Digital Cooperation Organization

THE DEVELOPMENT OF THE DIGITAL ECONOMY

FOSTERING PUBLIC PRIVATE PARTNERSHIPS

2024

DOCUMENT DISCLAIMER

The following legal disclaimer (“Disclaimer”) applies to this report (“Report”) and by accessing or using the Report, you (“User” or “Reader”) acknowledge and agree to be bound by this Disclaimer. If you do not agree to this Disclaimer, please refrain from using the Report.

This Report has been prepared by the Digital Cooperation Organization (DCO). While reasonable efforts have been made to ensure accuracy and relevance of the information provided, the DCO makes no representation or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability, or availability of the information contained in this Report.

The information provided in this Report is intended for general informational purposes only and should not be considered as professional advice. The DCO disclaims any liability for any actions taken or not taken based on the information provided in this Report.

The DCO reserves the right to update, modify or remove content from this Report without prior notice. The publication of this Report does not create a consultant-client relationship between the DCO and the User.

The designations employed in this Report of the material on any map do not imply the expression of any opinion whatsoever on the part of the DCO concerning the legal status of any country, territory, city, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The use of this Report is solely at the User’s own risk. Under no circumstances shall the DCO be liable for any loss, damage, including but not limited to, direct or indirect or consequential loss or damage, or any loss whatsoever arising from the use of this Report.

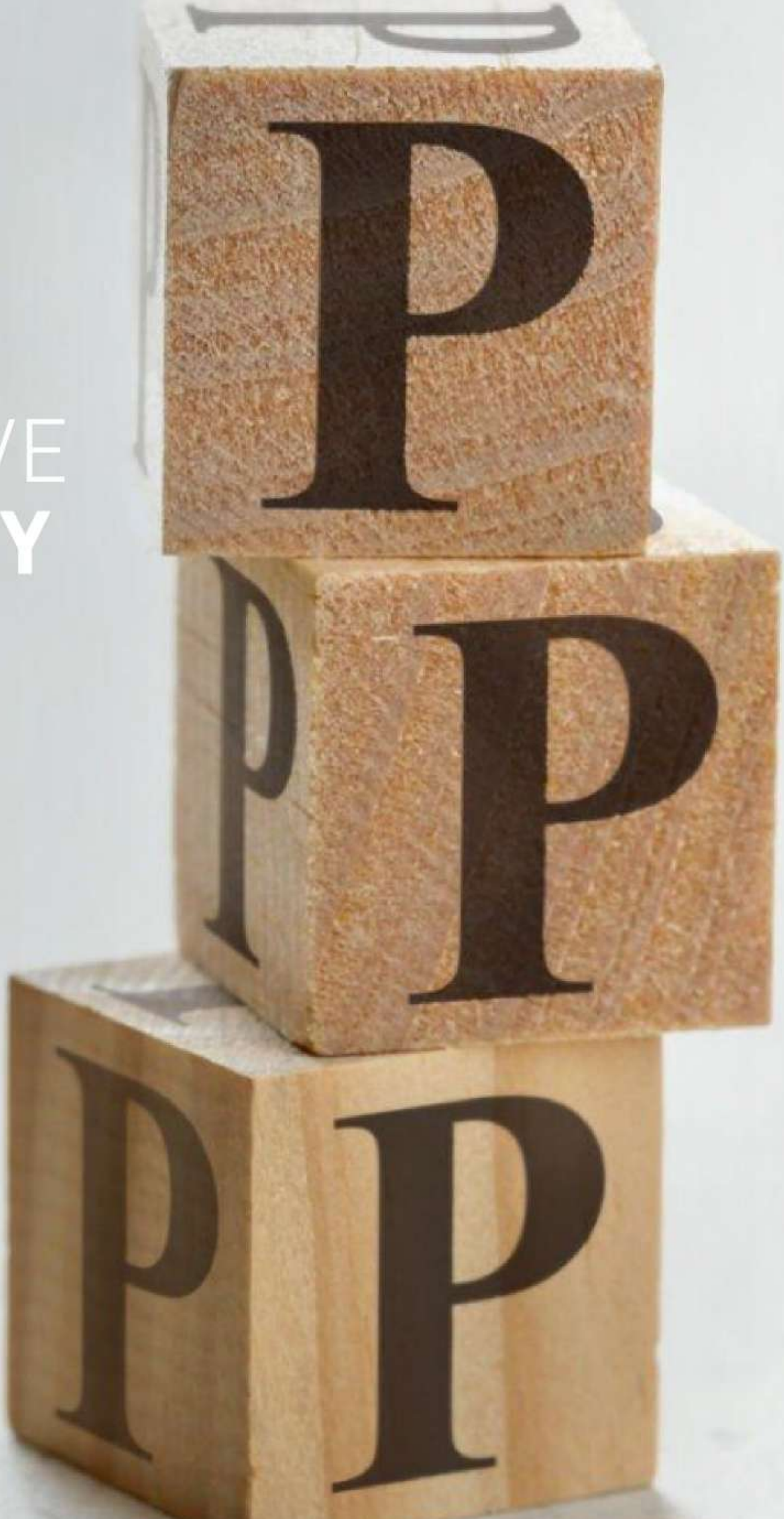
Unless expressly stated otherwise, the findings, interpretations and conclusions expressed in this Report do not necessarily represent the views of the DCO. The User shall not reproduce any content of this Report without obtaining the DCO’s consent or shall provide a reference to the DCO’s information in all cases.

