Guide to digital transformation in parliaments

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Foreword from the IPU

The IPU is delighted to partner with the Association of Secretaries General of Parliaments (ASGP) to publish this guide to digital transformation in parliaments.

Parliaments have used digital tools for many years. Their strategic importance and impact has been highlighted and accelerated by the world-changing events of the COVID-19 pandemic. At this time, many of our parliaments turned to new digital methods to continue to function, leading to an unprecedented acceleration in the adoption of new ways of working. This has placed digital technologies at the heart of parliaments.

For parliaments, digital transformation is both a necessity and an opportunity. A necessity, because as the world changes, parliaments must continue to evolve, as they always have done. To stand aside while society changes is not an option. An opportunity, because digital transformation can help parliaments to be more efficient and effective in their work, and to be more open and transparent to citizens.

The necessity and opportunities of digital transformation are widely recognized by parliaments, regardless of their size and geography. This guide is intended to accompany parliaments in their journey of digital transformation. It is meant to be practical but not prescriptive. Many choices need to be made by parliaments themselves, according to their circumstances, objectives and capacities. The guide helps by setting out the issues for parliaments to consider. It is based both on the experience gained by parliaments that have been leading in this area, as well as lessons learned from the digital transformation of other sectors.

Digital transformation is both strategic and operational. At the strategic level, parliament must decide what kind of institution it wants to be and how digital transformation can help to get there. At the operational level, it has to establish governance and management structures, to allocate resources and set priorities, to plan and implement projects, to constantly monitor progress and make adjustments where needed.

Parliamentary processes are complex. They have evolved over long periods of time due to the historical, political and cultural contexts of each parliament. Today, some of the legacy systems that have been established to support these processes may no longer be fit for purpose. There is no question that reviewing and revising parliamentary processes, and developing the digital tools to support these processes, requires significant commitment and resources.

The role of the parliamentary leadership in modernizing the institution is therefore crucial. Parliamentarians set the political direction of travel and ensure accountability. The parliamentary administration plays the central role in planning and implementing the systems that support parliamentary work.

For this reason, I am very pleased to take our collaboration with the ASGP one step forward. Secretaries general are crucial to the functioning of parliament. It gives me great hope that so many secretaries general are actively involved and have expressed their personal commitment to the digital transformation of their parliaments.

Our aim with this guide is to inform and educate senior leaders in parliament so that they are prepared for a new, digital future and recognize that technology is an enabler for the effective modernization of parliament. Through this guide and the work of its Centre for Innovation in Parliament (CIP), the IPU is supporting parliaments to become modern, digital institutions ready for the future.

Martin Chungong
Secretary General
Inter-Parliamentary Union

Foreword from the ASGP

Digital technologies have become inescapable in every aspect of the life of parliaments, enabling citizens' representatives to exercise their mandates and to address the challenges of our century.

How to use digital tools to facilitate legislative work and provide the transparency desired by citizens while improving cybersecurity and addressing the questions which arise from the development of artificial intelligence (AI) is a challenge for all our democracies and parliaments. Often, however, a concerted strategy for digital development in parliaments is lacking and secretaries general, on the front line, can find themselves ill-prepared to face the scale of the task.

Reflections on these themes, shared by all members of the ASGP and expressed in the IPU's 2022 World e-Parliament Report, are the genesis of this guide, which I have the honour to preface. I am pleased to introduce this publication, which results from a project that is close to my heart. The report flows from a long tradition, dating back almost a century, of publications, reports and studies by the ASGP on the functioning of parliaments. Our aim is to strengthen the work of parliaments by creating a toolbox available to members, secretaries general and other administrators of parliaments.

This guide renews this tradition by addressing new working methods. Driven in close partnership with the IPU and thanks to the support of working groups constituted of secretaries general of the ASGP, it is the result of 18 months of collaboration between our two organizations. The fruit of our labour is a concise and practical document which provides examples of good practice in the use of digital technology that have been trialled by parliaments across the world.

We hope to give parliaments – and particularly secretaries general – the keys to drive change in the digital era, to encourage a digital culture among parliamentary personnel, to consolidate the innovations which resulted from the COVID-19 pandemic and to usher in new working methods deriving from innovative digital tools that are both efficient and secure. The road map for digital transformation presented in this guide is ambitious and sets out to meet the challenges faced by parliaments.

The guide will help to convince the authorities in each parliament of the importance of putting in place a clear and shared strategy to facilitate change in the interests of parliaments and citizens. I am personally convinced that each reader will find in it a rich source of inspiration.

I would also like to address my deep thanks to Martin Chungong, Secretary General of the IPU, and to his team – Andy Richardson, Andy Williamson and Avinash Bikha – for their commitment to the philosophy of our project and their indispensable support in the drafting and translating of this publication. My thanks go also to the secretariat of the ASGP.

Lastly, I would like to express my gratitude to all the secretaries general, members of the ASGP, for responding to the questionnaire and participating in the webinars and working groups organized jointly with the IPU's CIP. This guide would not have been possible without their expertise, their detailed knowledge of the workings of parliaments and their commitment to share this precious insight.

Najib El Khadi
President
Association of Secretaries General of Parliaments

Acknowledgements

Introduction

Modernizing parliaments through the use of new digital technologies is increasingly commonplace. Digital transformation is an inevitable and important process as technology is woven into all aspects of modern life, parliaments included. Yet it carries with it risks and complexities, the addressing of which requires strong leadership, good management and significant planning. This guide is intended to inform and educate senior parliamentary staff about the opportunities and challenges of digital transformation in parliaments. It offers good-practice examples, and support and guidance to parliaments wishing to embark on a digital transformation programme. This will help them to take control of the process, maximize the benefits that modernization offers and develop a programme that best suits their needs.

> This guide will help parliaments create a well-governed, properly structured and sustainable digital transformation programme.

Clear processes and good practices are set out to support digital transformation, including suggestions for leadership, governance, design and implementation. The models are flexible and non-prescriptive. The guide assumes that all parliaments are unique and that they will approach digital transformation from different levels of digital and organizational maturity, and with different ambitions for the future.

The guide explores the role and requirements of leadership, both institutionally and politically, examines internal and external challenges and risks, potential points of failure, including systems compatibility and interoperability, project ownership, the rapidly changing nature of technology, the potential impact of political change on a long-term project, and working with donors and third parties. It is illustrated by examples from parliaments and contains an annex of longer examples, practical tools and resources.

Audience for this guide

This guide is intended for senior parliamentary staff, particularly secretaries general, senior management, including senior digital/ICT staff, and members. It will be of value to everyone involved in working on digital transformation projects, including staff, external collaborators, suppliers and donor agencies.

What is digital transformation?

Digital transformation is the action of applying new digital-based tools and technologies to parliamentary processes and culture. It happens as part of the wider drive to modernize and improve parliaments, making them more efficient and effective. Digital transformation delivers optimized, more user-centric services to members, staff and the wider public.

Figure 1 – Areas of impact for a digital transformation programme

CULTURE	PEOPLE	PROCESS	TECHNOLOGY
New ways of working Agility, flexibility, empowerment, user-centred	**Learning and adapting** New skills, more effective, collaborative	**Innovative** Efficiencies, process improvement, streamlining workflows, data-driven, agile	**Modernizing** Replacing legacy systems, better inter-operability, open platforms, cloud-based
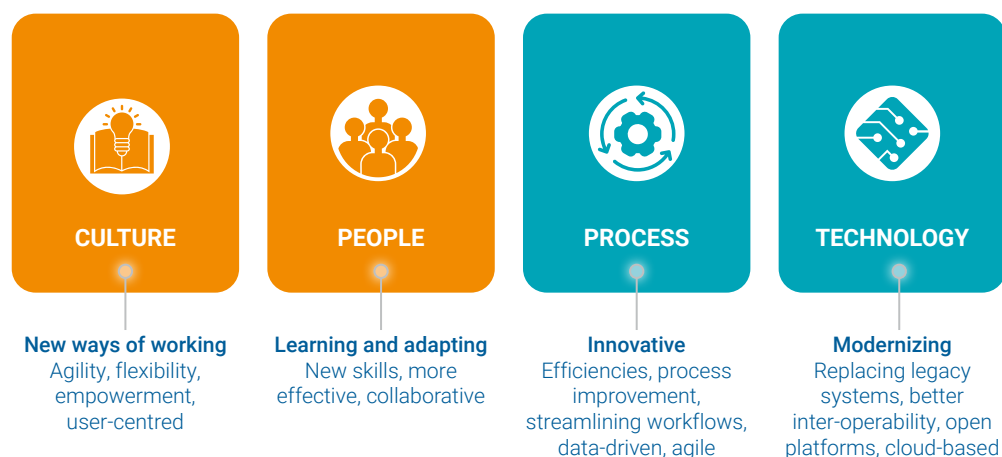
Digital transformation describes a journey of innovation, modernization and renewal. Each parliament starts from a different place, moves forward at its own pace and travels as far as it feels able. Ambition is encouraged but will always be limited by perceptions of risk and the realities of culture, costs and resourcing.

The guide assumes that digital transformation is a programme of work over an extended period. This programme takes place across manageable and measurable phases involving multiple, discrete but interrelated projects. In this regard, **"programme"** describes the overall digital transformation process, which comprises **phases** and, within these, **projects**.

Figure 2 – Components of a digital transformation programme

Digital transformation programme

Programme set-up and initiation

Phase 1
Project
Project

Phase 2
Project
Project

Phase 3
Project
Project
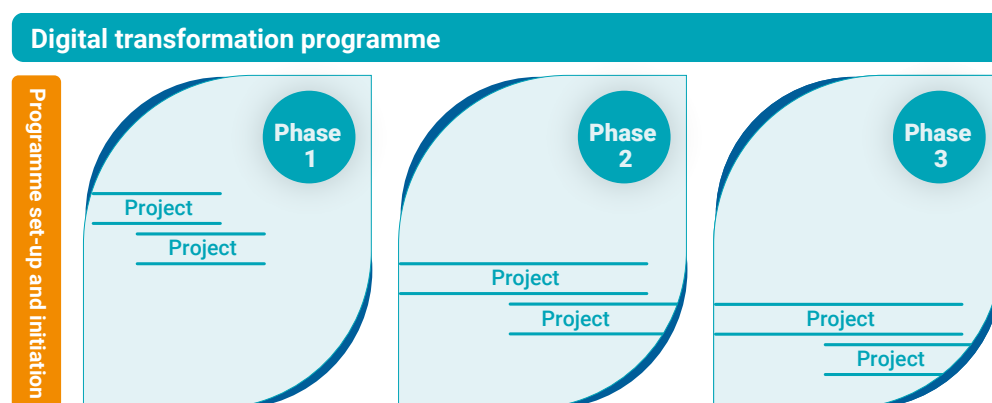
The current state of digital transformation in parliaments

Digital transformation rarely starts with a blank page; all parliaments use digital tools to some degree in their work. This means that there will be processes and structures in place for managing ICT, and for project planning and procurement. The 2020 World e-Parliament Report showed that 70% of parliaments had some form of strategic plan for ICT and that 48% were using a formal project management methodology or process.

When establishing a digital transformation programme, it is important to understand these existing processes and to recognize how appropriate (or otherwise) they are for supporting future ways of working. It is likely that in many cases processes will need to be renewed as part of the modernization programme. For example, introducing better high-level reporting and coordination of ICT initiatives through stronger governance. For many parliaments, the COVID-19 pandemic proved to be a significant accelerant for greater digitization, which must now be evaluated, embedded and, where appropriate, leveraged.[1]

The pandemic was a catalyst for change in the Senate of Cambodia

I can say that COVID-19 has provided an opportunity for us to strengthen, particularly in terms of ICT. Because of COVID-19, we adapted ICT sooner than we were intending and we have moved faster than ever before.

The National Assembly of Madagascar responded to the pandemic

The pandemic significantly accelerated the National Assembly's IT modernization programme. New virtual working and videoconferencing tools were developed for members and quickly deployed where needed. While some face-to-face meetings continued, the use of virtual-meeting tools was encouraged and supported wherever possible.

