MEASURE.
TARGET.
ACT.

Practical Guidelines for
Starting the Digitalisation of
Public Services

§ NRD Companies

Contents
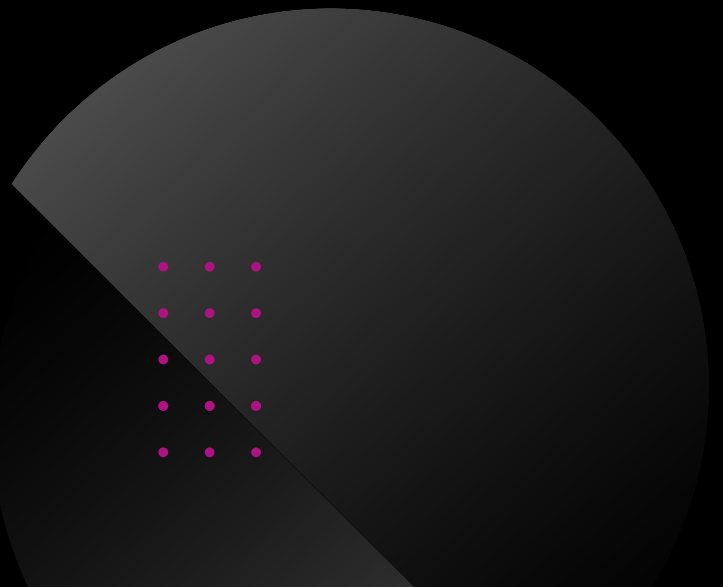
Introduction

Here are many well-known buzzwords related to the digitalisation of the public sector, such as "user centricity", "interactivity", "proactivity", "transparency", "simplification" and smart use of data, to name just a few. However, little is said about how we can put all these good ideas into practice.

It's no easy feat, and the facts are brutal: according to the World Bank's Digital Dividends report, fewer than 20% of all digital government projects are successful.[1] So, what is the key to success?

There is no single magic formula for a successful public services digitalisation project. Nonetheless, our extensive experience in the field has taught us that the "digital" component is the least complicated element of creating a well-performing digital service. To achieve real change, a whole complex of challenging "non-technological" factors – legal, regulatory, organisational, procedural and Even human – must be understood and realised.

Governments face numerous challenges on their path to the digitalisation of public services, ranging from limited financial resources, insufficient capabilities and the lack of a digital infrastructure, to concerns relating to by data privacy, cyber-security and the digital divide. Nevertheless, the benefits of digitalisation outweigh these challenges and it is the only path forward. Once started, the process evolves to create a "virtuous circle": public administrations develop better digital services because the users' demand is high; while an increasing number of users of the services begin pressing the public institutions for an even higher quality delivery.

In this paper, practical insights and methodological guidelines are showcased, based on the best international practice and our own experience of implementing digitalisation projects worldwide and building the best public services for citizens and businesses. These guidelines will provide valuable insights for governments and institutions that are currently planning the development of their digital public services, both those that are looking for guidance on where to start and how to proceed, as well as the establishments that have started provisioning digital services and are now looking for ways to improve their provision.

> These guidelines will provide valuable insights for governments and institutions that are currently planning the development of their digital public services, both those that are looking for guidance on where to start and how to proceed, as well as the establishments that have started provisioning digital services and are now looking for ways to improve their provision.

[1] World Bank Group. World Development Report 2016: Digital Dividends, 2016 // https://openknowledge.worldbank.org/bitstream/handle/10986/23347/9781464806711.pdf

Principles of Digital Services Development:
International Models

There are quite a lot of different models, methods and indexes used for measuring a digital government, as well as its digital services. In this case, we will briefly present just a few.

In the Digital Government Policy Framework (DGPG),[2] **the Organisation for Economic Co-operation and Development (OECD)** defines a mature digital government by the following characteristics that can be used to evaluate and compare the progress of a country in achieving a digital government. Such a government is:
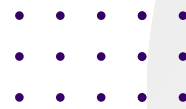
Digital by Design

Data-Driven

Acts as Platform

Digital by design: governing and leveraging digital technologies are used to rethink and re-engineer public processes, simplify procedures and to create new channels of communication and engagement with the stakeholders.

Data-driven: data is valued as a strategic asset and establishes the governance, access, sharing and re-use mechanisms for improving the decision-making and service delivery.

Acts as platform: platforms, standards and services are deployed to help teams focus on user needs in the public service design and delivery.

[2] https://www.un.org/sites/un2.un.org/files/2020_un_e-government_survey_full_report.pdf

Open by Default

Open by default: government data and policy-making processes are made available to the public, within the limits of the existing legislation and in balance with the national and public interest.