By accessing and using this Report, the Reader acknowledges and agrees to the terms of this Disclaimer, which is subject to change without notice, and any updates will be effective upon posting.

TABLE OF CONTENTS

1

EXECUTIVE **SUMMARY**



EXECUTIVE SUMMARY

The Digital Cooperation Organization is focused on enabling digital prosperity for all, by fostering international cooperation and innovation across the digital economy. One of the ways this goal can be achieved is through thoughtful collaboration and partnership, not just between DCO Member States and wider international stakeholders, but through increased cooperation between the public and private sectors within individual domestic markets and economies. Collaboration between governments and businesses is a catalyst that not only brings together the required mix of skills and experience to deliver transformative change, but also a range of different financing and funding options that are vital for the continued activation of the digital economy.

The digital economy is one of the key drivers of inclusive and sustainable growth. It offers economies across the world the opportunity to enhance their productivity, competitiveness, and innovative development, as well as to improve the quality of life and access to services for their citizens. Over the last decade, digital transformation has become a core priority for governments and businesses across the globe, resulting in the creation of new business models, innovative products and services, and revolutionary ways of doing business.

This document explores different opportunities within the digital sector that could yield significant benefits and innovation from increased collaboration between businesses and their national and regional governments. It draws on global best practice to examine how public-private partnerships can be leveraged to foster the development of the digital economy in the DCO Member States and culminates with the introduction of an initial 'Framework for Collaborative Investment in the Digital Economy', which is designed as a guidance and supporting roadmap for the DCO countries to leverage when considering joint-investment in the digital sphere.

The Framework follows a Four-Stage Approach that guides the PPP process from the identification of the needs and opportunities to the delivery and maintenance of the proposed PPP project.

1

The First Phase is opportunity assessment, which involves identifying and analyzing the needs, gaps, and opportunities for digital development in a specific country or sector. It also involves engaging with potential partners and stakeholders to understand their interests, expectations, and capacities.

2

The Second Phase is strategic planning, which explores developing an overarching vision and plan for the PPP project that aligns with the national digital strategy and priorities. It also involves defining the roles, responsibilities, and contributions of each partner and stakeholder, as well as the expected outcomes, benefits, and impacts of the project.

3

The Third Phase is PPP structuring, which involves designing and negotiating the legal, contractual, and institutional arrangements of the PPP project. It also involves identifying and allocating the risks, costs, and revenues of the project among the partners and stakeholders.

4

The Final Phase entails securing necessary financing and guarantees for the PPP project, assessing and managing risks associated with the project's execution. It further involves the implementation, operation, and maintenance of the project in accordance with predefined standards and specifications.

The Framework is an initial step in DCO's Digital PPP journey and is intended as a guide for Member States seeking to use PPPs to develop their digital economies. At a strategic level, the Framework will look to support DCO organizations to leverage the opportunities provided through PPPs as a mechanism to increase access, innovation, efficiency, and social impact across their digital economies, as well as supporting DCO´s mission to provide guidance and recommendations on policy, regulation, financial levers and incentives to support impactful PPPs.

