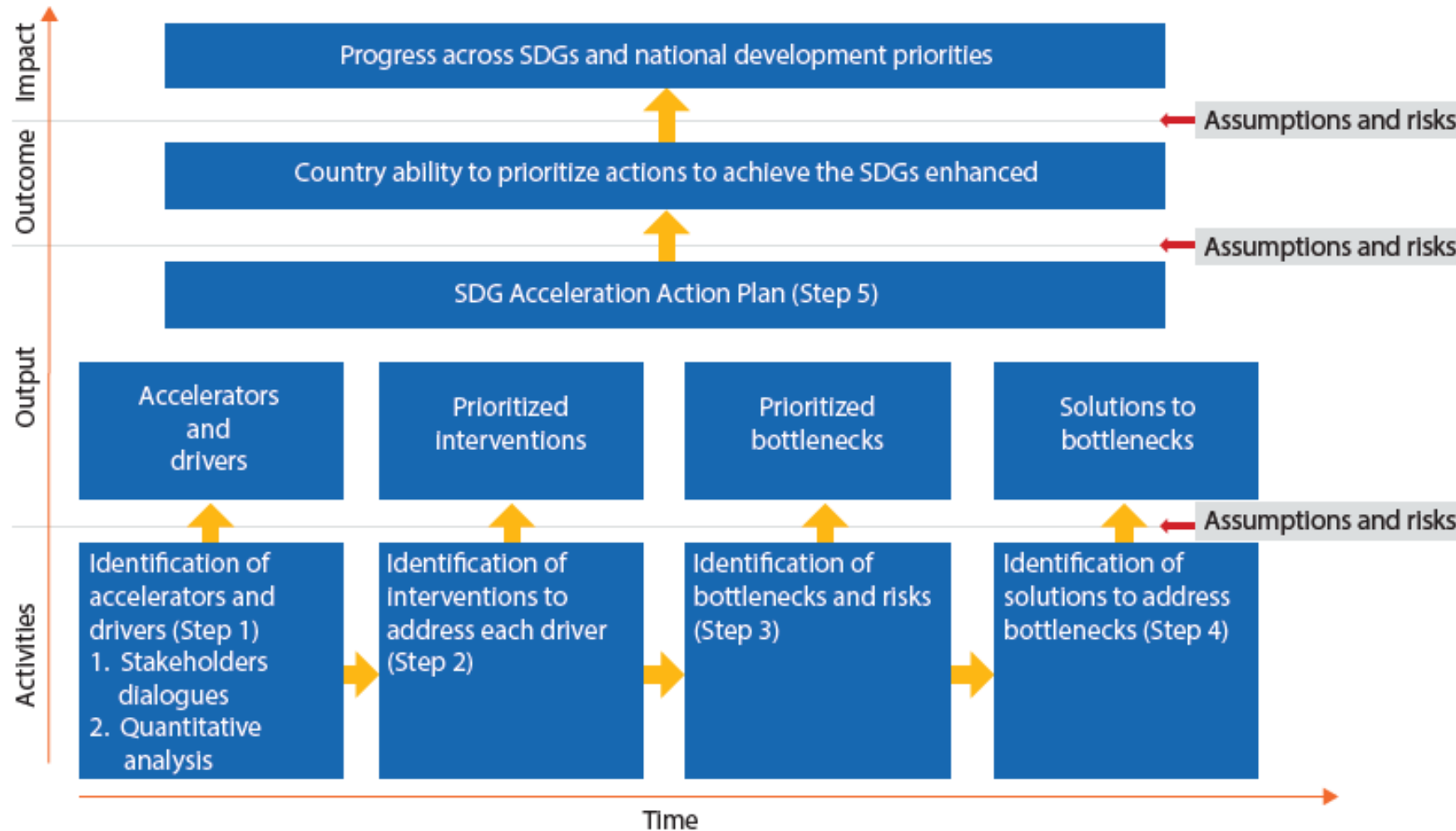
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# Theory of Change