User-Driven

User-driven: its central role is to create accord with the public's needs and convenience in the shaping of the processes, services and policies, by adopting inclusive mechanisms that enable this to happen.

Proactive

Proactive: it anticipates the public's needs and responds to them rapidly, avoiding the need for cumbersome data and service delivery processes.

§ NRD Companies

Meanwhile, according to the **United Nations Web Measure model,**[3] there are **four stages of E-Government Development** that conform to a scale of progressively sophisticated citizen services as follows:

STAGE 1 Emerging Presence

represents information that is limited and basic: the e-government online presence may be comprised of a web page and/or an official website; links to the ministries/departments for education, health, social welfare, labour and finance may/may not exist; links to the regional/local government may/may not exist; and some archived information, such as messages from the Heads of State or a documents such as the Constitution may be available online, but most information remains static with the fewest options available for citizens.

STAGE 2 Enhanced presence

where the government provides greater public policy and governance sources: there is current and archived information available, such as the country's policies, laws and regulations, reports, newsletters and downloadable databases. The user can search for documents, as there is a help feature and a site map provided, with a larger selection of public policy documents (such as the e-government strategy, policy briefs on specific education or health issues, etc.) available. However, the interaction is still primarily unidirectional, with information generally flowing only from the government to the citizens.

STAGE 3 — Transactional presence

that allows two-way interactions between the citizens and the government: for example, it includes options for paying taxes, applying for ID cards, birth certificates/passports, licence renewals and other similar C2G interactions, by allowing the user to submit these online 24/7. The citizens can also pay for the relevant public services, such as motor vehicle violations, taxes or fees for postal services through their credit, bank or debit card, while the providers of goods and services can bid online for public contacts via secure links, etc.

STAGE 4 — Connected presence

that represents the most sophisticated level in the online e-government initiatives: it is characterised by an integration of G2G, G2C and C2G (and reverse) interactions. The government deliberately encourages participatory decision-making and is willing and able to involve the members of society in a two-way open dialogue. Through interactive features such as the web comment forms, as well as innovative online consultation mechanisms, the government actively solicits the citizens' views during its public policy, law making and democratic participatory decision-making process.

The World Bank Group's Public Service Delivery Index (PSDI), which forms a part of the GovTech Maturity Index (GTMI),[4] is based on several composite indicators that measure the existence of national online service portals and the maturity of those services – whether they are **informational or transactional** – as well as the online services for revenue administration. In this methodological approach, the digital public services are separated into two groups:

1 **Informational services that** enable a one-way flow of information from government portals to citizens or businesses about the services or open data.

2 **Transactional services that** provide a two-way flow of information and interactions with the public bodies; usually, these are provided through digital public service delivery portals.

In the EU countries, the eGovernment performance has been monitored for more than 20 years. In 2001, the European Commission presented its methodological approach to the development of electronic services, based on 4-stages of "Online Sophistication" (later supplemented with a 5th stage), to provide a common understanding of the maturity of electronic services for all EU member countries. The 5 **levels of the "Online Sophistication"** [5] **of electronic services** are as follows:

LEVEL 1

Information

LEVEL 2

One Way Interation

(downloadable forms)

LEVEL 3

Two Way Interaction

(electronic forms)

LEVEL 4

Transaction

(full electronic case handling)

LEVEL 5

Targetisation/ Automation

(pro-active and automated)

[4] https://read.oecd.org/10.1787/f64fed2a-en?format=pd
[5] http://www.infodev.org/infodev-files/resource/InfodevDocuments_16.pdf

At the moment, the maturity of digital public services in the EU member states is also monitored using **four top-level benchmarks,[6]** where each is comprised of multiple sub-indicators that are used to assess a set of various "life events"[7] for the users.[8] The four benchmarks are:

1. **User Centricity:** To what extent are the services provided online? How mobile-friendly are they? What online support and feedback mechanisms are in place?
2. **Transparency:** Are the public administrations providing clear, open communication with information about how their services are delivered? Are they transparent about the responsibilities and performance of their public organisations, and the way that people's personal data is being processed?
3. **Key Enablers:** What technological enablers (eDocuments, eID, authentic sources, digital post) are in place to deliver the eGovernment services?
4. **Cross-Border Mobility:** How easily are citizens from abroad able to access and use the online services?