One of the most obvious outcomes of pandemic-based innovation has been the dramatic rise in the use of remote and hybrid proceedings. The 2022 World e-Parliament Report finds that over half of parliaments have held virtual plenaries and more than three quarters remote committee meetings. According to the 2020 World e-Parliament Report, the most important improvements between 2018 and 2020 were an increased ability to disseminate documents, providing more information on parliaments' websites and making existing documents more accessible online (see Figure 3). For lower income countries, being able to produce an official record in a more timely way was important, suggesting there remain a significant number of parliaments looking to modernize core processes.

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1 This is discussed extensively in the 2020 and 2022 World e-Parliament Reports (Geneva: IPU). The quotations from the Senate of Cambodia and National Assembly of Madagascar are drawn from the 2022 report.
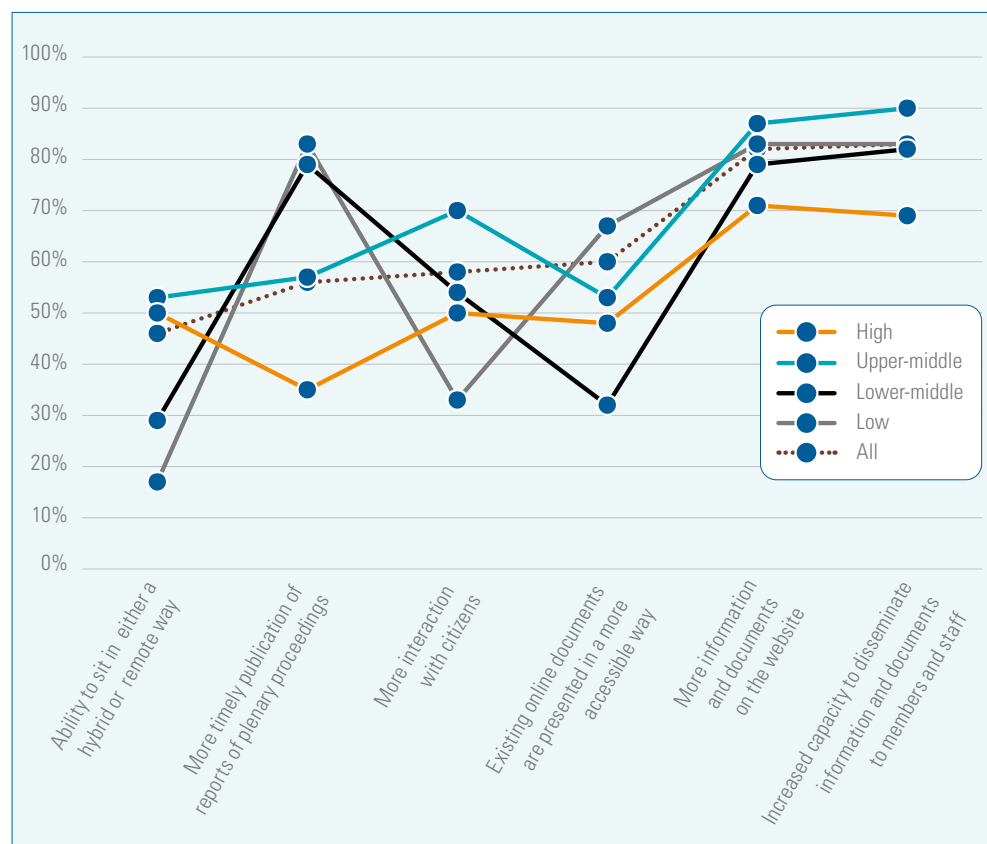
A survey on digital transformation was distributed to ASGP members in October 2022. Responses were received from 45 parliaments (representing 52 chambers) between early December 2022 and the end of January 2023. In addition, the World e-Parliament Report series[2] produced by the IPU offers a series of benchmark reports that provide an in-depth and authoritative view of parliamentary ICT.

The importance of digital transformation to parliaments is reflected in the 83% of respondents who see digital tools as critical to the functioning of their parliament, the 75% who agree that they improve the legislative process and the 69% who agree that digital tools make parliaments more accountable.

Of the parliaments responding, 73% have a multi-year strategic plan for the institution, 82% a multi-year digital (or ICT) strategy and 85% have made a formal commitment to advance digital transformation. Seventy-five per cent of respondents have a clearly identified digital/ICT leader (e.g. a CIO or CTO) and 87% a formally defined ICT department.

In terms of ICT governance, this is overseen by a range of roles but most often will include the secretary general (93%). Members are only involved in just under half of the parliaments surveyed.

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2   See, for example, World e-Parliament Report 2020 and World e-Parliament Report 2022 (Geneva: IPU).

Table 1 – Governance and oversight of digital/ICT within parliament

ROLE	%AGE
Speaker/President	66%
Members	46%
Secretary general	93%
Other senior management	84%
At an operational or project level	72%
External consultants	44%
Special committee or management group responsible for digital transformation	53%

Most respondents already use formal methodologies for their internal projects: 71% report using a formalized method for determining a 'business case', 93% use a project management methodology and the same percentage have a methodology in place for project delivery. The 2020 World e-Parliament Report shows that 59% of parliaments have informal methods for encouraging innovation and 35% have at least one staff member in a formal innovative role. While only a quarter (26%) have a formal innovation strategy, 61% have a working group or committee engaged in promoting innovation within the parliament.

The survey of ASGP members shows many parliaments to be strongly digitized already. For example, 96% of respondents have a financial management system, 73% have digital tools for bill tracking and 64% have systems for communicating with the public.

The start of a move from internal digital architecture to the cloud is shown in the 84% of respondents who have on-premises architecture versus the 38% who now have at least some of their architecture hosted in the private cloud, and 22% who are using a public cloud service. Likewise, the increasing demand for secure remote access is reflected in the 78% who provide a virtual private network connection (see Figure 4).

Figure 4 – Data storage in parliaments
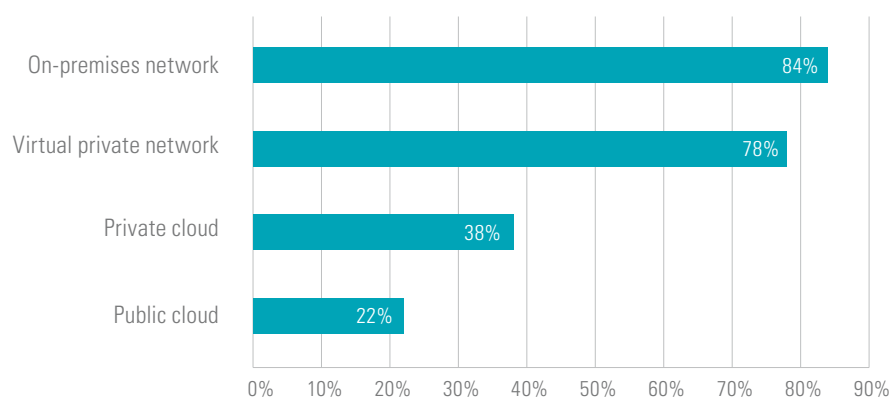
Openness and transparency are increasingly important for parliaments, as is engagement with the public. The survey shows that 96% of respondents use a social network (such as Facebook) to publish information and 82% a video sharing site (such as YouTube). As Figure 5 shows, almost three quarters of respondents have an open data portal (73%) and over half (53%) have a formal policy for publishing open data and one third (36%) for online public participation.

Figure 5 – Data publishing and public participation
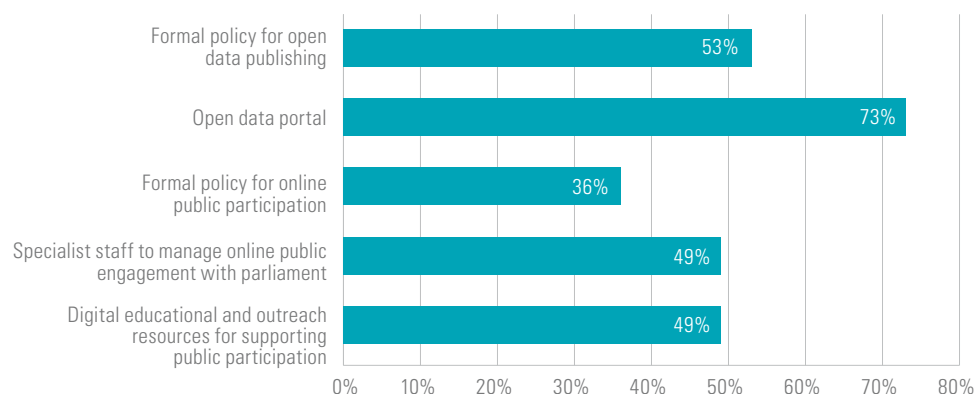
Despite the majority of parliaments in the survey having formal policies on public participation and open data, far fewer are actually providing functionality for the public to access parliament processes. Table 2 shows that 29% of respondents have a method of online consultation for bills and 22% have a facility for e-petitions. However, only 13% have developed tools for more direct, deliberative engagement at this stage.

Table 2 – Tools for public participation

FUNCTION	%AGE
e-Petitions	22%
Online consultation on bills	29%
Online submission of evidence to committees	16%
Online consultation on committee inquiries	18%
Online polls	4%
Online deliberative events	13%

The 2020 World e-Parliament Report also highlights that many parliaments lag behind and often lack the skills and resources to deliver on digital transformation. As Figure 6 shows, digital maturity exists on a continuum, from the highly developed to those parliaments with a minimal use of technology. This guide will support parliaments at all stages of digital maturity.

Figure 6 – Digital maturity across 123 parliaments (World e-Parliament Report 2020)
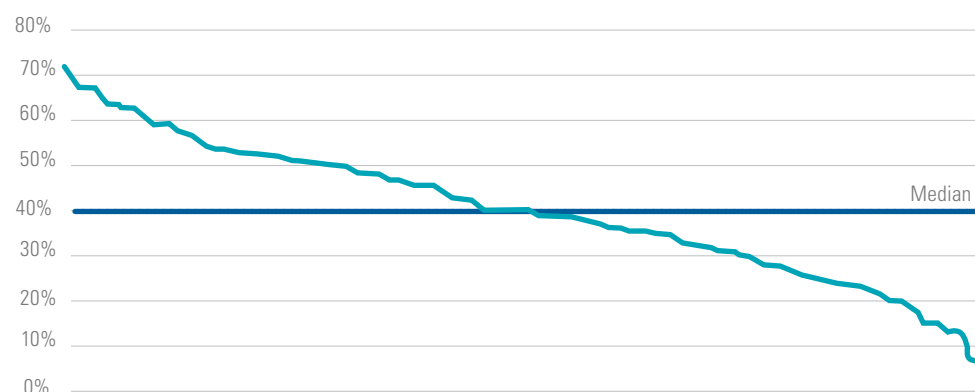
Digital transformation in parliaments

This section examines the benefits and challenges of digital transformation, highlighting some factors that help ensure success, and discussing the components of a digital parliament (e-parliament) and the emerging trends for parliaments in the digital space. Finally, in this section, the role of members in digital transformation is considered.

Benefits of digital transformation to parliaments

The most commonly cited objective for digital transformations is digitizing the organization's operating model.[3]

Digital transformation supports the modernization of parliamentary culture to ensure that parliament is in step with the world around it and able to interact and exchange with the executive in an efficient, effective and timely way. Specific benefits parliaments might realize through digital transformation are:

- **Increased efficiency:** Digital transformation can help increase efficiency by automating processes and making them more streamlined and efficient. This can decrease costs and increase productivity.

- **Improved user experience:** By using digital solutions, parliaments can offer more personalized user experiences, leading to increased satisfaction and greater trust.

- **Enhanced data management:** Digital transformation offers more advanced data analysis tools, allowing parliaments to better understand trends, support clearer decision-making, and improve their transparency and accountability.

- **Faster decision-making:** The speed and consistency of managerial decision-making processes can be improved by having ready access to key metrics and data.

- **Improved productivity:** Digital transformation can lead to improved collaboration and communication among members and staff, which can help increase productivity.

- **Increased environmental sustainability:** Many parliaments have progressed their ambitions to become more sustainable through modernizing systems and processes. For example, a digital-first strategy reduces paper use, and remote working and participation in proceedings can reduce travel to and from parliament.

Digital transformation helps ensure business continuity for the Shura Council of Bahrain

Through optimal strategy and proper planning, digital transformation and AI applications were used to achieve a digital parliament in order to guarantee business continuity during times of crisis.