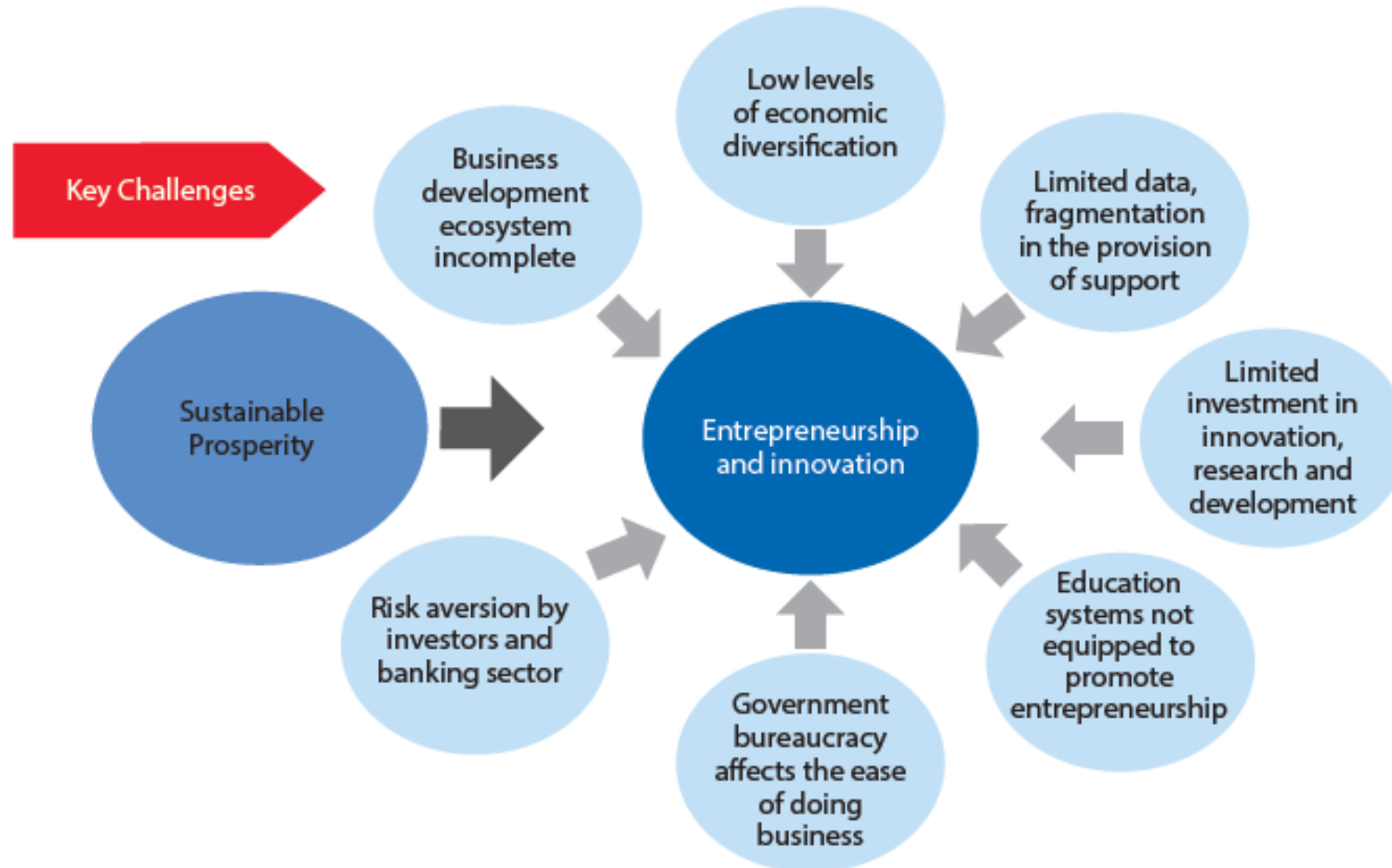


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