To summarise this short overview, international models and methodologies have been created to define valuable principles and directions that the countries engaged in digital transformation should follow. Although these models are all slightly different, they all demonstrate a common, globally accepted understanding that the development of a "good" digital public services requires a strategic engagement to transform the way that things have been done "traditionally".
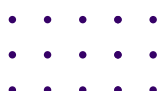
However, even though there are so many good approaches, it can be seen that governments and institutions are often struggling to apply these in practice. In fact, the approaches are quite complicated and broad, including many distinct aspects that are difficult to summarise in a single project. For this reason, we have de-constructed these international methodologies, supplemented them with practical insights based on our many years of experience, and produced a step-by-step methodology for the public institutions that are planning or already are engaged in the digitalisation of their services, to present them a simple tool to measure the maturity of their digital services and to define their path to further progress.

> However, even though there are so many good approaches, it can be seen that governments and institutions are often struggling to apply these in practice. In fact, the approaches are quite complicated and broad, including many distinct aspects that are difficult to summarise in a single project.

---

[6] https://joinup.ec.europa.eu/sites/default/files/document/2014-12/Method%20paper%202010%20-%20Preparing%20the%209th%20Benchmark%20Measurement.pdf
[7] "Life event" means a user journey representing common public services that citizens or businesses will go through: Regular Business Operations, Moving, Owning and Driving a Car, Starting a Small Claims Procedure, Business Start-Up, Family life, Losing and finding a job and Studying
[8] https://digital-strategy.ec.europa.eu/en/library/egovernment-benchmark-2020-egovernment-works-people

Digitalisation of Public Services: Roadmap Preparation Guidelines

Setting the roadmap to successful digitalisation

International indexes are usually designed for measuring the maturity level of the whole country's digital government. But although they define some important principles, practical issues for any institution remain, such as: How do they not get lost among so many slightly different buzzwords? How are important aspects not forgotten when there are so many of them? And at what stages should these aspects be remembered, followed and embedded into the digitalisation work?

To understand these challenges, NRD Companies has developed a framework that encompasses the crucial internationally-recognised principles in a user-friendly, easily understandable and practical manner. We have defined the guidelines for preparing for public service digitalisation efforts in 3 steps:

STEP 1

Assessment of the current state and the desired level of public services based on a Service Digitalisation Level Assessment tool

STEP 2

Incorporation of a set of essential quality characteristics for the digital services

STEP 3

Definition of the scope of the digitalisation effort – it's not just "digital"!

Service
Digitalisation
Level Assessment
Tool

Our Service Digitalisation Level Assessment tool is based on the European Union methodological approach, where a 5-level "Online Sophistication" measurement model is used to assess an organisation's digital services. This model enables institutions to implement a quick and easy "diagnosis" of their situation, and to define a vision for the future. However, the EU model was developed in 2001 and last reviewed (when "Level 5" was introduced) in 2010, so it is partly outdated. We've therefore updated the names and definitions for each of the levels, to include the progressive characteristics of digital services

Assessment of the Current State and Desired Level of Public Services with the Service Digitalisation Level Assessment Tool

Our informative, yet straightforward tool, is based on the best international practice and can evaluate any public service, classify the current state of its digitalisation, and define the desired level of digital services to be achieved.

LEVEL 0

LEVEL 1

LEVEL 2

LEVEL 3
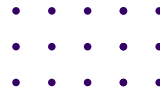
LEVEL 4

LEVEL 5

LEVEL 0

No Online Presence Level

Nothing is provided online related to the particular public service

The public institution that provides this service doesn't have a website or doesn't provide any service-related information online (e.g. contact details for the institution, particular departments/specialists, etc.)

LEVEL 1

Information Provision Level

Provision of public service-related information is available online

On the website of the public institution, all basic information about the service is provided in a simple and easily accessible manner (e.g. information about the procedures, rules, steps and costs to obtain a specific public service).

LEVEL 2

One-way Interactivity Level

There is a possibility to download and then print and provide on paper the form needed to apply for the service

The public institution's website provides a downloadable form that can be used to apply for this service, which then must be printed by the user, filled in with data and delivered to the institution on-site, to initiate the delivery of the relevant public service.
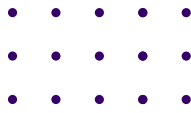
LEVEL 3

Two-way Interactivity Level

There is a possibility to download, fill in and provide the forms to apply for the public service online

The public institution's website or the Governmental Services Portal (preferably) provides the user with a possibility to apply for the service remotely (by filling in and sending to the institution the digital form needed to apply for the service).
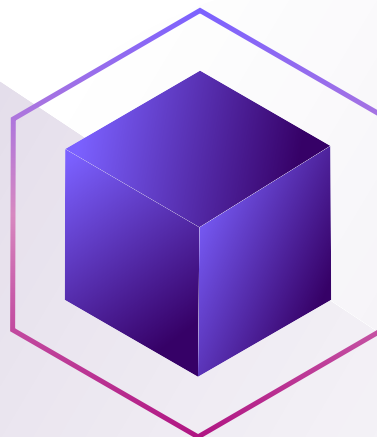
LEVEL 4

Digital Delivery Level

Fully-digital handling of all public service delivery processes (from applications to the delivery of the result)

The Governmental Services Portal provides the user with a possibility to apply for this service and receive it in a fully digital manner (by filling in the form needed to apply for the service, paying for the service and receiving the final result, e.g. to register a business or a car, or to get a certificate, etc.), where the entire process is fully digital and paperless.

