The landscape of public sector capacity and capability frameworks, toolkits and indexes: What they do and what we can learn

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Executive summary

The Institute for Innovation and Public Purpose (IIPP) is working with Bloomberg Philanthropies to develop a new Public Sector Capabilities Index. This new index will be a global measure of where city government capabilities are strong and where critical skills must be built up. To develop our thinking and learn from existing practice, we have explored the landscape of existing capacity and capability frameworks, toolkits and indexes.

Over the past decade, there has been a rapid growth in these types of schemes that seek to measure and foster government performance. Despite their increasing ubiquity and their aspirations to help improve governments, there has been relatively little exploration and comparison of these schemes, to understand their ways of working and gauge their usefulness to governments around the world.

This paper explores 54 frameworks, toolkits and indexes to understand their geographic spread; who is funding their development; the national, regional and city-level focus; the approaches to measurement; and evidence of influence and impact on their target audiences. It draws upon these insights to identify what the forthcoming Public Sector Capabilities Index can learn to ensure it adds value to city governments and to identify where further research is needed (see Annex 1 for the full methodology).

Key findings

- To help ensure governments can respond to contemporary societal challenges, frameworks, toolkits and indexes have been created that aim to enhance government performance. These schemes have been developed over the past three decades, with rapid growth in the past ten years. They have been developed or funded by the public sector, intergovernmental organisations, academia, the private sector (typically service-based consultancies) and philanthropy. Of these, philanthropy has played the most significant role.
- There is geographical variance. Over 70% of the schemes aim to have global applicability and the rest focus on a specific country or continent. We did not find any scheme specifically aimed solely at

audiences in the Middle East and North Africa, Sub-Saharan Africa or Oceania.

- Measuring progress is a feature of many of the indexes and it appears to be a key step in attempting to support government improvement. Comparing progress and ranking the success of governments can exert social pressure and change the behaviour of governments.
- Despite the prevalence of indexes, there is a lack of uniformity, and universally accepted evaluation and ranking methodologies. This might not be problematic when indexes are measuring different elements of government performance, but the plethora of schemes and diversity of approaches can cause confusion and navigating them can create additional work for governments.
- Furthermore, there is a lack of data to understand the usefulness of these schemes to the governments they aim to assess and support.

Lessons for the Public Sector Capabilities Index

Drawing upon the mapping exercise to identify the key principles and approaches that should be emulated in future schemes, and for IIPP in developing the Public Sector Capabilities Index, any new index should:

1. Have a compelling value proposition so city officials can understand how and why they should engage.
2. Robustly and transparently capture and reflect upon its impact on city government decision-making and resident outcomes to ensure it benefits the cities it sets out to serve.
3. Explore grouping city governments into categories of performance, with a maturity model scale to enable city governments to progress, rather than publishing a numerical ranking that could lead to the gaming of results.
4. Continually reflect upon the influence of the Public Sector Capabilities Index to identify and address any unforeseen consequences, such as on city government behaviour or resident outcomes.
5. On entering a relatively crowded space with many existing city-focused schemes, a new Public Sector Capabilities Index should ensure it does not duplicate existing efforts, and that it is well promoted with its benefits and value for governments clearly defined.
6. Success metrics should be appropriate, but they must also be achievable and within the purview of city governments.
7. Be user-friendly and easy for government officials to access, interpret and use the index and its resulting data.
8. Go beyond a static assessment of a city government's status to provide concrete steps and, if possible, also provide support and assistance to improve performance.

Areas for future research

We hope this mapping will be a useful reference and resource to help government officials better understand which schemes are available. Furthermore, it could help scheme developers become more familiar with other schemes and identify opportunities for mutual learning and knowledge exchange.

However, this mapping is a first and initial step in helping to understand the existing landscape of capacity and capability toolkits, frameworks and indexes. Further research could usefully go beyond what we have explored in this paper. This could include primary research to:

- Explore how useful these schemes are to governments, such as by analysing their use and influence on a sample of governments.
- Critically evaluate the ranking indexes, addressing how successful they are at measurement, whether they are successfully measuring what they set out to measure, and whether this is relevant, and for whom.
- Look in greater detail at unforeseen consequences, such as behaviour change or dysfunctional dynamics arising from the promotion and use of these schemes.

1. Introduction

It is well documented that countries across the globe are undergoing radical change and facing a range of challenges and opportunities. This includes rapid urbanisation, technological advancement, resource scarcity and evolving citizen expectations (Asker Guenduez and Mergel 2022). Governments require various capabilities to respond effectively, including setting strategic goals, and designing and implementing new types of policies (Kattel 2022; Kattel and Mazzucato 2018; Wu et al. 2018).

To help ensure governments can respond to contemporary societal challenges, frameworks, toolkits and indexes have been created that aim to measure and foster capacities and capabilities to drive innovation and enhance government performance (Wojewnik-Filipkowska et al. 2024).

This paper has identified and explored 54 toolkits, frameworks and indexes (collectively referred to as 'schemes'). We have created a grouping to help define each scheme type (Table 1).

Table 1. Categorisation of schemes

	Objective	Number identified
Toolkit	To provide guidance and support to foster the emergence of capacities or capabilities, such as innovation or use of data. *There is no data collection, ranking or comparison.*	11
Framework	To measure the emergence and growth of capacities or capabilities, such as strategy or innovation, skills or resources. *There is no ranking or comparison.*	22
Index	To measure and compare government capacity and/or capability against a specific scale.	21

We conducted desk research to identify and analyse the 54 schemes. Further details on the method are in Annex 1 and data tables on all the schemes are in Annex 2. Although they often use different terminology, all 54 schemes can be characterised as trying to deliver better services, improve residents' lives and increase economic productivity. Some of these focus on the government's role in the broader economy or society, such as through the provision of technology infrastructure, or the strength of democracy and citizen engagement. Others are focused on the government's ability to foster innovation within service delivery, including achieving long-term missions or coping with short-term policy delivery issues.

This paper starts by exploring the scholarly theories surrounding government capacity and capabilities, and brings in debates about the use and usefulness of government ranking indexes. It then presents the findings from our review of the 54 schemes. Next, it draws upon the 54 schemes to identify the key lessons and principles to consider when developing the Public Sector Capabilities Index. It concludes by identifying areas for future research.

2. Theories on government capabilities, indexes and comparative frameworks

Dynamic capabilities in government

Dynamic capabilities are systemic abilities to question existing routines and capacities (Kattel and Takala 2021). The concept of dynamic capabilities in the public sector is still a relatively nascent research practice. Kattel and Takala (2021) have explored the three strands of academic literature that touch upon public sector dynamic capabilities. First, the Weberian tradition of long-term capacity; second, the Schumpeterian theory of 'change agents' and 'innovators'; and, finally, the more recent exploration of innovation labs and teams (see also Evans 1995; Evans and Rauch 1999; Painter and Pierre 2005; Wu et al. 2018; Breznitz et al. 2018; Breznitz and Ornston 2013; Clarke 2019; Mergel 2019; Tõnurist et al. 2017).

Over recent years, dynamic capabilities have been explored in various governments and contexts. For example, dynamic capabilities and state capacities in South Africa (Mazzucato et al. 2021), in the UK Government Digital Service (Kattel and Takala 2021) and in response to the Covid-19 crisis (Mazzucato et al. 2021). These studies usefully bring in concepts related to the developmental state, the public sector's role in market shaping and the role of innovation in various areas of the public sector, such as digital transformation (see also Mazzucato 2013, 2018 and 2021).

To support governments in their efforts to be better at responding to crises and taking advantage of opportunities, scholars and practitioner-oriented organisations have developed a range of frameworks and indexes aimed at understanding, and often improving, capacities and capabilities. Furthermore, scholars have looked at how and when governments are deemed to be 'performing' and the implications for measurement (see Van Dooren et al. 2015).

Indicators on government performance can be separated into at least two subsets. If looked at as external and internal, the external category of schemes would seek to publicly rank organisations into similar groupings. An example would be the World Bank Ease of Doing Business Index. The internal category is focused on understanding a single organisation and it may track its maturity towards an ideal-typical model. An example here would be the What Works Cities Certification Program.