2

INTRODUCTION

INTRODUCTION

The digital economy is rapidly emerging as the catalyst for inclusive and sustainable growth, offering the promise of significantly enhanced productivity, heightened global competitiveness, and a surge in innovation across diverse sectors. With its remarkable potential to elevate living standards, the digital economy is set to democratize service accessibility and provide an unprecedented impetus to economic transformation across the world[i].

Supporting the development and uptake of digital technologies is a major commitment on the road to global economic growth and sustainability. Public-Private Partnerships can become one of the key enablers for the enhancement of the digital economy and can help address the shortage of adequate and affordable financing that is available for important infrastructure, particularly in emerging economies. Investment in the necessary infrastructure, hardware, and software is crucial for boosting interconnectivity, for targeting growth in new sectors and for the pursuit of Sustainable Development Goals. Multi-sectoral partnerships harnessing technology and blended finance models can be a driving force in transforming the lives of citizens and in supporting national digital transformation journeys.

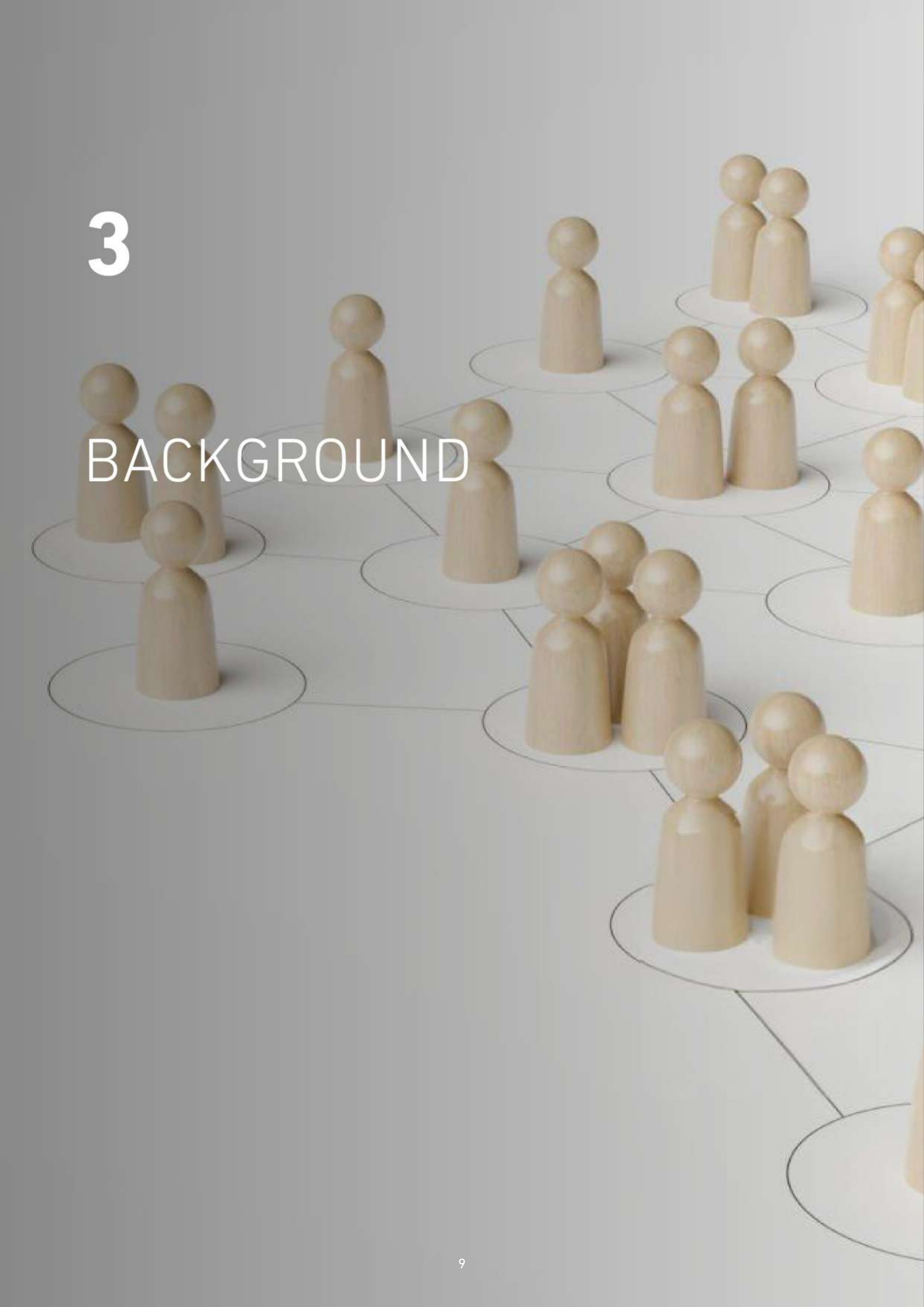
However, multistakeholder approaches and cooperation models in the digital economy are still relatively new, as are the ways for thinking about collaborative investments. While PPPs can be a defining catalyst in supercharging the growth and enhancement of the Digital Economy across nations, there is a need for governments and non-state actors to align collective and innovative efforts to accelerate the use of technology and enable smarter investment strategies in the digital economy.