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3   "Unlocking success in digital transformations" (McKinsey & Company, 2018): https://www.mckinsey.com/capabilities/people-and-organisational-performance/our-insights/unlocking-success-in-digital-transformations

Ensuring success in digital transformation

Digital transformation requires strong leadership, good planning, clear communication, and productive stakeholder engagement and partnerships. The key factors needed for successful digital transformation include:

- **Strong leadership:** Successful digital transformation requires strong leadership. This means leaders in parliament who understand the importance of digital transformation and are committed to making it happen. Leaders should be able to create a clear vision and strategy for the parliament, and to communicate it clearly and effectively.

- **Strategic planning:** Creating a detailed plan for digital transformation is essential. This plan should include the goals, objectives, timeline, and resources needed to implement the changes. It should also outline the steps needed to ensure a successful digital transformation programme.

- **Clear communication:** Digital transformation requires clear communication between all stakeholders. This includes members, internal teams and external partners. Communication should be frequent and open to ensure agreement on key points. It is important to ensure that communications are inclusive and those with less confidence or understanding of digital tools are not excluded by the use of jargon.

- **Collaboration:** Collaboration is essential for successful digital transformation. Internally, parliaments can foster an environment of collaboration and cross-functional communication to ensure that digital transformation goals are met, including coordinating resources, exchanging ideas and working together to solve problems as they arise. Externally, parliaments can involve subject-matter experts in generating ideas and solving problems where they have experience of different technologies and working with the public.

- **Technology:** The key to successful digital transformation is selecting the right technology. This includes both the hardware and software needed to enable the transformation. Parliaments should assess their current technology and decide on which pieces need to be upgraded or replaced in order to achieve their goals.

- **Legacy processes:** Digital transformation's focus on systemic change across parliament means that it is important to identify and consider legacy processes and systems to ensure that constraints are removed or mitigated. For example, do ICT management and operations within the parliament need to be restructured? Do internal processes and workflows, such as procurement, support or hinder new working practices?

- **Future-proofing parliament:** It is impossible to predict where technology will go. Therefore, retaining a focus on flexible, open solutions that embed agility into parliamentary processes helps reduce redundancy. Equally, it is important to build a culture of continuous innovation, not see projects as a 'one-off' that can quickly become outdated and constrain future innovation.

> Success in digital transformation can be predicted by having the right, digital-savvy leaders, building staff capabilities for the future, empowering people to work in new ways, giving day-to-day tools a digital upgrade and communicating frequently via traditional and digital methods.[4]

There are several things that a good-practice digital transformation programme can be expected to do:

- **Establish a clear vision:** A clear vision helps to secure top-level agreement from members and staff. Developing an actionable digital strategy with measurable objectives helps ensure that everyone in the parliament understands the desired outcomes and how they will be achieved.

- **Analyse and prioritize:** Identify opportunities for improvement, prioritize initiatives, and develop a road map for implementation.

- **Develop a technology road map:** Create a road map for technology implementation that is aligned with the overall digital transformation strategy.

- **Leverage existing technology:** Look for ways to use existing technology and systems in order to maximize efficiency and minimize cost.

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4 "Unlocking success in digital transformations" (McKinsey & Company, 2018): https://www.mckinsey.com/capabilities/people-and-organisational-performance/our-insights/unlocking-success-in-digital-transformations

- **Build an agile approach:** Create an agile approach to digital transformation that is focused on rapid delivery of innovation, and which produces visible initial quick wins (no matter how small they may seem at first).
- **Develop a data-driven culture:** Develop a data-driven culture to ensure that management decision-making is based on accurate and timely data. This requires parliaments to invest in sound data governance practices and data management systems.
- **Invest in security:** Invest in security initiatives, including training, to protect data and ensure a safe and trusted digital environment. This will recognize that modern digital infrastructure is more open and connected, often relying on external services and systems, and therefore potentially more vulnerable to breaches of security.
- **Measure and monitor progress:** Measure and monitor progress to ensure that goals are being met and adjustments are made.

Where to start with digital transformation: a view from the German Bundestag

In an organization as large as the German Bundestag, the first obstacle to digital transformation is obtaining as comprehensive an overview as possible of ongoing projects and necessary initiatives. Another challenge is the different origins of the projects, which may have their roots in administrative procedures, services for members or the digitalization of the legislative process. Only once we have all of this information is it possible to develop a shared understanding of how to prioritize digital transformation projects and create an overall strategy.

Conversely, it is important to consider why digital transformation sometimes fails. Some of the principal causes of this failure are:

- **Seeing strategy as fixed:** A strategic plan is helpful for parliaments but it represents a snapshot in time. Digital transformation programmes will push against strategy, which must be flexible and responsive, not rigid and limiting.
- **Lack of a clear vision:** Without a clear vision for the digital transformation, it can be difficult for members and staff to understand the goals and objectives of the project. Without a clear vision, staff are not motivated to contribute to the project and may lack the focus needed to make the project a success.
- **Poor leadership:** Poor leadership can lead to a lack of commitment and engagement from staff. Without strong leadership, it is difficult to ensure that everyone is working towards the same goal, that the project is progressing as expected and that momentum is being maintained.
- **Lack of specialist knowledge:** Digital transformation is complex and complicated, requiring senior leadership with a strong understanding of parliament and ICT. There must be a balanced focus, since too much focus on the digital side without a proper understanding of parliamentary processes and procedures is a significant indicator of risk (and vice versa).
- **Inadequate resources:** Digital transformation programmes often require significant investments in technology, personnel and training. Without proper resources, the programme may not meet its objectives.
- **Poor communication:** Poor communication can lead to confusion, delays and mistakes. Without proper communication, staff may not understand the project's goals and objectives or may not have provided critical inputs, leading to a lack of engagement and commitment.
- **Resistance to change:** Digital transformation programmes often require significant changes to existing cultures, processes and procedures. Good project processes and well-planned communication can help to overcome this.
- **Failing to address legacy issues:** Parliaments must take a holistic approach, looking for process improvement across the institution. It is not enough to promote digital transformation in one area if legacy processes in another will negatively impact on the success of it.

Key areas of focus

Digital transformation is not the replacement of one computer system with another; it is a broad parliament-wide programme that understands the future business needs and re-maps the technical landscape to support those needs. It is a holistic programme that leverages digital technologies to change how an organization thinks, works and behaves. At the heart of transformation lies the culture of the organization and the cultural beliefs (implicit and explicit) that drive behaviour.

Figure 7 – Digital transformation programme: five core areas of focus
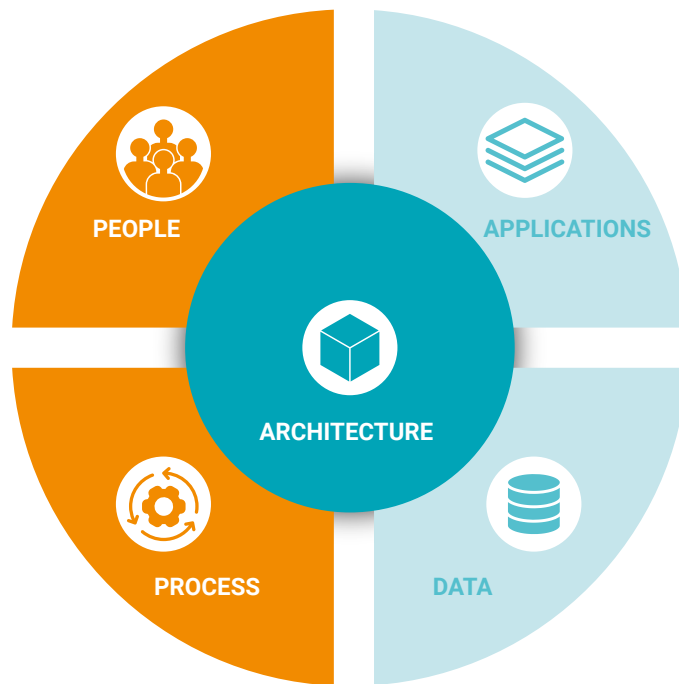
- **People:** Successful digital transformation changes the way people work and the way they think about how they work. The focus should be on building competence rather than digital literacy. This also involves thinking early on about desirable outcomes for users and building systems that make their experience seamless, instead of requiring users to adapt to the technology.
- **Process:** Mapping the way parliament works, defining business processes, and identifying areas for improvement is essential. This starts with understanding where the parliament is currently and then explores where it wants to go in the future.
- **Architecture:** Developing an enterprise-wide road map for the underlying technology will support the new processes and culture to be introduced. This will define what future platforms and applications will look like. It will, for example, consider whether systems are to be in-house or cloud-based, as well as assessing what core standards and security measures need to be applied.
- **Applications:** Applications deliver the experience to the user and perform the functions necessary for parliament to function. By understanding business needs and the technical environment, parliaments will develop a technology stack that meets these requirements, is efficient and cost-effective and which can grow and adapt to future needs.
- **Data:** It is important to understand what data is held by parliament (and what is missing), how (and why) it is used and how it is shared (with other systems, with users and in open formats outside parliament).

Digital components of a modern parliament

The modern parliament uses digital tools to modernize, rationalize and improve its processes. This is sometimes referred to as an e-parliament, which the 2018 World e-Parliament Report defined as:

> [A parliament that places] technologies, knowledge and standards at the heart of its business processes, and embodies the values of collaboration, inclusiveness, participation and openness to the people.[5]

This report notes that a digital parliament is not about ICT per se; rather it is about how ICT (in the broadest sense) can be used as a transformative tool for both processes and relationships inside parliament and beyond. For this to happen, strong governance models are needed. The components of a digital parliament can vary, but here are some common ones:

- **Digital document management system:** A digital document management system allows parliament to manage bills, amendments, committee reports and minutes of meetings digitally. It supports improved workflows, helps to streamline document archiving, storage and retrieval, facilitates publication of documents in an open format, and reduces paper waste.
- **Videoconferencing system:** A videoconferencing system allows members of parliament to participate in meetings and debates remotely, reducing travel time and costs, and allowing for more flexible scheduling.
- **Electronic voting system:** An electronic voting system enables members of parliament to cast their votes electronically, increasing the speed, accuracy and accountability of the voting process.
- **Dashboards:** Digital dashboards allow for the real-time display of information, whether via a physical display within parliament or delivered remotely online. This can include the order of business, amendments and voting results during parliamentary proceedings. Dashboards increase transparency and facilitate the monitoring of parliamentary activities by citizens and stakeholders.
- **Online citizen-engagement platform:** An online citizen-engagement platform enables citizens to participate in parliamentary proceedings by submitting comments, petitions and feedback online. This can increase transparency, accountability, and public engagement in the legislative process.
- **Fully digitized business process:** This covers standard 'business' areas such as finance and human resources, and can extend to other core internal systems too.
- **Social media presence:** Social media allows parliament to engage with citizens and stakeholders and share information about parliamentary proceedings, upcoming bills, and events. This helps to increase transparency and public awareness of parliamentary activities. However, it also comes with risks[6] and must be carefully managed.

As consecutive World e-Parliament Reports highlight, digital tools have become a significant strategic asset for parliaments. Because of this, the ICT department has become increasingly critical to the mission of the parliament and vital in ensuring its smooth working. Over time the ICT function has moved up parliamentary organizational charts. It is no longer an administrative or support activity but, in the modern parliament, is represented at the highest strategic level, with clear lines of reporting through to the administration's leadership.

Approaching digital transformation in the Icelandic Althingi

Digital transformation, as part of an overall process of modernization, means becoming more agile and innovative. It does not mean doing the same thing with digital tools; rather, it is about looking for new, better ways of working.

Overall, the digital parliament is a more efficient and transparent place to conduct legislative activities, leveraging new technologies to enhance the legislative process and facilitate openness and public participation.