Quantitative indicators and indices

Measuring city and national progress is a key step towards supporting continuous improvement (Quijano et al. 2022). For decades, supranational organisations have assessed urban and national development across different nations (Wong 2015). Since the 1960s, the World Bank has compiled world development indicators to monitor progress towards international development goals. Likewise, schemes such as the United Nations Human Development Index (HDI), Eurostat's Urban Audits and the Asian Development Bank's Cities Data Book have played a role in steering the attention of governments towards critical enablers of effective governance (Wong 2015).The prevalence of comparable data sets is changing the behaviour of governments. Doshi et al. (2021, p. 2) claim that, 'The world is increasingly governed not by force, but by information.' An essential tool can be Global Performance Indicators (GPIs), especially those that rate and rank states against one another, purposefully packaging information 'to influence the priorities of states, the perceptions of publics, and the decisions of economic actors.'

As a result, GPIs can constitute an important form of social pressure that can change the information environment of communities of importance and change their behaviour. Doshi et al. (2021, p. 2 – 3) state that, 'Wielding comparative information using simple rankings is designed to alter shared information, affect third party beliefs and opinions, and ultimately to convince targets that their reputation or relative status is at stake, potentially with material or social consequences.'

Use and usability of indexes and frameworks

At a city level, Toh (2022) reviewed indexes and rankings of 'smart cities', those innovative cities 'that use information and communication technologies (ICTs) and other means to improve the quality of life [...] while ensuring that it meets the needs of present and future generations' (ITU, online, as cited in Toh 2022, p. 211).

Toh (2022) found that most smart cities indexes have their own evaluation criteria and ranking methodologies, and claims that the lack of uniform and universally accepted methods for a fair and comprehensive evaluation of cities is a problem. Toh states that as no ranking is widely accepted and universally agreed upon, 'This not only creates chaos but also confusion as to what indexes to follow' (Toh 2022, p. 211). At a city level, Toh (2022) claims that there is scepticism about smart city rankings, particularly regarding accuracy, measurement methods, neutrality and reliability. As a result, no international organisation is producing a universally agreed and accepted city index and ranking.

At the city government level, despite the ubiquity of indexes and frameworks (Sharifi 2020), it is not known how widely accepted and used these are by city governments and residents (Toh 2022). In recent years, questions have been raised that some of these schemes may not be helping policymakers or governments improve how they operate and the services they deliver. Toh (2022) reviewed six smart city[1] indexes and argued that, for smart cities, there is not a universally recognised approach and that 'Too many indexes and rankings add to confusion and result in tedious work [for governments] in reading through lots of reports and understanding all existing city indexes and rankings' (Toh 2022, p. 221).

1 Smart cities are defined as those "that use information and communication technologies (ICTs) and other means to improve the quality of life, the efficiency of urban operation and services, and competitiveness while ensuring that it meets the needs of present and future generations" (ITU, online, as cited in Toh, 2022, p. 211).

3. The landscape of competency and capability frameworks, toolkits and indexes

Overview of schemes

We have explored 54 schemes. Although often using different terminology, all the toolkits, indexes and frameworks can be characterised as trying to deliver better services, improve the lives of residents or increase economic productivity. Some of these focus on the government's role in the broader economy or society, such as through the provision of technology infrastructure, or the strength of democracy and citizen engagement. Others are focused on the government's ability to foster innovation within service delivery, including achieving long-term missions or coping with short-term policy delivery issues. All have been developed over the past three decades, with rapid growth in the past decade (Chart 1).

Chart 1. Cumulative growth of schemes (n = 52; dates for two schemes are unknown)

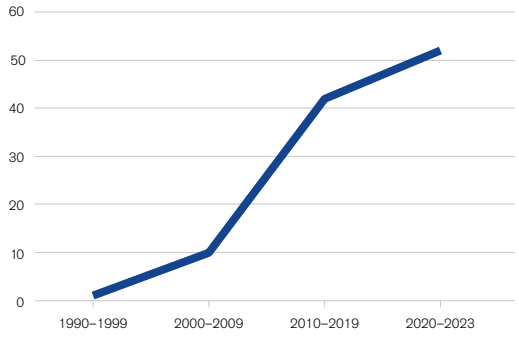
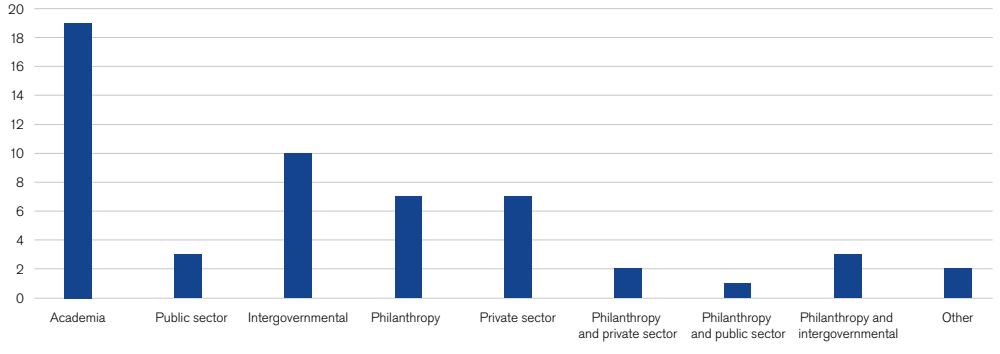
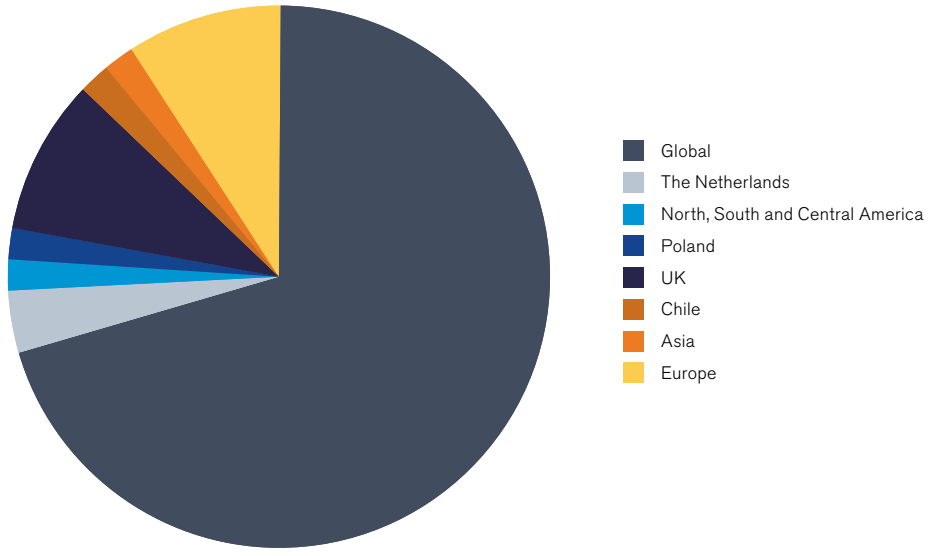


Chart 2. The sector the scheme emerged from (n = 54)



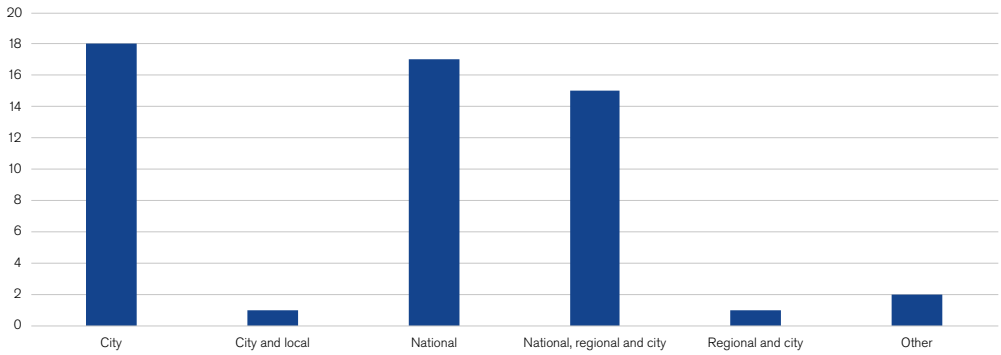
Schemes have been developed or funded by the public sector, intergovernmental organisations, academia, the private sector (typically service-based consultancies) and philanthropy (Chart 2). Of these, philanthropy has played the most significant role. Philanthropy has been involved in developing 25% of the schemes, either as a sole developer or in collaboration with others. Intergovernmental organisations have also played a significant role, developing almost a fifth (19%) of all schemes. The private sector has been involved in developing 15% of the schemes. Interestingly, despite having a government focus, only 4% of schemes emerged from the public sector.