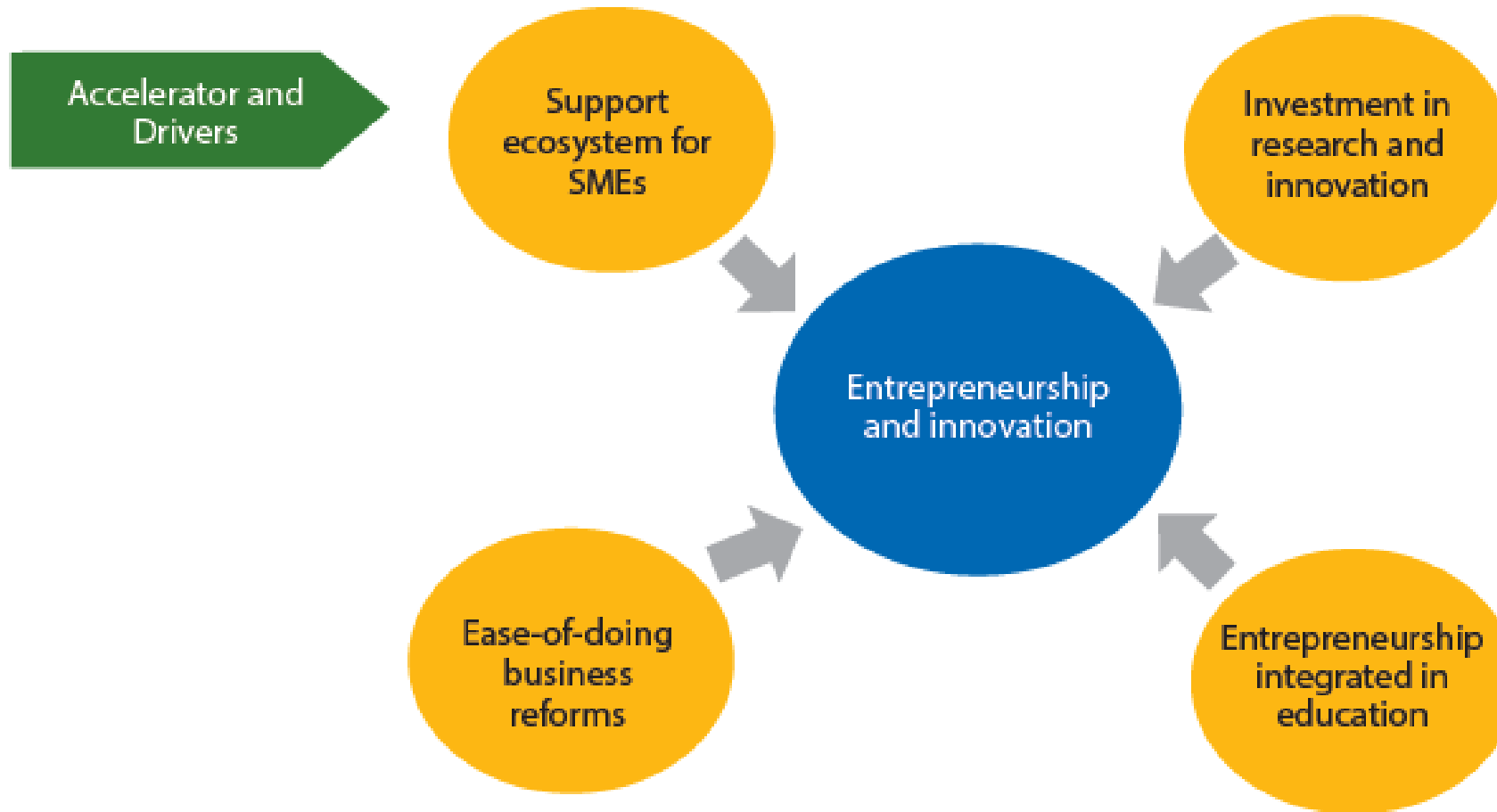
# Identifying an accelerator and related challenges