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5   World e-Parliament Report 2018 (Geneva: IPU, 2018): https://www.ipu.org/resources/publications/reports/2018-11/world-e-parliament-report-2018
6   Social media guide for parliaments and parliamentarians (Geneva: IPU, 2021): https://www.ipu.org/resources/publications/reference/2021-02/social-media-guidelines

Figure 8 – Sample schema for a digital parliament system
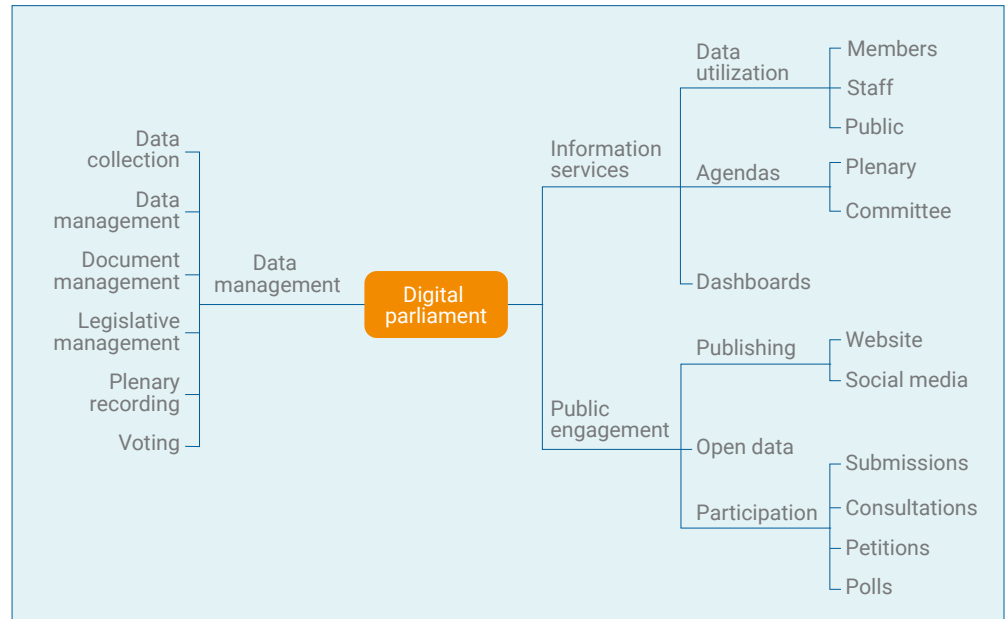
Technology trends for parliaments in the short to medium term

Just like elsewhere, parliamentary technologies are constantly evolving. There are several emerging trends that are transforming the way legislative bodies could operate, including:

- **Cloud computing:** Cloud computing technologies are being used to store, manage, and process large amounts of data generated by parliamentary activities. Cloud-based solutions enable easier and more efficient access to information and can reduce the costs associated with managing physical data centres.

- **Data repositories:** Centralized data repositories hold parliamentary data to be accessed and shared across multiple systems (rather than at the individual systems level). These repositories range from structured data held in data warehouses to unstructured data lakes.

- **Open data:** Open data initiatives are becoming increasingly common in parliaments, enabling citizens and stakeholders to access and use parliamentary data for research, analysis and public scrutiny.

- **AI:** AI and machine learning are increasingly being explored by parliaments to automate various tasks, such as data analysis, creating an official transcript of proceedings through speech recognition, and using natural language processing to analyse public submissions. AI-powered tools can help parliamentarians to process vast amounts of data and improve decision-making.

- **Internet of Things (IoT):** IoT technologies are a way to improve the efficiency of parliamentary operations, such as managing broadcasting, security, building systems and automating various tasks.

- **Virtual and augmented reality:** Virtual reality and augmented reality technologies could provide immersive experiences to citizens and stakeholders, enabling them to take part in parliamentary proceedings remotely and enhancing the transparency of the legislative process.

- **Blockchain:** Blockchain technology could be explored to enhance transparency, security, and trust in parliamentary activities. This could be used for voting, document management and facilitating public participation.

- **Social media:** While social media is well established, the way it is used and the platforms that are popular are constantly changing, which makes this field challenging to assess and keep track of. Trying to decide which social media platforms are beneficial (or appropriate) for parliament to adopt or carry on using will continue to be important.

Roles and responsibilities

This section will briefly outline the roles and importance of key stakeholders in the digital transformation process, namely members, secretaries general and parliamentary ICT departments.

The role of members

Members, either individually or via committees, play a critical role in advancing modernization and digital transformation in parliaments. They can support this process by:

- **Advocating for modernization:** MPs can champion the cause of modernization and digital transformation within their parliaments by advocating for the adoption of new technologies and processes. They can raise awareness about the benefits of digital transformation and work to build consensus around its implementation.

- **Supporting innovation:** MPs can support innovation by encouraging experimentation and risk-taking in the adoption of new technologies and processes. They can also support the development of digital skills and capabilities within their staff to enable them to embrace new technologies and processes.

- **Updating procedures:** Where a digital transformation project creates the opportunity for new ways of working, MPs can support this modernization by ensuring that parliamentary procedures are updated to allow for the full potential of the innovation to be realized.

- **Providing oversight and guidance:** MPs can provide oversight and guidance to ensure that the digital transformation process is being carried out effectively and efficiently. They can ask questions, demand accountability, and provide feedback on implementing digital technologies. Members may also be involved in a digital transformation working group.

- **Participating in training and capacity building:** MPs can take part in training and capacity building programmes to enhance their understanding of how modern technologies can be applied to parliamentary operations. This can help them make informed decisions and provide valuable guidance on digital transformation initiatives.

- **Engaging with citizens and stakeholders:** MPs can engage with citizens and stakeholders to understand their needs and expectations for modernization and digital transformation. This can help to ensure that digital transformation initiatives respond to the needs of citizens and stakeholders and enhance transparency and accountability in parliamentary operations.

- **Enabling the transformation programme:** Where appropriate or required, MPs can ensure that there is sufficient budget allocated to digital transformation and that parliament's strategic plans are adopted.

Involving members in the design of systems in the Lok Sabha, India

All projects envisaged for the use of members are implemented in consultation with a group of members selected from across party lines. They provide their valuable inputs.

Members of the French Senate are involved in setting priorities and proposing digital innovations

When projects are large-scale and impact all senators, the Senate Office (composed of all political persuasions) may be called upon to decide on digital transformation projects. These can involve issues such as cybersecurity, website design and sustainable development in digital matters. Senators themselves may originate some of the digital transformations, such as electronic voting in public session. Decisions in this area are considered in the overall budget of the Senate and are subject to political and administrative follow-up.

The role of the secretary general

Secretaries general provide strategic direction, lead cultural change, ensure that resources are allocated effectively, foster collaboration, and monitor performance, including the oversight of risks. In summary, their role is to drive parliaments' successful transition to a digital-first mindset and operation.

- **Vision:** Secretaries general own the vision for digital transformation and can articulate the desired outcomes and benefits for the parliament. To do this, they lead the comprehensive strategy to achieve the programme objectives and ensure that digital initiatives align with overall business objectives.
- **Leadership:** They drive the cultural and organizational change necessary for digital transformation.
- **Communication:** They communicate the importance of digital initiatives to the entire organization, inspire and engage staff and create a supportive environment for innovation and experimentation.
- **Collaboration:** They foster collaboration across departments and specialisms to break down silos and promote cross-functional teamwork.
- **Performance:** They track the progress and outcomes of digital transformation initiatives against the programme's key performance indicators (KPIs).

Proposed digital governance in the National Assembly of Malawi

Because the Clerk is responsible for the efficient operations of the whole of parliament, it is vital that s/he takes a major role in the management of ICT, albeit from a high, non-technical level. Therefore, the ICT governance group of the Parliament of Malawi is formally established at the level of the Speaker/Parliamentary Service Committee and chaired by the Clerk of Parliament.

Role of the Secretary General, Conseil National de Transition, Chad

The Secretary General oversees the planning, execution and monitoring of the Conseil National de Transition's digital information and communication systems and coordinates activities.

The role of the ICT department

Parliament's ICT function is a core asset in the digital transformation process, not least since it possesses significant knowledge about existing systems, processes and infrastructure. However, significant changes in the way parliament functions might also require a restructuring of the teams responsible for support and delivering digital tools and services.

It is difficult to be prescriptive in discussing the role of the ICT department and how this will change since this will depend on many factors, including:

- Existing roles, resources and skills
- Scale and reach of the digital transformation project
- Extent to which external partners and suppliers are to be involved
- Whether ICT support requirements are to change (for example, as a result of the adoption of a new technology platform or transition from in-house to cloud-based applications and storage)

ICT services must be responsive to the needs of the business. Increasingly, this means being able to operate with flexibility and agility. ICT services need a clear set of priorities developed at the highest level, but equally must contribute to the strategic planning process and to the establishment of those priorities. They can be expected to prepare project documentation, including budgets, resource requirements and timelines, as well as being able to support a wider discussion on the future direction for the digital parliament. This must happen in the context of wider technology trends and the experiences and good practices of other parliaments.

Role of the ICT department in digital transformation in the Senate of Spain

The ICT department is responsible for collating and coordinating project proposals, which usually come from within parliament's secretariat. From there, they must prepare a fully costed draft plan of work and justify it to the Secretary General.

Establishing a digital transformation programme

Seeing digital transformation as a sustained programme of strategic change means that it must be properly set up and structured in a way that delivers the maximum impact and the lowest risks. The components common to a good-practice programme are discussed below.

Adopting a programme-level view of digital transformation helps the House of Commons of Canada achieve its strategic objectives

The House of Commons of Canada has recently adopted a product-centric model as part of its overall digital transformation. The creation of three product lines each tailored to a specific vision and mandate – legislation and diplomacy, digital member services, and corporate systems – fosters collaboration, and drives value and alignment of product evolution to our strategic objectives.

By bringing business and technical experts together to achieve outcomes, we have created an environment where continuous improvement is embedded in the organizational structure.

We have also benefited from subject-matter experts, who are in direct contact with our members, and who are able to suggest improvements and drive digital transformation based on their front-line experiences. Approaching digital transformation in this way has allowed us to take advantage of downtime between major initiatives to make improvements to existing products and services.

Motivations and strategic drivers

Digital transformation happens for many reasons and it is important to identify, understand and articulate the motivations and strategic drivers for modernization early in the process. Doing so will guide the programme, help set priorities and lead to a better understanding of the risks.

Common motivations and strategic drivers include:

- **Strengthening democracy:** How can advances in technology support better law-making and stronger public representation in the parliament?
- **Aligning with a wider government strategy:** Is there an overarching public sector strategy of 'digital first' that parliament needs (or wishes) to align with, or is this a unique internal process? Significant knowledge and resources might be available in other parts of the government sector to support parliament's programme. There might also be standards and guidelines in place to support digital transformation.
- **Overcoming inefficient processes:** The nature of work changes and new technology allows parliaments to improve the way they work, reduce paperwork and speed up decision-making. A key purpose of digital transformation is to improve business processes.
- **Connecting digital infrastructure:** Over time, systems and processes may have developed in parallel or in isolation. This can lead to redundancy, inefficiency, overlap, poor integration. Systems become outdated and processes suboptimal. Digital transformation is about consolidating infrastructure and improving business effectiveness.
- **Improving openness and transparency:** There is an increasing demand for parliaments to be open and transparent, which is reflected in how many parliaments are publishing more information and freely sharing open data. Digital transformation is a way to support this.
- **Embracing innovation and new technologies:** Technology is perishable and processes become outdated. Digital transformation is a way of holistically embracing innovative practices and new technologies, such as cloud services and AI that weren't available before.

Strategic objectives in the Verkhovna Rada of Ukraine

The Verkhovna Rada created a committee on digital transformation in 2019, which has drafted strategies for the digital parliament and for strengthening cybersecurity. These have been led at a senior level within the parliament. The committee is also in the process of developing a new strategy for the use of AI. The Secretary General is responsible for enabling change, shaping Parliament's goals and setting the strategic direction, as well as building levels of international cooperation and liaising with members.

Sustainability at the heart of Mozambique's strategic plan for ICT

The Assembly of the Republic has a strategic master plan for information and communication technology, which assesses all actions in terms of material/infrastructural and human resources. This will lead the institution to the much sought-after digitalization objective called zero paper.

Components of a digital transformation programme

A successfully implemented digital transformation programme typically comprises a number of phases and projects. While the exact structure varies depending on the scope and goals, a programme can be expected to include the following key activities or components.

At the initiation phase:

- **Establishing a clear governance structure:** This is a one-off exercise occurring at the project set-up phase to establish roles, responsibilities and ownership. This phase will establish protocols and expectations for management, meetings, reporting and communications.
- **Assessment and planning:** This involves assessing the current state of the parliament's digital infrastructure, identifying areas that need improvement, and defining the programme's objectives and goals. The planning phase also includes defining the scope, timelines and budget. Assessment happens up front, ahead of selecting the projects and, in an ongoing programme, can be repeated on an annual basis.