Chart 3. Geographic focus (country, continent or global) of framework, toolkit or index (n=54)



Over 70% of the schemes aim to have global applicability. The rest focus on a specific country or continent. Over a quarter are aimed at a European audience, 10% are pan-European and the rest focus on the UK (10%), Chile (one scheme), the Netherlands (one scheme) and Poland (one scheme). Only one scheme is targeted at Asia. Beyond the global schemes, we did not find any specifically aimed solely at audiences in the Middle East and North Africa, Sub-Saharan Africa or Oceania.

Chart 4. Government unit of analysis (n = 54)



The schemes can focus on national, regional or city-level government (Chart 4). Most focus solely on the city or national level of government.

Popularity

Following Toh (2022), we have used Google Search to identify the popularity of each scheme using the scheme name as representative keywords. Based on this, the 12 most popular schemes are shown in Table 2. While this shows the page results for each scheme and provides a proxy for how much coverage it has received, it does not show whether the framework or index has been used and how much impact it has had on city governments.

Table 2. The 12 most popular schemes

Google page results	Scheme (Top 12)
>500,000	Global Competitiveness Index
>300,000	Global Cities Index
100,000 – 199,999	World Bank Ease of Doing Business Index Smart City Index Technological Innovation System Framework
50,000 – 99,0000	What Works Cities Certification Program Global Power City Index
30,000 – 49,999	Digital Economy Society Index
20,000 – 29,999	Cities of the Future Index City Resilience Framework Nesta Innovation Index

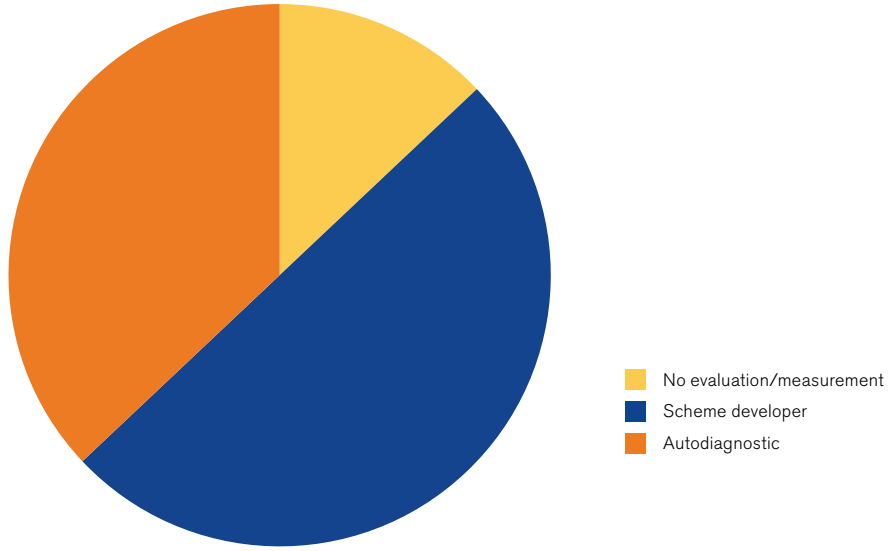
Source: Google page results, correct as of 16 November 2023

Philanthropy or intergovernmental organisations have developed all the top 12 most popular schemes. Only one scheme, the Technological Innovation System Framework, has been developed in academia.

Approach to data collection

We looked at who collects data across all 54 schemes (Chart 5). For seven schemes, no data is collected. For the remainder, 50% have data collected by the scheme developer and 37% are auto-diagnostic, with data collected by the target audience, such as a city government. The self-assessment of data with no external verification could affect the reliability of data gathered.

Chart 5. Scheme data collection (n = 54)



Index formats and approach to measurement

All the indexes in our sample are composite indexes (n = 19, no data for two). Eleven rank city governments and eight rank national governments (none focus on regional government).

There are two types of index. The first is a composite index, where the index developers have specified dimensions to which numerical indicators are mapped. The index is a result of the weighting of the specific indicators. Example dimensions can include 'productivity' or 'quality of life' and potential metrics mapped to the dimensions include GDP per capita or literacy rate. Example indexes in this category include the Global Cities Index (GCI), City Prosperity Index (CPI), Cities of the Future Index, El Índice de Innovación Pública and the European Digital Social Innovation Index.

The second type is a composite index, where the index developers have specified dimensions to which numerical and qualitative indicators are mapped. The overall index does not produce a score, so it is not possible to compare different governments. Instead of ranking governments, it acts as a tool for individual governments to identify their status and, if the review is repeated, track their progress. Examples of this type of index includes the City Resilience Index.

To provide examples of the ranking indexes, we looked at two of the most popular (see Table 2) and this section summarises their approach to measurement and their potential relevance to their target audience.

Global Cities Index

Kearney, a global consultancy firm, produces the Global Cities Index (GCI). The GCI aims to assess 'the extent to which cities are able to attract, retain, and generate global flows of capital, people, and ideas' (Kearney 2023). The Index measures 29 metrics across five dimensions based on publicly available, city-level data. The five dimensions are business activity, including capital flow, market dynamics and presence of major companies; human capital, including education levels; information exchange, including access to the internet and media sources; cultural experience, including access to major sporting events and museums; and political engagement, including political events, think tanks and embassies. City rank is the total of the weighted averages of each dimension, which produces a score on a scale of 0 to 100, with 100 being perfect (Kearney 2023).

The relevance of it for city officials and city governments is debatable. For example, city governments may be unable to improve on some of the metrics directly, such as the number of embassies in a city. Furthermore, the Global Cities Index does not appear to offer any practical help or pathways for a city to improve its ranking (Kearney 2023).

What Works Cities

The What Works Cities Certification Program is philanthropically funded. It was launched by Bloomberg Philanthropies and is led by Results for America. What Works Cities is a city-wide certification programme that establishes a 'standard of excellence for data-driven, well-managed local government' (What Works Cities 2024). Open to cities in North, Central and South America with a population of at least 30,000, it assesses cities using 43 criteria corresponding to 'best practices for data-driven governance' (What Works Cities 2024). The 43 individual criteria are detailed and measure processes that can be quantified. All the ranking indexes we explored use a numerical scale, except for What Works Cities, which uses a maturity model approach. What Works Cities grades cities as silver, gold or platinum.

What Works Cities is helpful to city governments because it goes beyond a static assessment to provide concrete steps, and often technical assistance and support, for city government officials to improve their use of data. Once a city has been assessed, a suite of support is available to help the city improve. This includes technical assistance from programme lead Results for America and its partners, including the Bloomberg Center for Government Excellence, the Behavioural Insights Team, the Harvard Kennedy School Government Performance Lab and Public Digital. This assistance can involve pairing city leaders with an expert coach to develop an action plan tailored to their city, as well as access to webinars, office hours with experts, and 'learning sprints' on topics including data governance and how to run randomised controlled trials (RCTs) (see Haynes 2023).

Evaluation and data on influence and impact

We looked online for evaluation reports, impact data or reviews for all the toolkits, frameworks and indexes. However, we could only find such data for two schemes: the World Bank Ease of Doing Business Index and the City Prosperity Index (CPI). This section summarises these schemes' influence, limitations and criticisms.

City Prosperity Index (CPI)

Overview

UN-Habitat's City Prosperity Index (CPI) is 'designed to enable city authorities, as well as local and national stakeholders, to identify opportunities and potential areas of intervention for their cities to become more prosperous' (UN-Habitat 2021). CPI is a composite index made up of six dimensions: productivity, infrastructure development, quality of life, equity and social inclusion, environmental sustainability, and governance and legislation. Across these are 25 indicators. The CPI aims to enable cities, countries and international communities to measure their progress and identify possible constraints (UN-Habitat 2021).

Influence

Wong (2015, p. 3) reviewed the influence of the CPI and found that the adoption of 'people-centred' urban prosperity has led to a more holistic approach to integrating productivity, infrastructure, quality of life, equity and social inclusion, and environmental sustainability into a coherent framework.

Limitations

However, Wong (2015) also argued that the CPI requires conceptual and methodological improvements. This includes being better able to connect indicators and analytical intelligence with the policy needs of urban planners and government strategists by helping to foster participation and debate, tailor it to the different sets of challenges faced by cities in different regions and socio-spatial contexts and improve consistency and comparability with data collected where there is a common spatial and temporal basis. Further, Wong advocates qualitative data to supplement the quantitative data collected, with systematic commentaries compiled on each city (Wong 2015).