LEVEL 5

Proactivity Level

The service is delivered in a pro-active, fully automated manner (e.g. it is initiated without a specific application, based on data about the user's specific situation or a "life event")

The service is triggered not by the user's official application, but by his/her situation or life event that requires a specific service from the government. The service can be provided automatically, without the end-user's application, or the information is sent automatically to inform the user that he/her is entitled to a specific service. The institutions that provide the public service will pro-actively reach out to the user (e.g. informing the user that his/her driver's licence, certificate or another document will soon expire, and asking if the user would like to apply for an extension of document's validity, while providing a link to a pre-filled request; or based on a "life event" of the user (e.g. the birth of a child), providing a set of related services, or a so-called "composite service", automatically). or a car, or to get a certificate, etc.), where the entire process is fully digital and paperless.
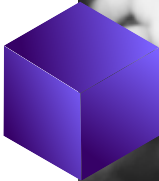
Please try out our digital tool to help you to define the digitalisation level of any public service

Find out the level of digitization

Incorporation of a set of Essential Quality Characteristics for the Digital Services
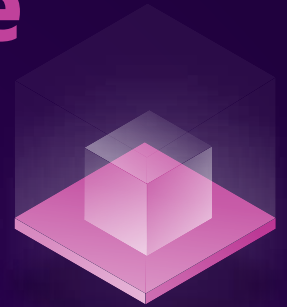
Specific characteristics define the quality of advanced digital services. Based on our long-time digitalisation experience in various regions of the world and in accordance with the best international recommendations, we have formulated **seven essential quality characteristics for digital services:**

1 **User-driven:** such services are constructed, from start to end, in a user-friendly and ergonomic way, based on the design thinking approach (from the perspective of the people for whom the service is designed). As a result, the navigation, presentation of content, interactivity, etc., are based on the user's perspective, while the number of contacts with the institution is minimal, and the level of satisfaction is further monitored while delivering the digital service in order to further improve the user's experience.

2 **Developed based on re-engineering of the service delivery process:** such services are digitalised only after an optimisation of the original service delivery process, including back-office processes, so that the digital service is designed in its optimal format (e.g. by eliminating all redundant procedures and the collection of unnecessary information, reducing the number of user-institution contacts, pre-filling information that the institution already has, etc.), rather than the duplicating the "paper" processes with their shortcomings.

3 **Based on automated collection of the required data:** for the delivery of such services, all the data on natural and legal persons or other data needed to provide the service, which is already stored in the state or municipal registers and information systems, must be available and to use by the institutions providing the digital services, rather than asking the user for such information again and again (ensuring that the data is used within the existing norms and regulations, and that this is clearly communicated to the users).

4 **Accessible through a one-stop-shop and multichannel means:** such services are provided and/or accessed through a single access point, e.g. a Digital Government Portal, where various services can be easily found and received, which can be accessed via various ICT channels and tools.

5 **Related to the user's "life-events":** specific public services are related to specific life-events of the user; thus, every digital service must be presented to the user according to his/her life event (e.g. by grouping the services on the Governmental Services Portal not by the providing institutions, but by the user's life events (starting a new business, building a house, etc.). At the highest level, all services related to a specific life event should be entirely digital and provided as a "set."

6 **Based on the Government as a Platform (GaaP) concept:** the GaaP concept ensures a greater reuse of platforms and reusable digital components (e.g. eAuthentification, eID, eDelivery, etc.) to make it quicker, cheaper and easier to assemble the digital services across the government and move towards solutions with a common technology, by avoiding the duplicated development of solutions or a range of incompatible components.

7 **Open to technological innovations:** such services are constructed in a way that's open to adding new features based on new, innovative technological solutions that are adaptable for the needs of specific users and institution, which make the service even more simple, fast, secure and satisfactory.