Having defined the broad requirements and set priorities, then within each programme phase:

- **Design and development:** Design and develop the new digital infrastructure in discrete projects across the programme's phases. This can include new software applications, hardware, and network infrastructure. The team also tests and refines the new infrastructure to ensure that it meets the parliament's requirements.
- **Implementation:** New digital projects and infrastructure are deployed and integrated into the parliament's existing systems. This includes training staff on how to use the new infrastructure and making sure that the transition is as smooth as possible.

On an ongoing basis:

- **Monitoring and optimization:** After deployment, new digital infrastructure is monitored to ensure that it is functioning as intended. The team also collects data to evaluate the project's success and identify areas for further improvement.
- **Continuous improvement:** Parliament continues to optimize and improve its digital infrastructure. This may include upgrading existing systems, adopting new technologies, and implementing new processes to improve efficiency and effectiveness.

Overall, a digital transformation programme is a continuous process that involves ongoing evaluation and improvement. By following these phases, parliaments can successfully transform their digital infrastructure and position themselves for success in the digital age.

Building a world-class parliament in Zimbabwe

Continuous improvement in the way parliament works has been transformed to create the new objective of being a world-class parliament. In doing so, digital ways of working have become the strategic driver for the Parliament of Zimbabwe to achieve its objectives and this has led to the parliament being seen as a 'trailblazer' for digital transformation in the public sector.

Governance and oversight

An effective digital transformation programme involves systemic and cultural change across the whole of parliament. Strong leadership and good communication matters and is a powerful predictor of success. Parliamentary leadership (both administrative and political) must attach a high priority to the digital transformation programme. The programme must actively engage with stakeholders at all levels to educate and inform and to support the shift to a digital parliament.

Strong leadership drives the transformation agenda, builds support for the programme right across parliament and ensures that momentum is maintained.

A governance structure will define:

- Project owner (most likely the secretary general)
- Working group structure and membership
- Key stakeholders (internal and external)

The working group is critical to the success of the project; it must have the authority to act and be chaired at the highest level within parliament. This group will own the direction of digital transformation and ultimately be responsible for delivering the programme. To do this, it must have the right mix of knowledge and skills, and the ambition to drive modernization forward. Membership should be qualified and varied. It is vitally important that this group contains a mix of senior management with significant expertise in parliamentary processes and procedures and senior staff from the digital area (if this is lacking, the parliament might consider bringing in external digital specialists from government to support the initiative). Failure of the governance process to understand how parliament works and how it needs to adapt is just as likely to lead to failure as a lack of understanding of the potential technology solutions.

Figure 9 – Sample governance structure
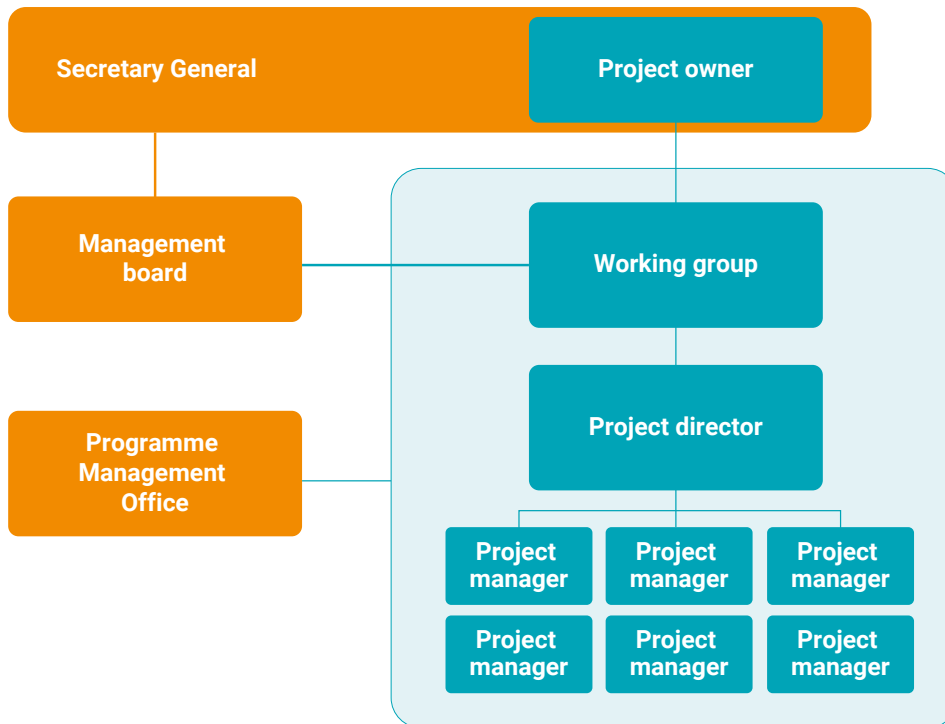
Digital governance in the Austrian Parliament

The Austrian Parliament recognizes that digital transformation is an ongoing strategic programme and this is led by the Secretary General. S/he is responsible for encouraging staff to 'future scan' and identify potential projects. Dialogue across departments is crucial here, ensuring that business and ICT teams are connected and prioritizing work. It is also vital to engage in dialogue with political factions in the parliament; one of the challenges the parliament faces is convincing members of the need for change.

Defining the objectives

A digital transformation programme should have clearly defined objectives. These can be varied and will depend on the requirements and ambition of individual parliaments. However, they might include:

- Improving internal processes and procedures
- Enhancing the efficacy of parliamentary process
- Providing support for improved legislative drafting, law-making and scrutiny
- Supporting the Sustainable Development Goals
- Increasing openness and public participation
- Ensuring that suitable business continuity measures are in place

Prioritizing digital transformation in the Senate of Spain

We give higher priority to issues that may affect the continuity of parliamentary activity – that is, the performance by the MPs of their constitutional functions: voting, drafting of legislative texts, government control, budget approval, etc.

In general, we try to find a balance between what is urgent and what is important, so as not to focus only on urgent projects but also to keep an eye on the long term. Approximately 85% of resources are devoted to short-/medium-term needs, and 15% to longer-term needs.

The outcome of the programme must be more efficient and effective workflows, better systems and better solutions for stakeholders. For this to happen, processes must be as open as possible and not present undue constraints on future innovations. To implement the detail of the programme, strong processes defined early on will instil confidence and give clarity to solution providers, reducing the risks. Above all, the digital parliament requires flexibility in its processes to ensure that it can operate smartly, virtually and securely. Achieving this must be considered from the outset and at the highest level.

Sample Digital Transformation Programme Aims and Objectives statement[7]

Digital technology is a critical enabler of a responsive and resilient parliament. This project focuses on delivering effective and reliable access to information and resources regardless of location (within parliament and remotely) to staff and members. The project aims to create a modern digital-first parliament by:

- Defining an agreed understanding of digital direction and priorities in support of parliament's legislative business towards smart, confident use of technology and information to drive improvements
- Driving modernization in order to establish the parliament as an exemplar of good governance, excellent financial management and accountability
- Capturing the above processes

Once completed, the Digital Transformation Programme will deliver a world-leading digital-first parliamentary system that will
:
- Give legislators access to up-to-date and effective tools that support good-practice legislative processes, enabling them to produce timely, accurate and evidence-based legislation
- Support more effective scrutiny of government and more effective committee work in general
- Improve the efficiency and reliability of the supporting legislative functions, including enhanced parliamentary services (e.g. research)
- Support business continuity and virtual functioning of the parliament to enable remote working of members and staff
- Be open and transparent in order to better share parliamentary activities and build public trust in the institution

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7   This is adapted from a real-world example. However, it has been supplied anonymously.

Transforming the approach to digital projects

Digital transformation is about culture and process change supported by technology. However, in taking a transformative approach to parliamentary modernization, the way the ICT is deployed and managed in parliament is likely to change too.

> **New systems and new ways of working require a reimagining of the ICT culture and practices in parliament.**

This next section considers four potential areas for digital transformation and a set of examples of innovative practice that is already transforming the legislative process in parliaments around the world. These examples encourage parliaments to rethink how they look at ICT functions, structures and roles and how they deliver ICT services in the future. The first example discusses taking an agile approach to projects. This is followed by an example of how parliaments can build a strong platform for the digital parliament and an evaluation of the benefits and challenges of cloud computing. The fourth example looks at the strategic issues affecting cybersecurity.

Agile approach to digital transformation

Agile is an iterative and incremental approach to project management and delivery that emphasizes collaboration, flexibility and adaptability. Agile project management is characterized by the following features:

- **Iterative and incremental approach:** Projects are implemented in short iterations or sprints. Each sprint delivers an increment in the functioning of the project, offering visible 'quick wins'. These are tested and evaluated before proceeding to the next iteration.
- **Emphasis on people and culture:** People and culture are prioritized over technology. This principle recognizes that successful digital transformation requires a shift in mindset and behaviour. It is important to focus on building competence and a culture of innovation and continuous improvement.
- **Flexibility and adaptability:** Projects are designed to be flexible and adaptable to changing requirements and circumstances, prioritizing responsiveness over a fixed plan or schedule.
- **Collaboration:** Close collaboration between project teams and stakeholders, including end users, helps to ensure that the project meets their needs and expectations.
- **Continuous feedback and improvement:** Projects rely on continuous feedback and iterative improvement to ensure they are delivering value and meeting objectives. This feedback is used in real time to refine the project and adjust priorities as needed.

By applying an agile approach within a digital transformation programme, parliaments can achieve their goals more efficiently and effectively, minimizing the risks and costs associated with traditional project management approaches. Agile involves taking a leaner approach to procurement; therefore, it is important to review internal processes that might delay or negatively impact on the programme.

Agile working in the House of Commons of Canada

Applying agile methodology to digital transformation initiatives at the House of Commons has allowed us to deliver quality products and services that are responsive to our members' needs more quickly than would otherwise be possible.

Instead of using the traditional waterfall approach, we are able to leverage continuous delivery by deploying new products or services as they are ready, which has allowed us to solicit feedback and improve measures in real time while we work towards a final product.

For agile methodology to be truly successful, senior leaders need to be willing to empower their employees and to fully delegate decision-making authority to the team of subject-matter and technical experts, who sit physically and virtually together so they can work in close collaboration. At the executive level the priority is to provide direction on general outcomes and priorities and to ensure awareness across the institution about ongoing initiatives.

Rethinking parliament's ICT function

When parliament is in the early stages of digital transformation, it should consider an institution-wide strategic approach to ICT. This will help guide the digital transformation programme and define standards for future projects to ensure that they adhere to clear criteria and good practice. Parliament should consider:

- **Organization:** How to best structure parliament's ICT function within the administration.
- **Governance:** An internal framework that includes strong leadership from the secretary general, appropriate procedural and technical knowledge within the oversight process and engagement with all stakeholders. This will help to deliver more value and better solutions that meet user needs.
- **Strategy development:** A step-by-step digital transformation strategy that will act as the road map to a digital parliament. This should be approved by senior parliamentary leadership and engage all stakeholders, including members.
- **Resourcing and prioritization:** Processes to budget for, prioritize, plan and mobilize the resources that will be needed to deliver successful digital transformation in parliament.
- **Methodologies:** Agreed methodologies included as part of the programme in order to ensure wider understanding and better reporting. This will lead to improved oversight and responsiveness to issues that arise.
- **Technology:** A definition of the baseline standards that parliament wishes to adopt, including for e-parliament systems, cybersecurity and the cloud, as well as for systems interoperability and open publishing. This could be driven by national public sector standards, industry standards, or based on the experiences of other parliaments.

Benefits and challenges of cloud computing

Cloud computing is a technology that enables organizations to access digital storage, resources and software applications over the internet, rather than buying and maintaining physical servers and software. As such, its impact on the digital transformation of parliament, as well as the way that parliament work, is significant. Moving to cloud-based data and applications is a strategic change and a decision that needs to be considered in the wider context of the pros and cons of the cloud and the needs of the parliament.

Cloud-based services have several benefits, including scalability, flexibility and increased efficiency. The cloud reduces capital infrastructure costs but does not necessarily create savings as costs are transferred into operational expenditure. Solutions can be scaled up or down as needed and, because providers are responsible for maintenance and upgrades, internal ICT staff can be freed up to focus on other tasks. Additionally, cloud computing allows for remote access to resources and data.