Ease of Doing Business Index

Overview

The World Bank Ease of Doing Business (EDB) project tracked business regulation activity to create the annual Ease of Doing Business (EDB) Index across countries (Rogge and Kolyaseva 2022). The index ranks economies on their ease of doing business, from 1 to 190. A higher ease of doing business score means that the regulatory environment is more conducive to starting and operating a local firm (World Bank n.d.). After data irregularities on Doing Business 2018 and 2020 were reported in 2021, the World Bank discontinued the Doing Business report (World Bank 2021). Despite its closure, there are interesting lessons to learn.

The EDB Index comprises a mix of indicators measuring business regulation across ten dimensions, including starting a business, construction permits, getting electricity, registering property, access to credit, protecting minority investors, paying tax, trading, contract enforcement and insolvency resolution (Rogge and Kolyaseva 2022). The individual indicators are normalised using the formula (worst – y) / (worst – best) before being aggregated for each EDB dimension by simple arithmetic averaging. The resulting scores for the ten EDB dimensions are then weighted equally to obtain a country's total EDB score on a scale from 0 to 100, with 0 representing the worst performance and 100 the best (Rogge and Kolyaseva 2022, p. 134).

Influence

As a monitoring tool, the Index enables governments, investors, companies, shareholders, the media and the public to understand the regulatory environment in a country and how it has changed over time in absolute terms (Rogge and Kolyaseva 2022).

As a benchmarking tool, it has also helped urge governments to implement reforms that improve their business regulation environment (Rogge and Kolyaseva 2022). Doshi et al. (2019) claim that the World Bank utilises bureaucratic, transnational and domestic policy channels to affect policy. In response to being ranked, governments pursue strategic reforms to improve their ranking. The World Bank reported that by 2021, over 70 nations had created regulatory reform committees based on the EDB ranking, and there have been over 3800 related reforms (Shmulyan 2021). For example,

in 2015, the Prime Minister of India, Narendra Modi, made improving India's EDB rank by 100 points a key component of his government's agenda. In 2012, President Putin of Russia set the goal of entering the EDB top 20 (Rogge and Kolyaseva 2022; Besley 2015), and in 2015, the UK government aspired to be in the top five (Rogge and Kolyaseva 2022; McCormack 2018).

The EDB database and index are also widely used by academics, think tanks and international organisations to analyse the role of business regulation in economic development. The influence of the EDB on policymakers and its use in research has led to the EDB Index being described as 'one of the most influential economic indices' (Rogge and Kolyaseva 2022, p. 132).

Criticism and limitations

There have been scandals surrounding the EDB Index. In the early 2010s, it emerged that some of the contracted Doing Business teams, including big international accounting firms, 'had been playing a double game: taking from WB [the World Bank] for supplying relevant information on the various indicators of "ease of doing business", and taking fees from governments for advice on how to raise the country's ranking – which might encourage them to submit to the World Bank statistics massaged favourably for the country' (Wade 2021).

Scholars widely debate the influence and usefulness of the World Bank EDB Index. Belsay (2015) identified three common criticisms of the EDB Index: defects in its design, the validity of selected indicators and the underlying motives of the projects. For design, its approach to measurement has been described as 'crude' and failing to capture the complexities of the legal system (Rogge and Kolyaseva 2022, p. 132). Further, the EDB has been criticised as lacking a transparent data-gathering and reporting system, and enabling significant input from government and officials who want to improve their ranking (Shmulyan 2021). Another methodological criticism is that the EDB is constructed by scoring countries on ten topics with equal weighting, while scholars like Shmulyan (2021) argue that these are not equally relevant. Doshi et al. (2019) argue that the World Bank has successfully 'marshalled the Ease of Doing Business index (EDB) to amass surprising influence over global regulatory policies – a domain over which it has no explicit mandate and for which there is no ideological contestation' (Doshi et al. 2019, p. 1)

Lessons for the Public Sector Capabilities Index

This section draws upon the mapping exercise to identify the key principles and approaches that should be emulated in future schemes, and for IIPP in developing the Public Sector Capabilities Index.

Any new index should:

1. Have a compelling value proposition so city officials can understand how and why they should engage.
2. Robustly and transparently capture and reflect upon its impact on city government decision-making and resident outcomes to ensure it benefits the cities it sets out to serve.
3. Explore grouping city governments into categories of performance, with a maturity model scale to enable city governments to progress, rather than publishing a numerical ranking that could lead to gaming of results.
4. Continually reflect upon the influence of the Public Sector Capabilities Index to identify and address any unforeseen consequences, such as on city government behaviour.
5. On entering a relatively crowded space with many existing city-focused schemes, a new Public Sector Capabilities Index should ensure it does not duplicate existing efforts and is well promoted, with its benefits and value for governments clearly defined.
6. Success metrics should be appropriate, but they must also be achievable and within the purview of city governments.
7. Be user-friendly and easy for government officials to access, interpret and use the index and its resulting data.
8. Go beyond a static assessment of a city government's status to provide concrete steps and, if possible, support and assistance to support performance improvements.

Conclusion and areas for future research

We hope this mapping will be a reference point for public sector frameworks that aim to enhance and rank capacity and capability. As a resource, it could help policymakers be better informed about which index or framework to engage with. Furthermore, it could help scheme developers become more familiar with existing frameworks, and identify opportunities for mutual learning and knowledge exchange.

However, this mapping is a first and initial step in helping understand the existing landscape of capacity and capability toolkits, frameworks and indexes. Further research could usefully go beyond what we have explored in this paper. This could include primary research to:

- Critically evaluate the ranking indexes, addressing how successful they are at measurement and, even if the index is successfully measuring what it sets out to measure, whether this is relevant, and for whom.
- Explore how useful these schemes are to governments, such as by analysing their use and influence on a sample of governments.
- Look in greater detail at unforeseen consequences, such as behaviour change or dysfunctional dynamics, arising from the promotion and use of these schemes.

Annex 1. A note on the methodology

During November and December 2023, we conducted desk research to identify and analyse 54 frameworks, toolkits and indexes. To generate our sample, we explored academic articles and grey literature. The literature was identified through a search of three primary databases: Google Scholar, the collection of the UCL Library catalogue for academic articles, and Google searches focusing on practitioner-generated schemes that have not been featured in academic articles. The search terms we used were 'capacity', 'capability' or 'innovation', along with one or more of the following terms: 'government', 'public', 'public sector' or 'public-sector', and 'framework' and 'index'.

We screened the grey literature and academic articles based on abstracts and titles. We excluded those that did not focus on government or the public sector. We identified additional examples from references in the original articles. This process identified 54 schemes.

The data presented has been collected through content analysis of each scheme. We created Excel spreadsheets with all 54 schemes to collect and analyse data. Drawing upon publicly available information, we created matrices (Tables 2 to 6) that compiled information on each scheme, including objective(s), date created, developer or host organisation, funder, sector that it emerged from, target audience, policy area/topic focus, measurement tool or approach and evidence of impact.

Annex 2. Data tables: toolkits, frameworks and indexes

Table 3. Types of scheme

Toolkit	Framework	Index
To provide guidance and support to foster the emergence of capacity or capabilities, such as innovation capacity or use of data. *There is no ranking or comparison.*	**To measure the emergence and growth of capacities or capabilities, such as strategic or innovation capabilities, skills or resources. *There is no ranking or comparison.***	**To measure and compare capacity and/or capability against a specific scale.**
1. Bloomberg Philanthropies' Innovation Teams (i-teams)	1. (Evolutionary) Policy Capacity Framework	1. Global Cities Index
2. City Resilience Framework	2. Capacities Framework for Transformative Climate Governance	2. City Prosperity Index (CPI)
3. Enhancing Innovation Capacity in City Government	3. Distributed Strategic Capacity Assessment Framework	3. City Resilience Index
4. ISO 37101: 2016 Sustainable development in communities	4. Five Transition Tasks for Government	4. Cities of the Future Index
5. Public Value Toolkit	5. Governance capabilities framework for dealing with wicked problems	5. El Índice de Innovación Pública
6. The Five Es of Innovation	6. Government Performance Index	6. European Digital Social Innovation Index (
7. The Portfolio Exploration Tool	7. HM Treasury Public Value Framework	7. Fundamental Power of the City Index
8. Transformative Capacity of Public Sector Organisations	8. Innovative Capacity of Governments: A Systemic Framework	8. Global Competitiveness Index (GCI)
9. UNDP Portfolio Competency Framework	9. Legal-institutional Design and Dynamic Capabilities Framework	9. Global Livability Ranking
10. Urban Transformative Capacity Framework	10. Local Governance Performance Index	10. Global Power City Index
11. Whole Government Approach	11. Local government finance – capacity and capability study	11. European Green City Index
	12. Mission-specific Innovation System (MIS)	12. IESE Cities in Motion Index
	13. Nesta Innovation Index	13. Innovation Cities Index
	14. Nesta Public Sector Innovation Index	14. Resilient Cities Index
	15. OECD Core Skills for Public Sector Innovation Framework	15. Smart City Index
	16. Our World in Data, State Capacity Indicators	16. Smart Ecocity Index
	17. Public Innovation Capacity Assessment Framework	17. The Digital Economy and Society Index (DESI)
	18. Public Innovation Capacity Framework	18. The Everyday Democracy Index
	19. Public Innovative Capacity Assessment Framework	19. United Nations E-Government Development Index (EGDI)
	20. State Capabilities for Problem-Oriented Governance	20. What Works Cities
	21. The Technological Innovation Systems (TIS)	21. World Bank Ease of Doing Business Ranking
	22. UK Policy Profession Standards Framework	