In response to the pressing need for catalyzing investments in the digital economy and bridging the ever-widening digital gap, this report aims to set the initial groundwork for a Framework to unlock the benefits of Public-Private Partnerships (PPPs) for the development of the digital economy across DCO nations. Collaboration and engagement are at the heart of PPPs, bringing together the combined thought power, expertise and experience of governments, businesses and the third sector to drive positive impacts for all. A priority objective of the DCO's 'Framework for Collaborative Investment in the Digital Economy' is to leverage these benefits to increase the ability of DCO Members to achieve the 2030 Agenda for Sustainable Development, with a view to support implementation of the Global Digital Compact that will be agreed at the upcoming Summit of the Future taking place in September 2024. This Summit will serve as a pivotal platform to catalyze the joint efforts of Governments, the Private Sector, International Organizations, and civil society to reduce fragmentation within the digital landscape, fostering collaboration and coherence among stakeholders.

Specifically, the report serves as a business case for PPPs to be used by policymakers, offering actionable insights and strategic direction in the pursuit of fostering impactful PPPs that drive investments and propel the digital economy forward. It proposes a framework that aims to guide the strategic development of PPPs to catalyze investments in the digital economy and support smart resource mobilization to bridge the digital gap. It presents a theory of change that combines the observed status quo with specific actions that can be leveraged to transform the current landscape to achieve the envisioned success of the development of the digital economy through PPPs. By unpacking steps to harness relevant policies financial instruments and incentives, the framework can play an important role in supporting the decision-making process surrounding investments, thereby shaping the partnership models and funding structures conducive to robust growth in the digital economy.

3

BACKGROUND



BACKGROUND

A Growing Digital Economy

Digital markets are becoming increasingly important for all actors within the economy, with governments, the private sector and citizens all impacted by the progress of technological advancement and the growing recognition that digitalization is the cornerstone of growth, innovation, and competitiveness[ii]. The digital economy is currently estimated to contribute more than 15% to global GDP, and this contribution is estimated to reach close to 25% by 2025.[iii,iv] Digital and technological growth has been increasing at approximately two-and-a-half times the speed of physical world GDP in the past decade, as governments around the globe place digitalization at the forefront of their innovation and transformation agendas.[v]