> Cloud computing can lead to greater flexibility and new opportunities for improvement and efficiency. It is becoming the norm in many sectors.

The "cloud" can refer to private cloud storage (such as parliament's own), a government cloud which might be available to parliament, or commercial cloud services, such as those hosted by Amazon Web Services and Google.

Switching from internal servers to the cloud comes with some serious security and privacy considerations. It is important to consider under which jurisdiction parliament's data will be hosted and what the implications are for this (ranging from questions of what is permissible, to the risk of local data privacy laws being breached, and on to the wider issue of cybersecurity).

The potential downsides of cloud deployment are:

- **Dependence on internet connectivity:** Any disruption to internet connectivity will affect the availability of cloud services. Parliament must have sufficient secure capacity to provide real-time access to this data for users both within the parliamentary estate and working remotely and must consider redundancy of technology when designing internet connectivity.
- **Security risks:** Storing data and applications in the cloud can pose security risks, such as data breaches or unauthorized access. While cloud providers typically have robust security measures in place, it is important to take steps to protect parliament's data.
- **Limited control:** This can be a concern if you have specific security or compliance requirements.
- **Vendor lock-in:** Once parliament has invested in the services of a particular cloud provider, it can be difficult and expensive to switch to another provider.
- **Ongoing costs:** While cloud computing can be cost-effective in the long run, there can be ongoing costs associated with using cloud services, such as subscription fees, data transfer fees and storage costs, and these must be factored into operational budgets.

Following national public sector guidelines and compliance charts for cloud computing can help parliament mitigate the risks and realize the benefits more quickly. Follow these if they exist and seek advice from the government agencies responsible for managing them. Any negotiation with a third-party cloud provider should include an agreement on level of service and guaranteed uptime.

A parliaments that has not previously used cloud computing should consider starting with a small-scale, non-business critical pilot and with public (or at least non-sensitive) data.

Cybersecurity

Cybersecurity is an important and pressing issue for parliaments, particularly as they invest more in remote working and cloud-based technologies. This is a sensitive area and one where any organization must be cautious not to disclose information that might enable third parties to attack its infrastructure or circumvent the security measures in place. Parliaments responding to the Digital Transformation Survey reported high levels of awareness of cybersecurity and a range of approaches to managing it. These strategies included following local legal frameworks, outsourcing cybersecurity to the government and increasing internal capacity:

> Security is the responsibility of the government's information technology provider, and the Fijian Parliament is a tenant of its domain.
> *Parliament of Fiji*

> The parliament is following the Cyber Crime Act of Tanzania.
> *National Assembly of Tanzania*

> The UK Parliament is increasingly investing more in information security, and there is a new post, the Director of Information Security, due to start in 2023.
> *UK Parliament*

Ninety-eight per cent of respondents to the survey adhere to a law on data protection and the same proportion adhere to national cybersecurity standards or guidelines. The vast majority of parliaments (89%) have their own data protection policy and 86% have an internal structure responsible for cybersecurity. Half of the respondents (50%) have run campaigns or training about better information security and/or cybersecurity for members in the last two years, and 82% have done so for staff.

Developing a cybersecurity strategy for the Irish Houses of the Oireachtas

During 2021, the Houses of the Oireachtas Service decided to perform a cybersecurity maturity assessment, which identified areas for improvement. In November 2021, the Irish National Cyber Security Centre issued the Public Sector Cyber Security Baseline Standards, which provide a clear set of policies and procedures to support good cybersecurity risk management. The baseline standard is a voluntary self-assessment milestone towards a cybersecurity compliance-driven model in the Network and Information Security (NIS) 2 Directive.[88] This will be enforceable from 2024 and will require mandatory cybersecurity measures to be put in place by public sector bodies in the European Union.

The Houses of the Oireachtas Cyber Security Strategy sets out the blueprint, road map and investment case to increase parliament's security and brings the Houses of the Oireachtas cybersecurity position in line with the new standard. It will facilitate the move towards a compliance-driven cybersecurity model. The strategy consists of a set of visions and principles; blueprints giving a high-level view of the proposed initiatives; and proposed projects to improve security, to measure future maturity against cyberattacks and to become a leader among governments across Europe in cybersecurity.

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8   See "The NIS2 Directive: A high level of cybersecurity in the EU" (European Parliament, 2023): https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2021)689333.

A parliament-wide cybersecurity policy will typically include key components to ensure the protection of sensitive information and critical infrastructure:

- **Information security governance:** A framework for managing and overseeing cybersecurity activities within the parliament, including defining roles and responsibilities, establishing reporting structures and ensuring accountability.

- **Risk assessment and security audits:** Regular audits and assessments to identify and evaluate potential cybersecurity risks and vulnerabilities. There should also be processes to mitigate and manage these risks effectively.

- **Data protection and privacy:** Mechanisms to protect sensitive data, such as encryption, data classification and data loss prevention techniques. These must comply with relevant privacy regulations and there should also be clearly defined and rigorously tested procedures for handling data breaches.

- **Network and system security:** Measures to secure network infrastructure, including firewalls, intrusion detection/prevention systems and network segmentation. This includes regularly updating and patching software and systems for emerging vulnerabilities.

- **User management:** Access-control policies that limit user privileges based on the principle of least privilege. Strong authentication mechanisms, such as multifactor authentication, can be used and user access rights should be regularly reviewed.

- **Mobile device security:** Policies for the secure use of mobile devices, including bring-your-own-device guidelines, mobile application security and remote access controls.

- **Security awareness and training:** Training programmes to educate members and staff about cybersecurity best practices, potential threats and the responsibility of individuals to safeguard information assets.

- **Incident response and reporting:** Procedures for promptly detecting, reporting and responding to cybersecurity incidents. Clear roles and responsibilities for incident response teams and communication channels with relevant stakeholders should be defined and there should be robust logging and monitoring systems to detect and investigate security events.

- **Third-party risk management:** Assessment by parliament of the cybersecurity practices of third-party vendors and service providers to ensure they meet the relevant security standards. Contracts should define clear security requirements and there should be procedures for monitoring and managing vendor risks.

- **Compliance:** Proactive monitoring of compliance with relevant laws, regulations and industry standards.

- **Continuity and disaster recovery:** Plans and procedures to ensure business continuity in the event of a cybersecurity incident or disaster. These should be regularly tested and updated to address emerging threats and changes in the parliament's infrastructure.

Modernizing the legislative process

Many parliaments have introduced innovative changes to the way the legislative process works. These examples are taken from the Centre for Innovation in Parliament's (CIP) Innovation Tracker[9] and from the CIP's Transforming Parliaments webinar series.[10]

The **Italian Chamber of Deputies** introduced its Geo-Camera app in 2016 to support modern parliamentary procedures. The app is a digital briefcase that enables members to work effectively on and off parliamentary premises. It allows documents to be downloaded and amendments to be recorded in real time, which reduces the need to print paper documents. Via committee dashboards, members can digitally (and remotely) acknowledge or appeal decisions of inadmissibility. During the consideration stage in hybrid committee meetings, members, whether physically or remotely present, can use the app to read the current text under examination from their personal devices in real time.

Faced with the disruptions of COVID-19, the **National Assembly of Zambia** chose a hybrid format for its plenary meetings. While a limited number of MPs sat in the main assembly hall or nearby rooms, others connected remotely through a videoconferencing platform. Despite the technology, however, parliamentary business, including votes, remained hard to manage. Following examples of other parliaments, such as the Brazilian Chamber of Deputies, Zambia's National Assembly started to develop its own eChamber app to address these challenges. MPs and their staff can now log in using secure authentication and participate in plenary proceedings. MPs are able to register for attendance, access meeting information, request to speak, raise a point of order, call for and challenge divisions, and vote. The eChamber app is used with Zoom for videoconferencing. Unsurprisingly, the app has generated interest from other parliaments and the National Assembly of Zambia continues to work with partners in the region, including through the CIP Southern African hub.

Another critical area for parliaments is the official record. The **National Assembly of Malawi** has recently introduced new digital tools and methods to record and produce transcripts of plenary proceedings. As a result, the Parliament is now able to publish its Hansard reports in a matter of days, rather than in weeks. These are available in digital format, making the distribution of reports to members and the public virtually instantaneous.

This change marks a dramatic shift away from the previous cumbersome process of producing Hansard reports manually. In the past, following a plenary meeting the team of parliamentary reporters would manually transcribe the proceedings from boxes of analogue cassette tapes. Besides the lengthy production timelines, the scarcity of tapes on the local market posed another growing challenge, leaving the reporters with no choice but to erase and reuse old tapes, thereby destroying valuable archive material as well as risking the degradation and eventual failure of the media.

The new system was trialled at the end of the last parliamentary term and is now the de facto method for producing the Hansard. Digital audio from plenary proceedings is now automatically stored and distributed to the pool of parliamentary reporters, who are available during the live sessions. Reporters have been provided with upgraded PCs, transcribers' foot pedals and headsets. At the end of the 'pooled transcription' process, the system automatically merges all text segments into a complete digital draft of the Hansard, ready for digital distribution and review by members prior to web publication.

9 See: https://www.ipu.org/knowledge/ipu-innovation-tracker
10 See: https://www.ipu.org/innovation-tracker/story/2023-transforming-parliaments-webinar-series

The **Dutch Parliamentary Reporting Office (PRO)** instigated an automatic speech recognition (ASR) project to evaluate the potential for improving the capture of the official record. From 2016, it started to experiment with speech-to-text solutions including live subtitling using commercially available software. It has run a pilot project to investigate ways of incorporating ASR into its work. The pilot automatically translates speech into text, a process that is followed by manual grammar and style editing, though a key challenge is managing the amount of data produced.

The initial conclusion is that ASR can help, but works better in some circumstances than others. Debate speeches are much easier to translate into text, for example. Meanwhile, the ASR-supported process is only marginally faster. It has also been difficult to embed the ASR programme into existing parliamentary workflows because mistakes still need to be corrected manually. The experience of the Dutch PRO has been similar to that of the New Zealand Parliament, which has also experimented in this area. While not delivering significant benefits at the moment, speech recognition will improve and, increasingly augmented by AI, will be a technology to watch in the future.

More generally, parliaments around the world are starting to harness a wide range of data in order to support the work of members through research and statistical analysis. Data is being used to improve the quality of the legislative process and make post-legislative scrutiny more objective and evidence-based.

In turn, the data that parliaments produce can be mapped, modelled and captured in open data repositories and distributed through web portals and machine-readable interfaces (such as plication programming interfaces) for others to use. When it comes to parliaments' own data, there needs to be an understanding of data governance and strong technical models for ensuring quality, integrity and usability (both within parliaments and beyond). The increased use of data requires new technical, research and analytical skills but potentially can be supplemented with new tools. In the future, parliaments that lack the physical resources to harness the power of their data may be able to turn to AI for assistance.

According to article 68 of the **Constitution of the Kingdom of Morocco**, "[s]ittings of the Houses of Parliament are public, and the verbatim records of debates are published in the Parliament's *Official Bulletin*". Similarly, the Rules of Procedure of the House of Representatives stipulate that detailed minutes are to be published after each parliamentary committee meeting, and that MPs have the right to consult the original minutes of parliamentary committee meetings on site.

Aware of the importance of verbatim records of plenary sessions and committee meetings, the House of Representatives has been using since 2016 an automatic transcription system for parliamentary debates. The system, which is based on AI technologies and has a recognition rate of over 80%, automatically generates minutes of plenary sessions immediately after the session. The same system has been used since 2021 to produce committee meeting minutes.

The system can be further improved by making MPs aware of the need to respect certain rules, such as only one speaker at a time, speaking close to the microphone, not mixing different languages. The House of Representatives is the first institution to introduce this type of technology in Morocco, and the system is currently also being used by the regional councils. The House of Representatives is ready to share its experience in this field with other parliaments.

Implementation

This section of the guide offers some strategies for building and running an effective digital transformation programme within parliament.

Communicate often and effectively

Digital transformation is an enterprise-wide programme of change. Strong leadership and good communications are vital for building and maintaining the support of members and staff across parliament.

First, though this is a high-level programme with senior leadership, it is the existing ICT team and infrastructure that will often be the most heavily affected by it. Therefore, it is important to keep technical staff involved in the projects, as partners in change and as part of the conversations. Not only will they have specialist knowledge, but they will also have a strong awareness of how the institution works (formally and informally) and their support will benefit the programme.