Annex 2. Data tables: toolkits, frameworks and indexes

Table 4. Objectives of 54 schemes

Scheme	Objective	Further details
Policy Capacity Framework (Evolutionary)	Presents a conceptual framework for analysing and measuring policy capacity under which policy capacity refers to the competencies and capabilities important to policymaking. It argues that policy failures result from imbalanced attention to nine components of policy capacity and provides a diagnostic tool to identify such capacity gaps. The addition by Karo and Kattel (2018) integrates it with an evolutionary analytical approach that focuses on domains where uncertainty and the need for policy innovations, or novelty creation, is a central concern.	Wu, X., Ramesh, M. and Howlett, M. (2018) 'Policy Capacity: Conceptual Framework and Essential Components', in Wu, X., Howlett, M. and Ramesh, M. (eds) *Policy Capacity and Governance: Assessing Governmental Competences and Capabilities in Theory and Practice.* Cham: Springer International Publishing (Studies in the Political Economy of Public Policy), pp. 1–25. Available at: https://doi.org/10.1007/978-3-319-54675-9_1 Karo, E. and Kattel, R. (2018) 'Innovation and the State: Towards an Evolutionary Theory of Policy Capacity', in Wu, X., Howlett, M. and Ramesh, M. (eds) *Policy Capacity and Governance: Assessing Governmental Competences and Capabilities in Theory and Practice*. Cham: Springer International Publishing (Studies in the Political Economy of Public Policy), pp. 123–150. Available at: https://doi.org/10.1007/978-3-319-54675-9_6
Bloomberg Philanthropies Innovation Teams (i-teams)	Provides cities worldwide with innovation teams dedicated to solving pressing problems and delivering better results for residents.	https://www.bbhub.io/dotorg/sites/2/2014/08/Innovation-Team-Playbook_2015.pdf
Capacities Framework for Transformative Climate Governance	Provides a systematic analytical tool for understanding and supporting the already ongoing changes in the climate governance landscape towards more experimental approaches that include multi-scale, cross-sectoral and public-private collaborations.	Hölscher, K., Frantzeskaki, N. and Loorbach, D. (2019) 'Steering transformations under climate change: capacities for transformative climate governance and the case of Rotterdam, the Netherlands', *Regional Environmental Change,* 19(3), pp. 791–805. Available at: https://doi.org/10.1007/s10113-018-1329-3. van Dijk, J., Wieczorek, A.J. and Ligtvoet, A. (2022) 'Regional capacity to govern the energy transition: The case of two Dutch energy regions', *Environmental Innovation and Societal Transitions,* 44, pp. 92–109. Available at: https://doi.org/10.1016/j.eist.2022.06.001
Cities of the Future Index	To reveal which global cities use technology to create a more sustainable and liveable present and future for their citizens.	https://easyparkgroup.com/studies/cities-of-the-future/en/
City Prosperity Index (CPI)	To enable city authorities, as well as local and national stakeholders, to identify opportunities and potential areas of intervention for their cities to become more prosperous.	https://data.unhabitat.org/pages/city-prosperity-index
City Resilience Index	Aims to provide a comprehensive, technically robust, globally applicable basis for measuring city resilience.	https://www.arup.com/projects/city-resilience-index

Table 4. Objectives of 54 schemes (continued)

Scheme	Objective	Further details
Distributed Strategic Capacity Assessment Framework	Strategy, in Ganz's (2000) definition, is 'the conceptual link we make between the places in which we operate, the times and ways we mobilise and deploy our resources, and the goals we hope to achieve' (Ganz 2000, p. 1010). Strategic capacity is 'the ability of an organisation and its leadership to make these conceptual links.' Based on this definition, the paper develops an assessment framework for strategic capacity. By doing so, it proposes to support effective diagnostics and investments in the strategic and collaborative competencies required for networked governance at all levels of the organisation. It acknowledges the tension between different accountability relationships and the need for continuous, structured, reflective interaction between managers, employees and key stakeholders.	de Jong, J. et al. (2023) 'All Minds on Deck? Assessing Distributed Strategic Capacity in Public-Sector Organizations', Review of Public Personnel Administration, 43(1), pp. 33–55. Available at: https://doi.org/10.1177/0734371X211032389. Ganz, M. (2000). Resources and resourcefulness: Strategic capacity in the unionization of California agriculture, 1959–1966. *American Journal of Sociology,* 105(4), 1003–1062. Crossref. ISI.
Enhancing Innovation Capacity in City Government	The OECD and Bloomberg Philanthropies surveyed innovation capacity across 89 cities in OECD countries and non-OECD economies to understand how cities approach public sector innovation.	https://www.oecd-ilibrary.org/sites/6593ec90-en/index.html?itemId=/content/component/6593ec90-en
European Digital Social Innovation Index	Ranking how different European cities support digital social innovation (DSI) and tech for good to grow and thrive. To provide national and urban policymakers with an understanding of where they are doing well, where there is room for improvement and how they can better support DSI to thrive.	https://www.nesta.org.uk/data-visualisation-and-interactive/european-digital-social-innovation-index/
European Green City Index	Measures and rates environmental performance of 30 leading European cities from 30 European countries. Considers 30 individual indicators per city, touching on various environmental areas, from environmental governance and water consumption to waste management and greenhouse gas emissions.	https://assets.new.siemens.com/siemens/assets/api/uuid:fddc99e7-5907-49aa-92c4-610c0801659e/european-green-city-index.pdf
Five transition tasks for government	Transition perspectives provide a deeper understanding of transformative, system-level dynamics and identify intervention points for supporting socio-technical transitions to meet societal challenges. It attributes various transition tasks to the government to support socio-technical transitions toward overcoming societal challenges. It is, however, difficult for civil servants to execute these transition tasks because they partly conflict with Public Administration (PA) traditions that provide legitimacy to their work.	Braams, R. B., Wesseling, J. H., Meijer, A. J. and Hekkert, M. P. (2023). Civil servant tactics for realising transition tasks understanding the microdynamics of transformative government. Public Administration, 1–19. https://doi.org/10.1111/padm.12933
Fundamental Power of the City Index	The synthetic measure 'Fundamental Power of the City Index' allows the selection of variables representing individual cities' priorities and applies them in every city analysis, development strategy building, and monitoring. The Index is tested for 18 voivodship cities in Poland for 2014–2020. The results of this study can support city stakeholders in their efforts to develop a 'resilient, smart, sustainable city'.	Wojewnik-Filipkowska, A., Gierusz-Matkowska, A. and Krauze-Maślankowska, P. (2024). Fundamental power of the city – A proposition of a new paradigm and index for city development. *Cities,* vol. 144. https://doi.org/10.1016/j.cities.2023.104630.
Global Cities Index (GCI)	The GCI is a metric that seeks to quantify the extent to which a city can attract, retain and generate global flows of capital, people and ideas. It was established to investigate the degree of globalisation in major cities worldwide.	https://www.kearney.com/service/global-business-policy-council/gcr/2022-full-report

Table 4. Objectives of 54 schemes (continued)