# Identifying an accelerator and its drivers



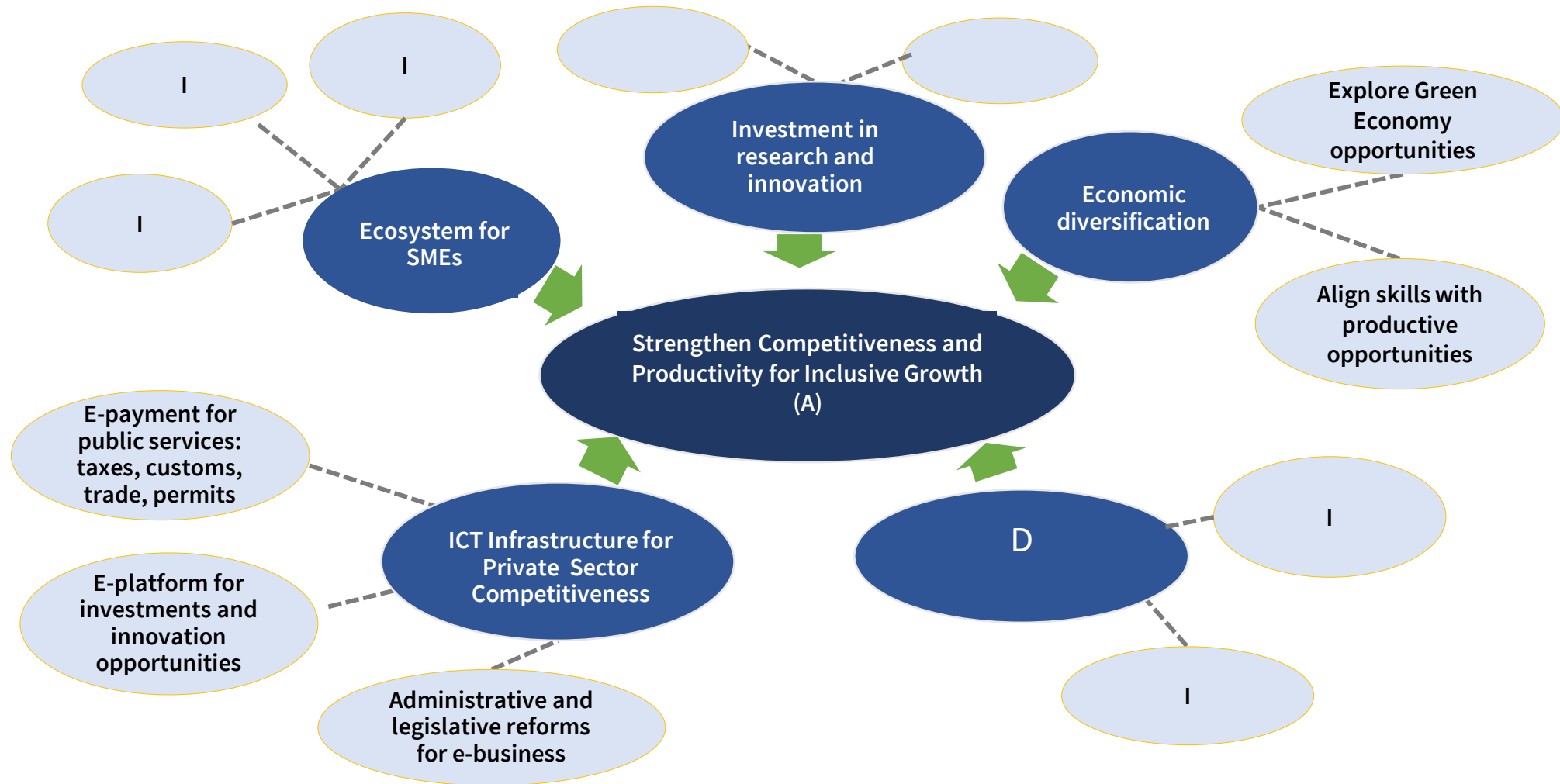
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