For other users, it is important to focus on how change will affect their experience of working in parliament. Present the benefits clearly and openly, allow time for pushback and discussion and listen to concerns that are raised.

It is helpful to articulate what the programme will deliver for parliament, such as in this example from the UK Parliament's Transforming Digital programme:[11]

Objectives of the UK Parliament's Transforming Digital programme

- A sustainable funding model for digital products and platforms to ensure that we are making better use of Parliament's investment in digital.
- Effective governance for digital decision-making, giving greater clarity to staff and users about how decisions are made, how they can inform those decisions, and how they can have their digital needs met.
- The ability to use digital more effectively to enable Parliament's work, ensuring that teams across Parliament have access to the digital tools they need to do their jobs and that the diverse demands of users in Parliament are met.
- A greater understanding of user needs so that we can better anticipate, plan, and meet those needs.
- Digital needs being prioritized and coordinated more effectively across the entirety of Parliament.
- A single data approach, with better quality and more accessible data, enabling us to realize the potential of Parliament's data resources more fully.
- A maturing ecosystem for digital across Parliament, including a growing number of digitally fluent leaders who can engage with and support digital decision-making.
- An ongoing transformation capability to ensure that Parliament's approach to digital and data remains fit for purpose, both now and in the future.

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11 See "Digital transformation in Parliament: what's coming up next?" (Parliamentary Digital Service, 2023): pds.blog.parliament.uk/2023/05/02/digital-transformation-in-parliament-whats-coming-up-next/

Assess the current environment

Before you start, it is important to understand where you are. The first part of a digital transformation programme will involve a detailed 'as is' assessment of your current situation (in terms of culture, processes and technology). This involves several steps:

- **Define the objectives:** Clearly outline the goals and expectations of the assessment. Determine what parts of parliament's digital infrastructure and systems need to be evaluated and what specific information needs to be gathered.
- **Identify stakeholders:** Identify the key stakeholders who will need to be involved in the digital transformation programme.
- **Gather information:** Collect comprehensive data about the existing digital infrastructure and systems. This can include hardware and software inventories, network configurations, security measures, data storage and management practices, system performance metrics and any existing documentation.
- **Assess current capabilities:** Evaluate the current state of the digital infrastructure and systems to understand their strengths, weaknesses and limitations. This assessment will cover aspects such as scalability, reliability, security, interoperability, data integrity, redundancy and performance.
- **Identify gaps and challenges:** Identify any gaps or challenges in the existing digital infrastructure and systems that might hinder modernization. This can involve conducting interviews, surveys or workshops with relevant stakeholders to gather their perspectives and insights.
- **Analyse risks and dependencies:** Assess potential risks associated with the existing infrastructure and systems, such as cybersecurity vulnerabilities, outdated technology or single points of failure. Identify any dependencies on legacy systems or external vendors that may impact the digital transformation programme.
- **Evaluate compliance and regulations:** Review the compliance requirements and regulatory frameworks applicable to the digital infrastructure and systems. Ensure that the current set-up adheres to relevant industry standards and data protection regulations.
- **Document findings:** Document all the findings and insights from the assessment process, including the identified gaps, challenges, risks and compliance issues. Create a comprehensive report that will serve as a baseline for the digital transformation programme.

This 'as is' assessment can be an ongoing process and may require periodic reviews as the digital transformation programme progresses. Regular reassessment will help track progress and identify any new gaps or challenges arising as the programme is executed.

Develop a programme structure and timeline

Once the current situation is understood, develop priorities for the changes you want to make, looking for potential synergies and economies of scale rather than viewing projects in isolation. Start developing the programme structure at the highest level, focusing on benefits to the parliament.

From here, a vision for the future parliament will emerge and a road map for the programme can be developed. This will allow the programme team to set priorities and identify dependencies in order to break the programme up into phases and projects and establish high-level timelines, budgets and resource requirements.

Irish Houses of the Oireachtas: Digital Transformation Strategy

The Digital Transformation Strategy sets out to transform the Houses of the Oireachtas into a 'digital first' organization.

Process: Moving away from inefficient siloed systems and processes to integrated ones will eliminate the need for repetitive and manual tasks.

Innovation: The latest technologies and systems will provide a modern environment that facilitates growth, innovation and continuous improvement.

People: Introducing integrated technology will free staff up to focus on the delivery of higher value-added tasks.

Fix: The more immediate transformation projects will see us move from legacy systems and outdated technology to modern tools that increase efficiency.

Prioritization

Where to start can be a challenging question and the answer will be different for each parliament. Despite this, the process for prioritizing can be surprisingly similar.

Start by defining the objectives of the programme and, from there, identify the most important areas for change. Once all potential projects have been identified, look for easy wins, synergies and economies of scale, as well as for potential risk projects that could derail the programme.

Prioritize by considering each project according to the following criteria:

- **User needs:** Who benefits from this and how significant is that benefit (to them, their stakeholders and to parliament)?
- **Reach:** Is this solving a common problem or is it quite niche?
- **Complexity:** How complex is it (institutionally and technically)?
- **Risk profile:** Is this new (higher risk) or is it modifying something already established (lower risk)?

Prioritizing digital projects in the Senate of France

Each year, all of the client departments send the Information Systems Department (DSI) their requests for IT projects. These requests are the subject of a brief study aimed at identifying needs and establishing the time, budget and resources available to meet these needs.

During this process, the DSI evaluates requests against the major structural objectives of digital development in the Senate (satisfaction of parliamentarians, move to paperless procedures, sustainable development, cybersecurity, etc.) and classifies each request as "registered", "to be discussed under arbitration" or "refused".

An IT Technical Steering Committee meets once a year under the chairmanship of the two general managers, representing the general secretaries, and reviews projects according to three criteria: the priority of the project (regulatory need, etc.), the availability of human resources and the budget.

If a project is supported by a political authority (changing the voting method during the session, for example), it is dealt with as quickly as possible and then the other current projects are debated.

Risks and challenges

Risk management is the process of identifying, assessing and grading risks, and implementing strategies to manage or mitigate them in order to reduce their impact on the success of the programme. Risk management can help prioritize phases and projects. By identifying and assessing risks, parliaments can make informed decisions about which initiatives to pursue and when, and which to deprioritize or delay.

There are several steps in effective risk management. The first is to identify potential risks, both internal and external. This includes risks related to operational issues, budget and resources, and security and compliance, as well as the risks presented by the programme itself, such as the introduction of new processes and technologies, relationships with vendors, and constraints imposed by donor agencies. Once risks have been identified, it is important to assess the likelihood and potential impact of each risk. This allows grading of the risks in terms of their seriousness and development of strategies to manage or mitigate each risk, should it eventuate. This can include making contingency plans, implementing risk controls or transferring risk through other mitigations.

Effective risk management requires a collaborative effort starting at the highest level, with senior management setting the tone while working closely with risk management experts to develop and implement effective strategies.

Establish a programme management office

A programme management (or project) office can act as a central hub for managing and coordinating the different aspects of the programme. It is responsible for overseeing the programme and projects within it from start to finish, ensuring they are completed on time, within budget and with the desired results. The primary functions of a programme management office in a digital transformation programme include:

- Change management
- Governance and reporting
- Planning and control
- Procurement
- Project management
- Risk management
- Stakeholder communication
- Vendor-partner relationships

Setting up a project office in the Hungarian National Assembly

An example of a programme management working group is the IJR-ParLex working group in the Hungarian National Assembly. IJR-ParLex is a European professional award-winning project for the digitization of legislation, which has since provided an innovative model for the digitization of the entire Hungarian legislature and is currently being further developed.

A key part of this programme has been the establishment of a project office, referred to as the IJR-ParLex working group, which has the following functions:

- Defining objectives, tasks and responsibilities in line with the IT (digitization) strategy
- Designating a permanent responsible coordinating team, with the participation of the heads of the parliamentary professional and IT departments
- Providing dual management (legislative professionals and IT specialists)
- Cooperating closely with the external developers
- Adapting digitization developments to the lead project and ensuring that they build on each other
- Maintaining uninterrupted operation across parliamentary cycles
- Communicating and interacting continuously (testing, improvement)

Measure progress and success

It is challenging to define KPIs for digital transformation. The process is complex and touches on all aspects of the institution. Even so, it is an important task. KPIs will help managers keep track of progress and monitor setbacks in the programme and are useful for ongoing communication with staff and users.

Relying on a single quantitative metric can be tempting, but this is often meaningless (at best) and misleading (at worst). A better approach is to define a combination of qualitative and quantitative, parliament-wide metrics. These can help parliaments evaluate the progress of the programme and the broad direction of travel. Individual projects can add more detailed KPIs that aggregate upwards to inform the bigger picture.

Table 3 – Examples of high-level KPIs

KPI	DETERMINED BY	MEASURE
Processes transformed	Number of processes transformed out of the total number identified	%age
Process efficiencies (reduced timescale/ complexity, improved reliability)	Examples of tangible improvements in processes	Qualitative
Server-based systems deployed in the cloud	Number of systems deployed in the cloud out of the total number identified	%age
User satisfaction with processes broadly, not just individual systems	User satisfaction surveys among staff and MPs	Various quantitative and qualitative
Return on investment (ROI)	A composite of project-level ROI metrics (this is important but challenging to calculate at a macro level)	Quantitative (and cumulative)
Level of innovation	Number of days allocated to innovation; number of project ideas; number of pilots; number of pilots becoming operational	Quantitative

As well as defining meaningful and measurable KPIs, setting additional checkpoints (or critical success factors) will help the project owner and working group confirm (or deny) that a digital transformation programme is on track. During the definition and delivery phases, it is helpful to evaluate all proposals to identify how they support the agreed outcomes of the project.

Monitoring digital transformation in the Senate of France

The DSI presents an annual activity report to the political authorities and the Secretary General. This is based on 20 activity monitoring indicators, grouped around three priority objectives for digital matters in the Senate:

1. Providing quality service to senators, management and the public

2. Making the DSI more efficient, with regard to staff (particularly in terms of training) and in terms of project management

3. Responding to the challenges of digitization in the context of sustainable development and security

Evaluate the programme and seek continuous improvement

Evaluation is a vital component of digital transformation programmes. It allows parliament to assess the effectiveness and impact of projects, ensuring that the programme is meeting users' requirements. Through continuous evaluation using the KPIs that have been established, parliaments can make informed decisions about how to improve the programme by making adjustments and revising priorities.

- **Identifying areas for improvement:** Evaluation helps identify areas where the programme is not achieving the desired outcomes.
- **Understanding progress:** Regularly assessing the programme against clear goals and metrics ensures that progress is being made towards objectives.
- **Making data-driven decisions:** Evaluation provides data and insights that can help parliaments make informed decisions about how to adjust digital transformation programmes.
- **Ensuring accountability:** By tracking progress and evaluating outcomes, parliaments can ensure that everyone is working towards the same goals and is accountable for achieving them.

Conclusion

Digital transformation is a journey and one that will look different depending on the parliament, the starting point and the ambition for transformation. It is impossible to be prescriptive about what must be done or how it is to be accomplished. This guide has set out to demonstrate the potential scope for digital transformation in parliaments and, with that, to inform senior staff who recognize that this journey is important and necessary for their parliament.

Each parliament will need to draw its own map but this guide can be used as a template or resource to answer questions about the scale, depth and ambition of the programme. It has, hopefully, provided an insight into how parliaments can go about developing a programme of digital transformation and has given some guidance on what might be considered good practice for such a programme – most notably, strong leadership, good communication, clear governance structures and a well-developed, evidence-based plan.

Appendices

Sample terms of reference for an ICT governance group

This sample terms of reference is taken from the National Assembly of Malawi. It defines the purpose, organization, activities and scope of the management group that is responsible for overseeing digital transformation in the parliament and for the ongoing strategic oversight of ICT.

Purpose

The purpose of the ICT governance group is to ensure a high level of communication, coordination and consultative decision-making in the management of ICT in the Parliament of Malawi. The implementation of ICT in parliaments is often subject to conflicting mandates and poorly understood priorities, which can lead to fragmentation of effort, inefficient practices, poor allocation of resources, and ultimately to user dissatisfaction with services.