Scheme	Objective	Further details
Global Competitiveness Index (GCI)	A highly comprehensive index which captures the microeconomic and macroeconomic foundations of national competitiveness – competitiveness as the set of institutions, policies and factors that determine the level of productivity of a country.	https://databank.worldbank.org/source/africa-development-indicators/Series/GCI.INDEX.XQ; Sala-i-Martin, X. and Artadi, E.V. (2004). "The Global Competitiveness Index", Global Competitiveness Report, Global Economic Forum.
Global Liveability Ranking	Quantifies the challenges presented to an individual's lifestyle and standard of living in 173 cities worldwide.	https://www.eiu.com/n/campaigns/global-liveability-index-2023/
Global Power City Index	Evaluates and ranks the major cities of the world according to their 'magnetism' or their comprehensive power to attract people, capital and enterprises from around the world.	https://mori-m-foundation.or.jp/english/ius2/gpci2/index.shtml
Governance capabilities framework for dealing with wicked problems	Wicked problems not only require alternative action strategies, but also alternative ways of observing and enabling. These capabilities form the basis for achieving small wins in wicked problems.	Termeer, C. J. A. M., Dewulf, A., Breeman, G., & Stiller, S. J. (2015). Governance Capabilities for Dealing Wisely With Wicked Problems. *Administration and Society,* 47(6), 680-710. https://doi.org/10.1177/0095399712469195
Government Performance Index (GPI)	Evaluates city government performance based on factors like leadership and management, policy formulation and implementation, and accountability and transparency.	https://www.pactworld.org/library/government-performance-index-handbook
HM Treasury Public Value Framework	The framework seeks to define everything that a public body should be doing in between to maximise the likelihood of delivering optimal value from the funding it receives. It sets out the activities required to turn public money into policy outcomes, creating a set of criteria that can then be used to assess the extent to which those activities are taking place and, by extension, how likely it is that value is being maximised.	Original version by Michael Barber (2017): https://www.gov.uk/government/publications/delivering-better-outcomes-for-citizens-practical-steps-for-unlocking-public-value HM Treasury final version (2019): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785553/public_value_framework_and_supplementary_guidance_web.pdf
IESE Cities in Motion Index	Explores how 183 cities worldwide are positioned regarding sustainability, fairness and liveability, viewed as the key factors for weathering climate-related and economic shocks.	https://blog.iese.edu/cities-challenges-and-management/2020/10/27/iese-cities-in-motion-index-2020/
Innovation Cities Index	Ranks and analyses cities based on their capacity for innovation.	https://innovation-cities.com/index-2019-city-rankings-method-overview-2/18835/
Innovative Capacity of Governments: A Systemic Framework	This practical and systemic framework guides governments in leveraging innovation as an integral part of policymaking and administration. It supports them in enhancing their capacity to adapt proactively to the changing environment. Ultimately, the framework helps governments steward their public administration systems to build more holistic, impactful and sustainable solutions, and improve the lives of citizens. It examines the innovative capacity of existing public sector systems and their governing mechanisms, rules, processes, norms and other factors.	https://oecd-opsi.org/publications/innovative-capacity-framework/

Table 4. Objectives of 54 schemes (continued)

Scheme	Objective	Further details
ISO 37101: 2016 Sustainable development in communities	ISO 37101:2016 establishes requirements for a management system for sustainable development in communities, including cities, using a holistic approach to ensure consistency with the sustainable development policy of communities. While not focused exclusively on innovation, this International Organization for Standardization standard provides a framework for sustainable development in communities, often including governance innovation.	https://www.iso.org/standard/61885.html
Legal-institutional Design and Dynamic Capabilities Framework	Presents a new framework about how legal institutional design affects the development of dynamic capabilities for mission-oriented innovation policy in innovation agencies. The framework is conceived as a mid-range theory to assist policymakers facing the challenge of (re)designing innovation agencies for MOIP.	Spanó, E. et al. (2023). 'Legal–institutional design and dynamic capabilities for mission-oriented innovation agencies: a new framework', *Science and Public Policy,* p. scad060. Available at: https://doi.org/10.1093/scipol/scad060.
Local Governance Performance Index	A new approach to measuring, analysing and improving local governance. It aims to help countries collect, assess and benchmark detailed information around issues of local and public sector performance, and service delivery to citizens and businesses.	https://documents.worldbank.org/pt/publication/documents-reports/documentdetail/196591468197374514/the-local-governance-performance-index-lgpi
Local government finance – capacity and capability study	Research to explore the concern that sector-wide capacity and capability issues are affecting local authority finance functions.	https://localpartnerships.gov.uk/wp-content/uploads/2023/02/Local-government-finance-%E2%80%93-capacity-and-capability-study.pdf
Mission-specific Innovation System (MIS)	To study the interactions between actors to assess mission-specific innovation systems.	Elzinga, R., Janssen, M.J., Wesseling, J., Negro, S.O. and Hekkert, M.P. (2023). Assessing mission-specific innovation systems: Towards an analytical framework, *Environmental Innovation and Societal Transitions,* Volume 48
Nesta Innovation Index	Aims to offer a significantly better basis for government policy that affects innovation. To go beyond R&D to more effectively, it measures the link between innovation investment and productivity growth.	https://media.nesta.org.uk/documents/innovation_index_2009.pdf
Nesta Public Sector Innovation Index	A survey tool to understand innovation in the public sector and the factors that enable it.	https://media.nesta.org.uk/documents/innovation_in_public_sector_orgs.pdf
OECD Core Skills for Public Sector Innovation Framework	The OECD's beta skills model for public sector innovation has been based on six 'core' skills areas. For each, the model provides a matrix that decomposes the skill area into four elements of practice against three levels of capability: 1) basic awareness, 2) emerging capability, and 3) regular practitioner.	OECD-OPSI Core Skills for PSI 2017: https://oecd-opsi.org/publications/core-skills/
Our World in Data, State Capacity Indicators	To make the knowledge on the big problems accessible and understandable. There are 26 indicators of state capacity.	https://ourworldindata.org/charts
Public Innovation Capacity Assessment Framework	Builds a model of the public innovation capacity based on innovation systems theory and the literature on public innovation. Five functions are identified and operationalised to construct a government self-assessment survey instrument—this instrument is tested by using it to self-assess the public innovation capacity of a Dutch municipality.	Meijer, A. (2019). 'Public Innovation Capacity: Developing and Testing a Self-Assessment Survey Instrument', *International Journal of Public Administration,* 42(8), pp. 617–627. Available at: https://doi.org/10.1080/01900692.2018.1498102.

Table 4. Objectives of 54 schemes (continued)

Scheme	Objective	Further details
Public Innovation Capacity Framework	Innovation capacity is defined as a set of conditions that supports innovation or provides a supportive infrastructure; it is the set of factors that either allows innovation to occur or actively encourages it.	Lewis, J.M., Ricard, L.M. and Klijn, E.H. (2018). 'How innovation drivers, networking and leadership shape public sector innovation capacity', *International Review of Administrative Sciences,* 84(2), pp. 288–307. Available at: https://doi.org/10.1177/0020852317694085.
Public Innovative Capacity Assessment Framework	Presents an integrative framework of the capacities public organisations need to be able to innovate while continuously improving their services and processes.	Gieske, H., van Buuren, A. and Bekkers, V. (2016). 'Conceptualizing public innovative capacity: A framework for assessment', *The Innovation Journal: The Public Sector Innovation Journal,* 21(1), pp. 1–25. Available at: https://www.innovation.cc/scholarly-style/2016_21_1_1_gieske-buuren-bekkers_public-innovate.pdf.
Public Value Toolkit	A set of materials designed to help educators and practitioners understand, utilise and share the core concepts of the public value framework.	https://www.cityleadership.harvard.edu/resources/collection/public-value-tool-kit/
Smart City Index	Aims to offer a balanced focus on the economic and technological aspects of smart cities on the one hand and the 'humane dimensions' of smart cities (quality of life, environment, inclusiveness) on the other.	https://lkycic.sutd.edu.sg/research/urban-innovation/cities-and-innovation/smart-cities-index/ https://imd.cld.bz/Smart-City-Index-2021/12/
Smart EcoCity Index	Tracks the performance of Chinese cities. The index provides granular-level data on behavioural habits and government investments in Asian cities.	https://www.smartecocity.com/smartecocity-index/
State Capabilities for Problem-Oriented Governance	Helps public managers think about how to be more intentional in designing and managing an effective problem-solving method that incorporates continuous learning and collaboration. It provides three capabilities for any public organisation to be more responsive to big, thorny problems.	de Jong, J. and Fernandez-Monge Cortazar, F. (2022). Tackling Big, Thorny Problems by Building the Capabilities Your Organization Needs: A New Approach Placing the Right Partners, Data, and Solutions at the Center. URL: https://www.cityleadership.harvard.edu/resources/tackling-big-thorny-problems-by-building-the-capabilities-your-organization-needs/
The Digital Economy and Society Index (DESI)	Summarised indicators on Europe's digital performance and tracked the progress of EU countries.	https://digital-strategy.ec.europa.eu/en/policies/desi
The Everyday Democracy Index	An approach to comparing the democratic health of nations	https://base.socioeco.org/docs/everyday_democracy_index.pdf
The Five Es of Innovation	The 'five Es' – evidence, empathy, engagement, engineering and ensembles – are ingrained in the DNA of innovative organisations. Problem-solvers in cities should seek to harness these elements to foster an innovative culture.	https://apolitical.co/solution-articles/en/the-5-genes-of-an-innovative-city-hall
The Portfolio Exploration Tool	Aims to help determine a team's or organisation's public sector innovation portfolio in 30-45 minutes.	https://oecd-opsi.org/pet/
The Resilience Framework	Provides a holistic, practical and evidence-based definition of urban resilience. It identifies 12 goals or outcomes which contribute to the city's 'immune system', across four critical dimensions of city resilience.	https://www.arup.com/projects/city-resilience-index