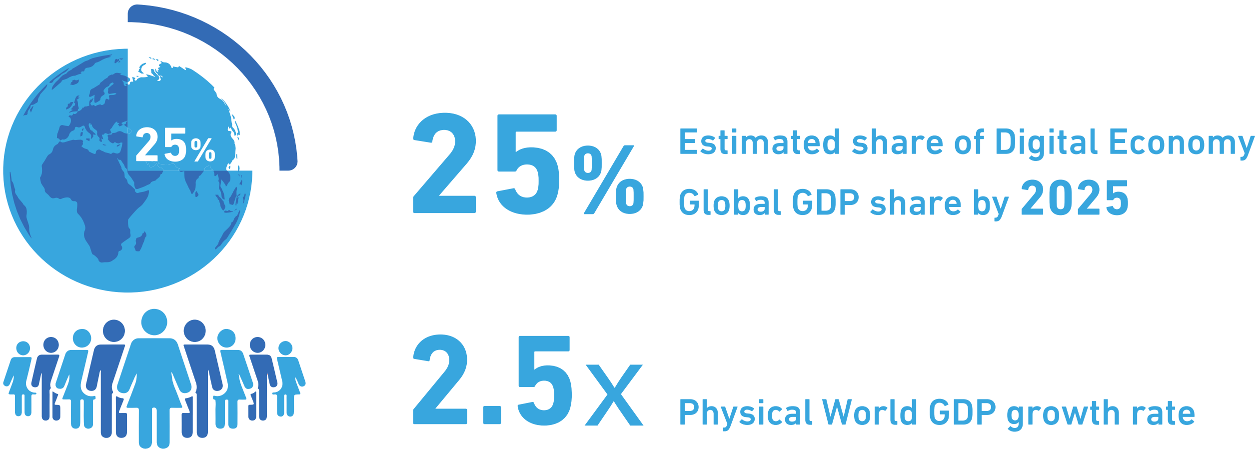
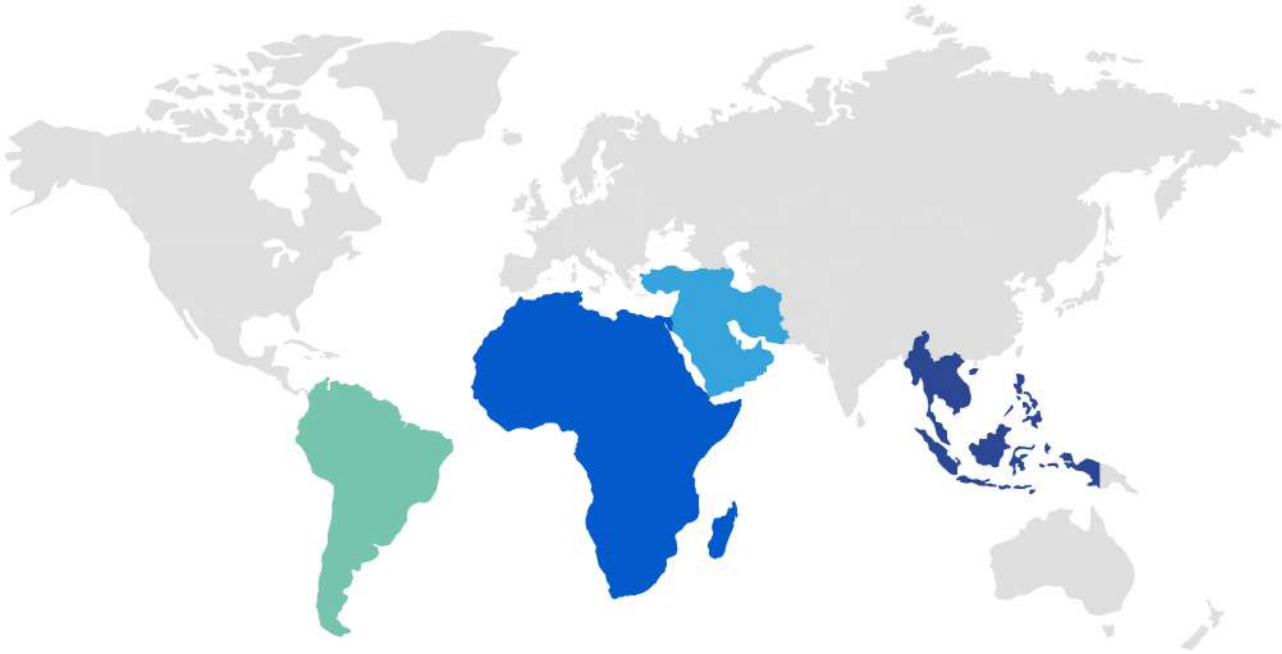


Figure 1: Digital Economy Recap

Historically, innovative technological development and investment in the digital economy has been concentrated in a more advanced economies, such as the United States, Japan, and the United Kingdom.[vi] These economies have been able to leverage their strong scientific and technological capabilities, large and dynamic markets, and supportive institutional and regulatory frameworks to foster digital innovation and adoption.[vii] However, in recent years emerging economies are increasingly investing in their digital development as an opportunity to catch-up with and even surpass nations in the West and Far East. Emerging economies are characterized by rapid economic growth, large and young populations, increasing urbanization, and rising middle classes. These factors create a foundation for a strong demand for digital infrastructure and services, as well as offering a supportive environment for digital entrepreneurship and innovation.

Governments and international organizations have joined forces to champion initiatives that not only fuel economic growth but also address social and broader developmental goals. With countries focusing on digital innovation, subsectors such as artificial intelligence (AI), and distributed ledger technologies emerge as important contributors to GDP and are well placed to reap the rewards of increased public-private collaboration.