The role of this ICT governance group is to address these problems through its organization and its activities. The Clerk of Parliament has final responsibility for (high-level) decisions regarding ICT, with the concurrence of the political leadership of the Parliament, but those decisions should be based on a consultative process. The values of openness and transparency, as well as the principles of good management, require procedures that encourage stakeholders and users to be engaged in this process.

The ICT governance group can support these goals by enabling users and stakeholders (e.g. heads of sections) to propose ideas for the use of ICT and to be informed as decisions are made and plans and schedules are established.

Organization

The ICT governance group of the Parliament of Malawi carries out its mandate partly through good organization. It should be formally established at the level of the Speaker/Parliamentary Service Committee (PSC) and chaired by the Clerk of Parliament. It should be composed of the heads of all sections within the Parliament's secretariat, or their representatives, and other major stakeholders as determined by the Clerk.

Figure 10 – National Assembly of Malawi ICT governance framework
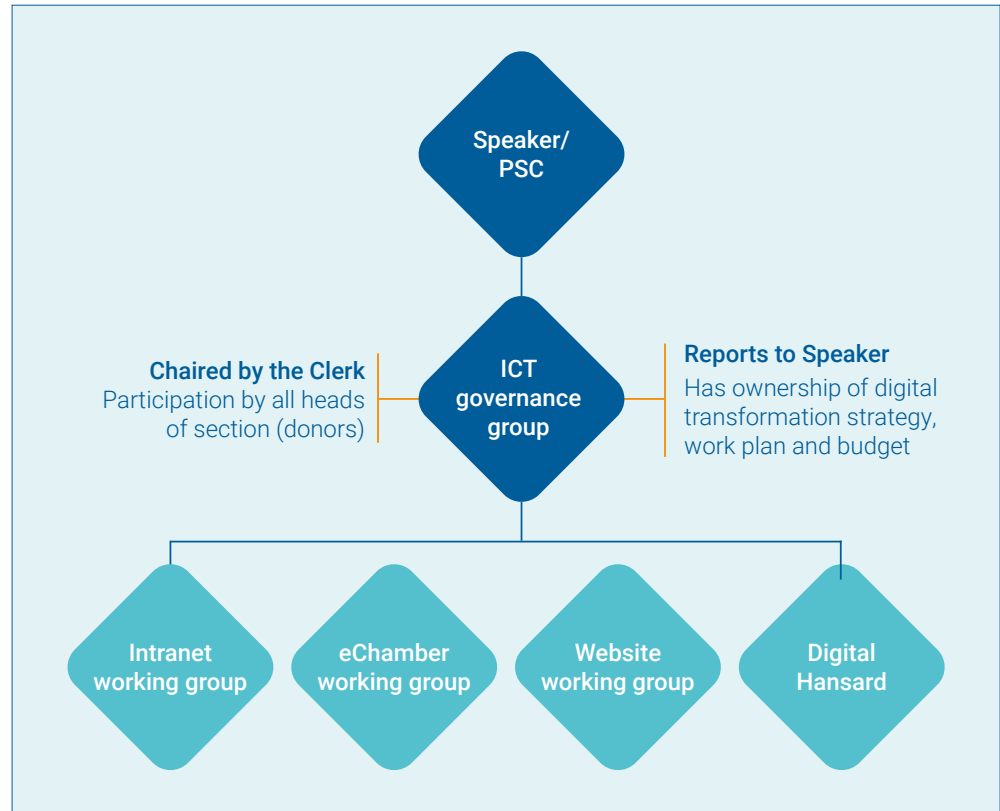
Because of the responsibility of the Clerk for the efficient operations of the whole of Parliament's administration, it is vital for the Clerk to play a major role in the management of ICT – albeit from a high level (and less so the technical level). The various sections under the supervision of the Clerk may have diverging objectives, and the Clerk must ensure coherence, cooperation and the resolution of competing goals. The Clerk also bears special responsibility for communicating ICT plans and activities to the leaders, including the Speaker/PSC and Members of Parliament, and for ensuring that their most important requirements for technology are met.

The ICT governance group is supported by the Controller of the ICT section, who recommends the agenda and records its decisions. The ICT Controller must ensure that the technical work undertaken is fully responsive to the needs of the Parliament, and that it complies with the objectives of the strategic framework of the Parliament of Malawi, including this digital transformation strategy (DTS). The ICT Controller reviews/drafts the goals and the accompanying implementation plans of the DTS for review by the ICT governance group. The ICT Controller must also be able to translate technical concepts into proposals that are understandable to members, particularly to those who do not have a technical background.

The work of the ICT governance group should be overseen by the Speaker/PSC.

Identifying the motivations and strategic drivers for digital transformation

There are many varied tools available to parliaments who wish to identify their motivations for digital transformation and understand the strategic drivers behind it.

Here are some commonly used approaches:

- **SWOT analysis:** Perform a SWOT (strengths, weaknesses, opportunities and threats) analysis specific to a programme of digital transformation to help parliament. This will identify internal strengths and weaknesses that can be leveraged or addressed, as well as external opportunities and threats that may influence your digital transformation initiatives.

- **PESTEL analysis:** Undertake a PESTEL (political, economic, social, technological, environmental and legal) analysis to examine the external factors that can influence your strategy. It helps parliaments understand key trends, risks and opportunities.

- **Scenario planning:** Create multiple plausible scenarios of the future and analyse their potential impacts on parliament. It helps identify uncertainties, risks and opportunities, supporting organizations to develop strategies that are robust and adaptable to different future outcomes.

- **Strategy maps:** Plot a strategy map to provide a visual representation of your strategy, illustrating the cause-and-effect relationships between different strategic objectives and initiatives. Strategy maps can support activities across different functional areas and levels of the parliament.

- **Strategy workshops:** Facilitate strategy workshops involving key stakeholders to align parliament's goals, vision and strategic priorities. These workshops can help identify the motivations and strategic drivers that align with the overall strategy.

- **Other workshops:** Workshops and idea-generation sessions with cross-functional teams help parliaments explore the motivations and strategic drivers for digital transformation. Encourage participants to share their ideas, concerns and aspirations, fostering collaborative discussions that can uncover valuable insights.

- **Stakeholder interviews and surveys:** Conduct interviews and surveys with key stakeholders across different levels of parliament, including members. These interactions can help gather insights into motivations and drivers for digital transformation. Open-ended questions can encourage participants to share their thoughts and experiences.

- **User feedback:** Collect user feedback through surveys, focus groups and interviews to understand expectations, barriers, pain points, opportunities and desired digital experiences.

- **Benchmarking:** Conduct benchmarking activities by studying good practices, case studies and success stories from parliaments and other public sector organizations. This helps identify common motivations and drivers that could apply to the parliament in question.

- **External consultation:** Engage external consultants or digital transformation experts to provide an objective perspective based on specialized knowledge. They should be able to conduct assessments, facilitate workshops and use their expertise to identify the motivations and drivers specific to the organization.

- **Sectoral research:** Stay updated on parliamentary and public sector trends in digital transformation, emerging technologies, and case studies. Resources such as the IPU's World e-Parliament Report and Innovation Tracker provide valuable insights into the motivations and strategic drivers prevalent in parliaments.

- **Organizational assessments:** Perform comprehensive assessments of the parliament's current state, including its technology landscape, processes, culture and capabilities. This evaluation can help to predict pain points, bottlenecks and the areas where digital transformation could have the greatest impact.

Checklist for parliaments starting on digital transformation

The following checklist is intended to be helpful for parliaments that are yet to begin their digital transformation programme and have limited or no ICT governance mechanisms in place. It is assumed that such a parliament will not have comprehensive digital transformation strategies and planning in place. However, the checklist is only a guide since every parliamentary context is different and parliaments should adapt the list below to their individual needs and circumstances.

STEP	LED BY	ACTION
1	SG	Establish a digital transformation coordination group (DT-CG) chaired by the SG/Clerk, with participation of all section heads (must include head of ICT section).
2	DT-CG	Assess the parliament's ICT readiness/maturity level by looking at the current ICT infrastructure and systems and information management services, policies and practices. ICT is best placed to carry out the assessment (see step 2a).

2a	ICT	Carry out a parliament-wide baseline assessment and report back to the DT-CG on:
		Current ICT infrastructure
		• Local area network
		• Internet connectivity
		• Cloud-based systems and storage
		Current ICT systems and information services
		• Electronic document management for members, plenary, committees and staff
		• Intranet for members, plenary, committees and staff
		• Parliamentary website (assess against IPU guidelines for parliamentary websites)
		• Social media (assess against IPU guide on social media)
		• Chamber conference management systems
		  ↘ Digital capturing, recording and broadcasting capabilities
		  ↘ Hansard/plenary reporting capabilities
		• Other systems/services (e.g. parliamentary email)
		Current information policies (and their digital readiness)
		• Parliamentary records management policy
		• Data classification policies
		• Cybersecurity policy
		Acceptable use policies (for digital assets)

STEP	LED BY	ACTION
3	DT-CG	Assess where you want to go: • Formulate SG/leadership vision for the digitally transformed parliament (3–5 years from now). • Formulate individual sections' digital information management needs. • Establish a 'wish list' for systems with 'business' justifications (i.e. how will this support parliamentary work).
4	SG	Set priorities: • Select priority initiatives from the wish list and determine digital transformation programme scope. In doing so, seek inputs, inspiration, examples and guidance from other parliaments through inter-parliamentary and other peer-to-peer exchanges.
5	ICT	• Conduct gap analyses and formulate solutions. • Formulate multi-year digital transformation road map (with projects). • Seek inputs/inspiration/examples/guidance from other parliaments through inter-parliamentary/peer-to-peer exchanges. • Engage and explain to all stakeholders the gaps in terms of needed infrastructure, information management platforms, and policies and practices.
6	DT-CG	• Assess resources, needs and budget. • Prepare budgets (multi-year and annual).
7	SG	Mobilize resources: • Report to parliamentary management board. • Engage development partners.
8	DT-CG	Monitor the implementation: • Establish project boards/working groups, which report back to DT-CG. • Periodically review progress of implementation.

Data collection for this guide

A survey on digital transformation was distributed to ASGP members in October 2022. Responses were received from 45 parliaments or individual chambers of bicameral parliaments between early December 2022 and the end of January 2023. A number of responses were jointly provided by both chambers of bicameral parliaments, meaning that a total of 52 chambers are represented here. The parliaments and individual chambers that responded were:

- Afghanistan – Meshrano Jirga
- Austria – Parliament
- Bahrain – Council of Representatives
- Bulgaria – Parliament
- Burundi – Senate
- Chad – Conseil National de Transition
- Cyprus – House of Representatives
- Czech Republic – Chamber of Deputies
- Czech Republic – Senate
- Estonia – Parliament
- Fiji – Parliament
- Finland – Parliament
- France – Senate
- Germany – Bundestag
- Germany – Bundesrat
- Greece – Hellenic Parliament
- Hungary – National Assembly
- Iceland – Althingi
- India – Lok Sabha
- India – Rajya Sabha
- Iraq – Council of Representatives
- Ireland – Houses of the Oireachtas
- Kenya – Parliament
- Libya – House of Representatives
- Malaysia – Parliament
- Morocco – House of Representatives
- Mozambique – Assembly
- Nepal – Federal Parliament
- Netherlands – Tweede Kamer
- Netherlands – Senate
- North Macedonia – Assembly
- Portugal – Assembleia da República
- Qatar – Shura Council
- Romania – Chamber of Deputies
- Romania – Senate
- Singapore – Parliament
- Slovakia – National Council of the Slovak Republic

- Spain – Senate
- Switzerland – Parliament
- Tanzania – Parliament
- Thailand – House of Representatives
- Togo – National Assembly
- Turkey – Grand National Assembly
- United Kingdom – Parliament
- Zambia – Parliament

Two focus groups were held in May 2023. These involved secretaries general and senior parliamentary staff from 17 parliaments/chambers, including:

- Austria – Parliament
- Azerbaijan – Milli Majlis
- Burundi – Senate
- Canada – House of Commons
- Chad – Conseil National de Transition
- Democratic Republic of Congo – Senate
- France – Senate
- Germany – Bundestag
- Germany – Bundesrat
- Hungary – National Assembly
- Iceland – Althingi
- Italy – Chamber of Deputies
- Spain – Senate
- Thailand – Parliament
- Ukraine – Verkhovna Rada
- United Arab Emirates – Federal National Council
- Zimbabwe – Parliament

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