Table 4. Objectives of 54 schemes (continued)

Scheme	Objective	Further details
The Technological Innovation Systems (TIS)	Explains the rate of technological change. It focuses on understanding the dynamics of an innovation system centred around a specific technology. Focus on technology limits its suitability for solving societal problems.	Markard, J., Hekkert, M. and Jacobsson, S. (2015). The technological innovation systems framework: Response to six criticisms, *Environmental Innovation and Societal Transitions,* Volume 16, Pages 76-86.
Transformative Capacity of Public Sector Organisations	Defines the transformative capacity of a public sector organisation (PSO) as the interaction between its purposeful enactment of various roles when exercising change agency and the deployment and development of its dynamic skills when mobilising the internal and external resources at its disposal. It offers the opportunity for a granular understanding of what specific combinations of those elements are at play in implementing highly diverse sustainability actions. This has important theoretical and empirical implications and practical implications for more targeted transformative capacity-building efforts.	Borrás, S. et al. (2023). The Transformative Capacity of Public Sector Organizations in Sustainability Transitions: A Conceptualization. Working paper 2023/2. CIRCLE - Centre for Innovation Research: Lund University. Available at: http://wp.circle.lu.se/upload/CIRCLE/workingpapers/202302_borras.pdf
UK Policy Profession Standards Framework	Defines the skills, knowledge and activities required for each standard as individuals progress from gaining foundational knowledge to becoming a skilled practitioner to being a policy leader. These three levels of learning set expectations for what a policy professional can do for every standard at any grade or career stage, from attaining a universal baseline of knowledge at level 1 to applying skills and knowledge in practice at level 2 to developing deep expertise at level 3.	UK Policy Profession Standards 2021 update: https://assets.publishing.service.gov.uk/media/6246c65dd3bf7f32a7c011c7/UPDATED_PP_Standards_main_v5_acc.pdf
UNDP Portfolio Competency Framework	'No matter how well conceived and relevant in their own right, projects tend to pursue single point rather than systemic solutions, limit strategic space and the ability to adapt continuously and to connect the dots systemically. Systemic solutions need adaptive ways of working, strategic space, iterative learning, and radical collaboration.' Helping UNDP transition to a new value proposition and business model, the Portfolio Approach Competency Framework aims to identify the strategic and political skills and 'bureaucracy hacking' that are as (if not more) valuable than technical and delivery skills when delivering initiatives that pursue strategic innovation within government.	UNDP Portfolio Approach Competency Framework blog post: https://medium.com/@undp.innovation/building-capacity-for-strategic-innovation-an-emerging-competency-framework-for-portfolio-work-fadb768242be UNDP Portfolio Approach Competency Framework Overview: https://drive.google.com/file/d/1epEJ29znNRVPYzyv7uHBlNOrbJsmeEUa/view
United Nations E-Government Development Index (EGDI)	Along with an assessment of the website development patterns in a country, the E-Government Development index incorporates the access characteristics, such as the infrastructure and educational levels, to reflect how a country is using information technologies to promote access and inclusion of its people	https://publicadministration.un.org/egovkb/en-us/About/Overview/-E-Government-Development-Index
Urban Transformative Capacity Framework	Identifies ten key components and a range of factors describing the forms of agency and interaction, development processes and relational dimensions involved in building urban transformative capacity, emphasising the vital role of place and scale in this. It thus establishes a baseline and direction for capacity growth. This allows recognition of the requirements and assets of diverse types of cities and urban contexts in the global North and South, and offers strategic orientation for urban policy-making, planning practice and research.	Wolfram, M. (2016). 'Conceptualizing urban transformative capacity: A framework for research and policy', Cities, 51, pp. 121–130. Available at: https://doi.org/10.1016/j.cities.2015.11.011. Wolfram, M., Borgström, S. and Farrelly, M. (2019). 'Urban transformative capacity: From concept to practice', Ambio, 48(5), pp. 437–448. Available at: https://doi.org/10.1007/s13280-019-01169-y.
What Works Cities	Encourages cities to use data more effectively in their policymaking. What Works Cities Certification evaluates how well cities are managed and whether they have the right people, practices and policies to put data and evidence at the centre of decision-making.	https://whatworkscities.bloomberg.org/assessment/

Table 4. Objectives of 54 schemes (continued)

Scheme	Objective	Further details
Whole Government Approach	Aims to mobilise and align many ministries and agencies around a common challenge.	https://op.europa.eu/en/publication-detail/-/publication/c6f35ad2-be33-11ed-8912-01aa75ed71a1/language-en/format-PDF/source-282011873
World Bank Ease of Doing Business Ranking	Economies are ranked on their ease of doing business, from 1 to 190. A high ease of doing business ranking means the regulatory environment is more conducive to starting and operating a local firm. When compared across years, the ease of doing business score shows how much the regulatory environment for local entrepreneurs in an economy has changed over time in absolute terms. In contrast, the ease of doing business ranking shows only how much the regulatory environment has changed relative to that in other economies.	https://archive.doingbusiness.org/en/rankings#:~:text=Ease%20of%20Doing%20Business%20rankings&text=Economies%20are%20ranked%20on%20their,operation%20of%20a%20local%20firm.
El Índice de Innovación Pública	Measures and develops capacities to innovate developed by the Government Laboratory and the Inter-American Development Bank. The Public Innovation Index seeks to help the state adapt to the changing contexts, needs and expectations of citizens. This, through clear and simple evidence, guides decision-making and promotes the development of capabilities.	https://indice.lab.gob.cl/#/
Resilient Cities Index	A comprehensive evaluation of urban resilience that explores cities' preparedness to tackle shocks by examining their critical infrastructure, environment, socio-institutional dynamics and economy.	https://impact.economist.com/projects/resilient-cities/en/whitepaper/the-resilient-cities-index/?trk=feed_main-feed-card_feed-article-content

Table 5. Scheme developer, funder, sector and date established

Scheme	Developer host organisation	Funder	Sector it emerged from	Date developed
El Índice de Innovación Pública	Government of Chile	Public sector	Public sector	2019
Resilient Cities Index	Economist Impact Unit	Tokio Marine Group	Private sector	2023
(Evolutionary) Policy Capacity Framework	Emerged from policy studies	Unclear	Academia	2018
Global Cities Index (GCI)	Kearney	Kearney	Private sector	2008
Bloomberg Philanthropies Innovation Teams (i-teams)	Bloomberg Philanthropies	Bloomberg Philanthropies	Philanthropy	2014
Capacities Framework for Transformative Climate Governance	Emerged from sustainability studies	Unclear	Academia	2019
City Prosperity Index (CPI)	UN-Habitat	Intergovernmental	Intergovernmental	2016
City Resilience Index	Arup	Rockefeller Foundation	Private sector and Philanthropy	2018
City Resilience Framework	Arup	Rockefeller Foundation	Private sector and Philanthropy	2018
Distributed Strategic Capacity Assessment Framework	Emerged from public sector innovation studies	Unclear	Academia	2021
Cities of the Future Index	EasyPark (global parking company)	EasyPark	Private sector	2017
Enhancing Innovation Capacity in City Government	OECD and Bloomberg Philanthropies	Bloomberg Philanthropies (?)	Philanthropy and intergovernmental	2019
European Digital Social Innovation Index	Nesta	EU-funded DSI4EU project	Philanthropy and Intergovernmental	2019
Five transition tasks for government	Various	Unclear	Academia	Unclear
Fundamental Power of the City Index	Academia (in particular, Wojewnik-Filipkowska, A., Gierusz-Matkowska, A. and Krauze-Maślankowska, P. (2024))	Unclear	Academia	2014 - 2020
Global Competitiveness Index (GCI)	World Economic Forum	World Economic Forum	Other	2004 - 2020
Global Livability Ranking	Economist Intelligence Unit	Economist Intelligence Unit?	Private sector	Unclear
Global Power City Index	Institute for Urban Strategies (IUS) at the Mori Memorial Foundation	Mori Memorial Foundation	Philanthropy	2008
Governance capabilities framework for dealing with wicked problems	Sustainability studies	Unclear	Academia	2015
Government Performance Index (GPI)	Pact	Pact	Philanthropy	2018