These seven characteristics must be followed and realised, from the re-design stage of the existing processes to the implementation of the technological solutions. Thus, they have to be understood from the very beginning of the process, starting with a definition of the scope of the necessary changes. To implement these characteristics, legal, organisational, procedural and technological changes must be implemented. This brings us to Step 3.
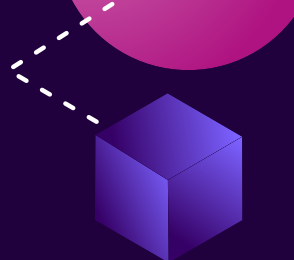
Definition of the Scope of the Digitalisation Effort – it's not just "Digital"!

At this stage, you will know where you currently are with your digital service and where you want to be. However, before starting your digital transformation effort, it's important to define its scope – and it's not just about the "digital" part. The following four pillars must be covered:

Legal Framework

A regulatory and legal framework, which is aligned with the international law and best practices, is fundamental. The legal framework should enable the digital transactions of services, including those based on "life events". It should also be "open" to the introduction of new modes and new digital tools, for a better service delivery, and should ensure that data can be received, stored and shared between institutions and departments in a secure and transparent manner.

Organisation

Digital services must be perceived as an integral part of the whole public sector as well as every specific institution. This requires a combined efforts of the public administration system to transform itself, with the aim of achieving substantial collaboration, simplification, flexibility and openness that is practical, and that not only exists "on paper". This approach necessitates understanding and support from top-level government officials and managers, as well as the commitment of all stakeholders, as it means a prioritisation of financial and human resources, amendments of the legal and institutional frameworks and ensuring that public servants have the necessary skills.
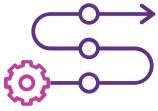
Procedures

In order to make a real change, these services must be based on "digital by design" procedures that are transparent, simple and clear, delivered instantaneously and that are free of charge (or they must at least be cheaper than the services provided on-site).

The scope of the changes in every domain should be put into a programme or plan

Technology

ICT has the potential to extend the accessibility of various public services, standardise and streamline processes, and integrate data – all at a low cost. Nonetheless, the specific tools selected for the development and later for the delivery of these services have to be appropriate, compatible and open to further improvements and innovations. This means not just fancy and fashionable technologies, but innovative tools that are best suited for the specific needs and situations, as the reuse of governmental digital platforms and their components must be ensured.

All the interested parties – from various departments of the public institution or the institutions in charge of specific services, to the stakeholders included in the service delivery process and the external digitalisation experts, if needed – have to be included in this process of analysing and defining the necessary changes. The scope of the changes in every domain should be put into a programme or plan, where the concrete activities that must be implemented as well as the institutions or departments responsible for them should be defined, and deadlines established for every action the must be implemented (these are highly interconnected, e.g. a delay with the necessary legislative changes can jeopardise all of the digitalisation effort).
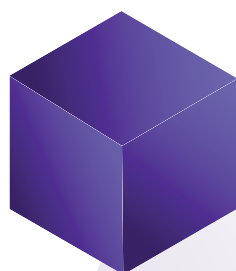
The Final Takeaway

Designing the roadmap for the provision of better digital services may be quite a challenge, but for those who are brave to tackle it, we advise following a proven framework. In cases where your organisation does not have space for experimentation, our advice is to employ strong consultancy partners who can lead you through the process and will be a valuable addition to your digital transformation team.

Ieva Zilioniene
Consulting Business Lead

Julius Zube
Development Operation
Advisor

Michailas Traubas
Chief Solution Officer

WHAT'S NEXT?

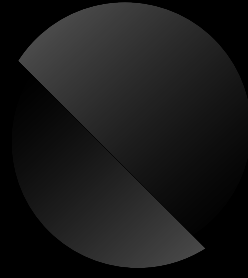Do you have questions, concerns or need some advice?
Drop us a message and we will get back to you as soon as possible.
Let's build your roadmap towards a better digital service delivery together!

Let's talk:
Info@nrd.no | www.nrd.no
Løkketangen 20 B, 1337 Sandvika, Norway

§ NRD Companies

About NRD Companies

NRD Companies is a global IT and consulting group of companies, specializing in governance and economic digital infrastructure development. Headquartered in Norway, the group unites companies operating in Fintech, GovTech and practice-based consulting areas in aiding countries to reach UN sustainable development goals. NRD companies have a successful track record of implementing projects, such as e-service delivery platforms, national post digitalization, tax administration platforms and other digital solutions, in all 5 continents. The Group is a recognized leader in the industry and is controlled by the INVL Technology UTIB.

NRD Companies is a parent company for the following subsidiary corporations: Norway Registers Development AS, NRD Systems, NRD Rwanda, NRD Bangladesh, ETRONIKA, Infobank Uganda. More information: **www.nrd.no.**

NRD Companies