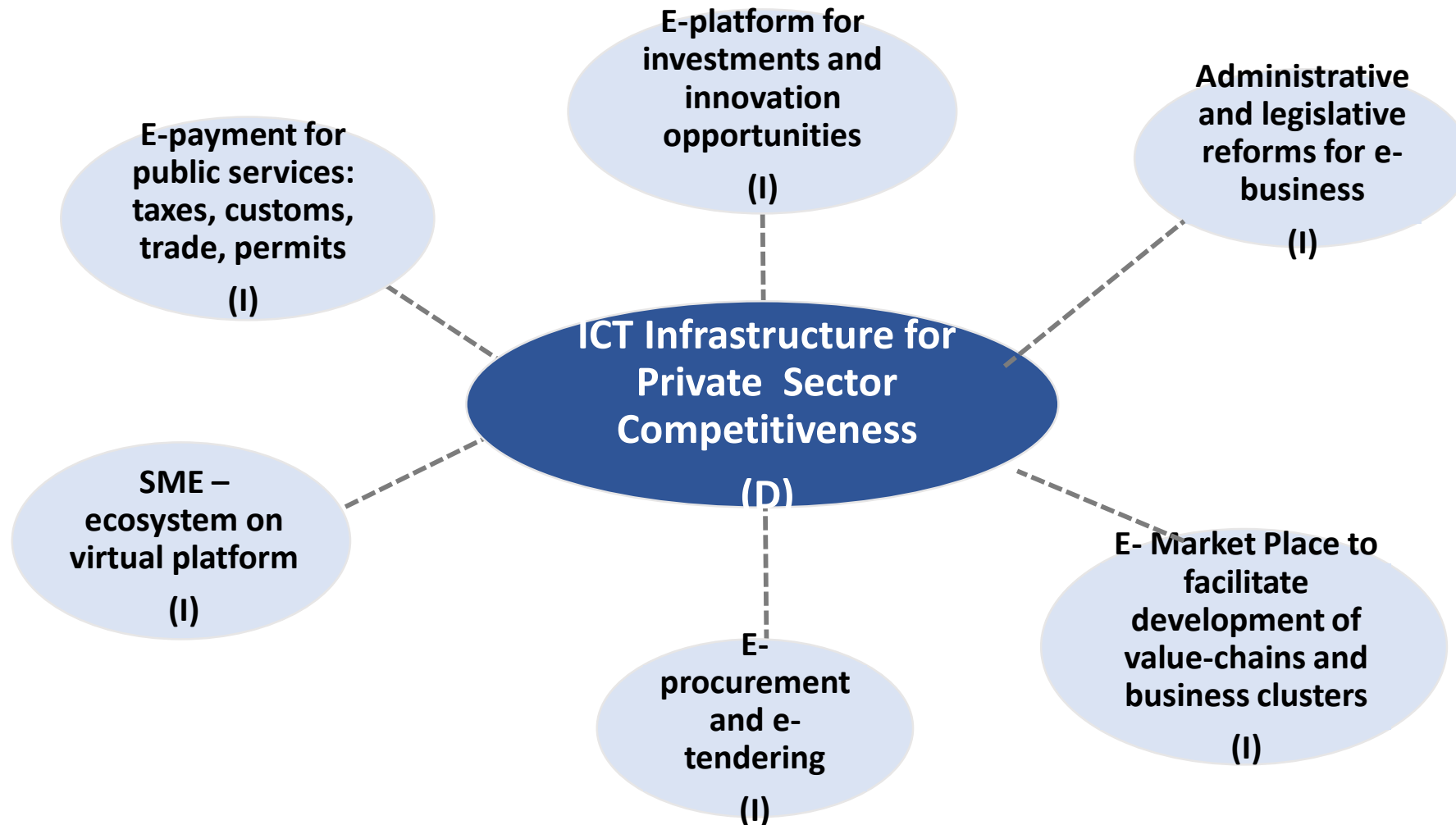
# Potential accelerators, drivers and interventions