Table 5. Scheme developer, funder, sector and date established (continued)

Scheme	Developer host organisation	Funder	Sector it emerged from	Date developed
European Green City Index	Economist Intelligence Unit	Siemens	Private sector	2009
HM Treasury Public Value Framework	HM Treasury	HM Treasury	Public sector	2019
IESE Cities in Motion Index	University of Navarra, Spain	Unclear	Academia	2013
Innovation Cities Index	2thinknow	2thinknow	Private sector	2007
Innovative Capacity of Governments: A Systemic Framework	OECD	OECD	Intergovernmental	2022
ISO 37101: 2016 Sustainable development in communities	ISO (International Organization for Standardization)	ISO (International Organization for Standardization)	Other	2016
Legal-institutional Design and Dynamic Capabilities Framework	Emerged from public sector innovation studies	Unclear	Academia	2023
Local Governance Performance Index	World Bank	Intergovernmental	Intergovernmental	2016
Local government finance – capacity and capability study	LGA	UK Government	Philanthropy and government	2019
Smart City Index	Lee Kuan Yew Center for Innovative Cities, Singapore University of Technology and Design	International Institute for Management Development (IMD	Academia	2017
Mission-specific Innovation System (MIS)	Emerged from innovation studies	Unclear	Academia	2023
Nesta Innovation Index	Nesta	Nesta	Philanthropy	2009 and updated since
Nesta Public Sector Innovation Index	Nesta	Nesta	Philanthropy	2011
OECD Core Skills for Public Sector Innovation Framework	OECD	Horizon Europe	Intergovernmental	2017
Our World in Data, State Capacity Indicators	Our World in Data	Unclear	Philanthropy	2019
Public Innovation Capacity Assessment Framework	Emerged from public sector innovation studies	Unclear	Academia	2019
Public Innovation Capacity Framework	Emerged from public sector innovation studies	Unclear	Academia	2018
Public Innovative Capacity Assessment Framework	Emerged from public sector innovation studies	Unclear	Academia	2016
Public Value Toolkit	Harvard University	Unclear	Academia	2020

Table 5. Scheme developer, funder, sector and date established (continued)

Scheme	Developer host organisation	Funder	Sector it emerged from	Date developed
Smart EcoCity Index	Smart EcoCity	Smart EcoCity	Private sector	2018
State Capabilities for Problem-Oriented Governance	Harvard University	Unclear	Academia	2022
The Digital Economy and Society Index (DESI)	OECD	OECD	Intergovernmental	2014
The Everyday Democracy Index	Demos	Unclear	Philanthropy	2008
The Five Es of Innovation	Harvard University	Unclear	Academia	2019
The Portfolio Exploration Tool	OECD	OECD	Intergovernmental	2020
The Technological Innovation Systems (TIS)	Emerged from innovation studies	Unclear	Academia	1991
Transformative Capacity of Public Sector Organisations	Emerged from public sector innovation studies	Unclear	Academia	2023
UK Policy Profession Standards Framework	UK Policy Profession	Unclear	Government	2018
UNDP Portfolio Competency Framework	UNDP	UNDP	Intergovernmental	2023
United Nations E-Government Development Index (EGDI)	United Nations (UN)	United Nations (UN)	Intergovernmental	2003
Urban Transformative Capacity Framework	Emerged from urban studies	Unclear	Academia	2016
What Works Cities	Bloomberg Philanthropies, managed by Results for America	Bloomberg Philanthropies	Philanthropy and intergovernmental	2015; launched in 2017
Whole Government Approach	European Commission	European Commission	Intergovernmental	2017?
World Bank Ease of Doing Business Ranking	World Bank	World Bank	Intergovernmental	2002

Table 6. Popularity of each scheme using Google Search

Scheme	Google page results (correct as of 16 November 2023)
(Evolutionary) Policy Capacity Framework	2,020
Global Cities Index	309,000
Bloomberg Philanthropies Innovation Teams (i-teams)	6,590
Capacities Framework for Transformative Climate Governance	10
City Prosperity Index (CPI)	10,200
City Resilience Index	10,800
City Resilience Framework	27,200
Distributed Strategic Capacity Assessment Framework	0
Cities of the Future Index	29,900
Enhancing Innovation Capacity in City Government	1,280
European Digital Social Innovation Index	3930
Five transition tasks for government	0
Fundamental Power of the City Index	5
Global Competitiveness Index (GCI)	538,000
Global Liveability Ranking	15,000
Global Power City Index	53,600
Governance capabilities framework for dealing with wicked problems	0
Government Performance Index (GPI)	19,700
European Green City Index	10,500
HM Treasury Public Value Framework	73
IESE Cities in Motion Index	9,620
Innovation Cities Index	15,400
Innovative Capacity of Governments: A Systemic Framework	267
ISO 37101: 2016 Sustainable development in communities	1,190
Legal-institutional Design and Dynamic Capabilities Framework	0
Local Governance Performance Index	1,840
Local government finance – capacity and capability study	0
Smart City Index	121,000

Scheme	Google page results (correct as of 16 November 2023)
Mission-specific Innovation System (MIS)	253
Nesta Innovation Index	20,000
Nesta Public Sector Innovation Index	51
OECD Core Skills for Public Sector Innovation Framework	4
Our World in Data, State Capacity Indicators	0
Public Innovation Capacity Assessment Framework	0
Public Innovation Capacity Framework	0
Public Innovative Capacity Assessment Framework	0
Public Value Toolkit	591
Smart EcoCity Index	4
State Capabilities for Problem-Oriented Governance	437
The Digital Economy and Society Index (DESI)	37,900
The Everyday Democracy Index	17,700
The Five Es of Innovation	1
The Portfolio Exploration Tool	8
The Technological Innovation Systems (TIS)	119,000
Transformative Capacity of Public Sector Organisations	7
UK Policy Profession Standards Framework	422
UNDP Portfolio Competency Framework	337
United Nations E-Government Development Index (EGDI)	5890
Urban Transformative Capacity Framework	262
What Works Cities	93,900
Whole Government Approach	42,600
World Bank Ease of Doing Business Ranking	195,000
El Índice de Innovación Pública (Search 21 December 2023)	15,000
Resilient Cities Index (Search date: 21 December 2023)	12,800

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About the Institute for Innovation and Public Purpose (IIPP)

The Institute for Innovation and Public Purpose (IIPP) at University College London (UCL) ims to develop a new framework for creating, nurturing and evaluating public value in order to achieve economic growth that is more innovation-led, inclusive and sustainable. This requires rethinking the underlying economics that has informed the education of global civil servants and the design of government policies. Our work feeds into innovation and industrial policy, financial reform, institutional change and sustainable development. A key pillar of IIPP's research is its understanding of markets as outcomes of the interactions between different actors. In this context, public policy should not be seen as simply fixing market failures, but also as actively shaping and co-creating markets. Re-focusing and designing public organisations around mission-led, public purpose aims will help tackle the grand challenges facing the 21st century.

IIPP is a department within UCL – and part of The Bartlett, which consistently ranks in the top two faculties for architecture and the built environment in the world.

About the project

IIPP, with support from Bloomberg Philanthropies, has launched an initiative to establish a Public Sector Capabilities Index. This will be the first global measure of city governments' capacity to solve problems. The project will examine areas in which a municipality can quickly scale or invest to bolster existing capabilities, serving as a guide for city leaders as well as state and national entities who can supply funding.

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