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# Potential driver and interventions





# ABA: Bottleneck Categories

Bottleneck categories	Policy and planning	Budget and financing	Service delivery (supply)	Service utilization (demand)	Cross-cutting
Sub-categories	Political will and concerned interests	Resource mobilization	Geography and demography	Empowerment and self-efficacy	Engagement and advocacy
	Strategies, policies and plans	Resource allocation	Human resources, skills	Acceptability	Coordination and alignment
	Legislation and enforcement	Resource expenditure	Equipment and supply	Accessibility and affordability	Accountability and transparency
	Institutional capacities		Quality and equitability	Inclusiveness (are there barriers for specific groups to access services?)	Communication
	Coordination and alignment		Inclusiveness (are adequate services offered for marginalized groups?)		
	Accountability and transparency				

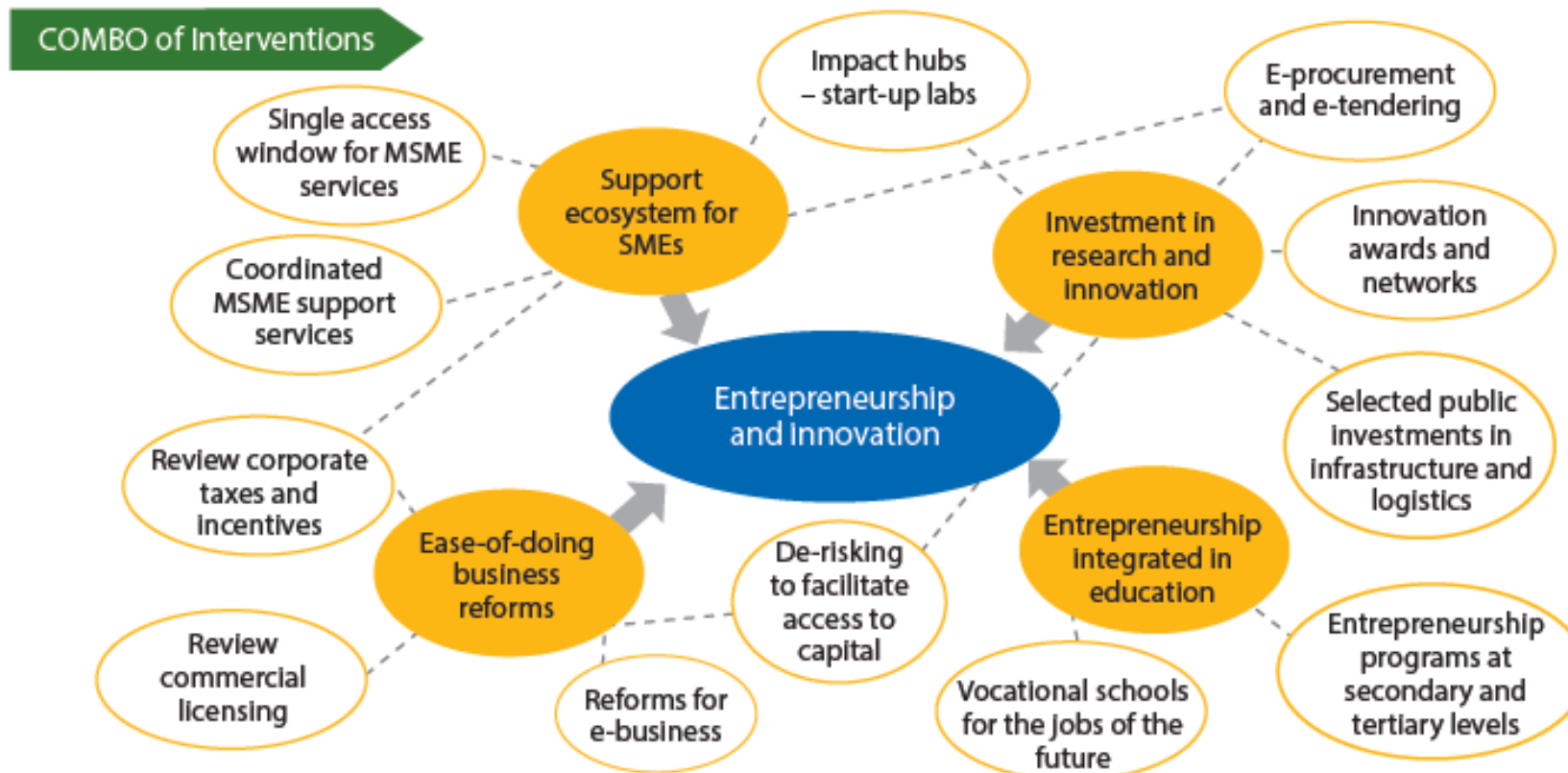
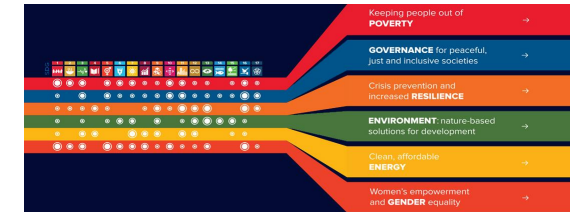


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# Potential driver and interventions



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# Cooperation and priorities

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- **Piloting the diagnostic tool [then finalize report and launch]**
  - **Introduce pilot at UNGA high-level event**
  - **Application at city level**
- **Capacity building, network-building**
  - **Workshop on the tool and digital transformation approaches**
  - **Online resources building: e-Courses, tools, networks**
  - **[City2City network launch]**

# Q/A/Comments/Insights

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**Thank you!**