The importance of digital is increasing, with estimates suggesting that around 70% of companies will adopt at least one type of AI technology by 2030, with the potential for AI to deliver an additional economic output of approximately USD 13 trillion the same year, and increasing global GDP by approximately 1.2% annually.[xvii] Furthermore, the transformative potential of blockchain technologies is highlighted, with the capability to boost the global economy by US$1.76 trillion by 2030 through enhancing levels of tracking, tracing, and trust.[xviii]



Latin America

- The digital economy is expected to grow by 25% in Latin America until 2025, reaching a value of **US$ 700 billion**.[xv]
- Brazil is one of the standout economies on a four-year innovation surge ranking of 49/132 across global innovators. [xvi]

Southeast Asia

- The digital economy accounts for between 6% to 10% of the GDP in countries like China, South Korea, and Japan.[xiii]
- Pakistan is one of the standout economies on a four-year innovation surge ranking of 88/132 across global innovators. [xiv]

The Middle East

- The digital economy is emerging as a force in the region, contributing approximately **4% to regional GDP**.[viii]
- Saudi Arabia is one of the standout economies on a four year innovation surge ranking of 48/132 in global innovators. [ix]

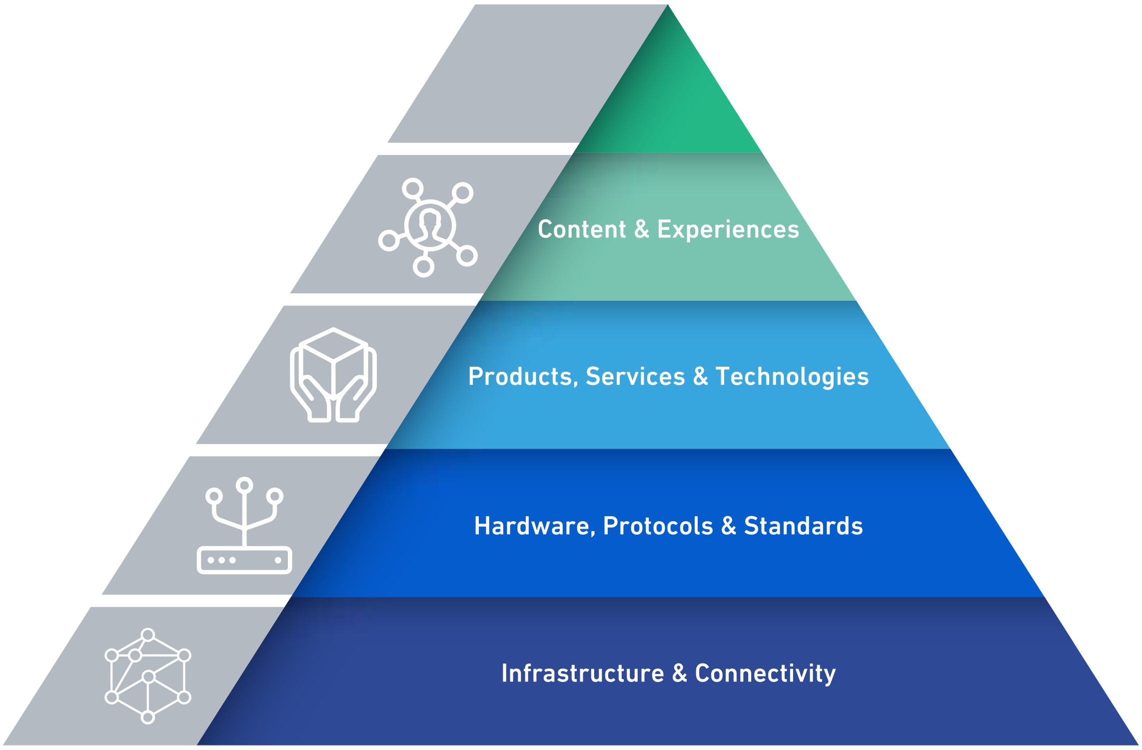
Africa

- The digital economy is a driver of development in Africa, the internet economy is estimated to be worth close to **US$ 180 billion** by 2025.[x, xi]
- Rwanda is the most innovative economy for its income group in 2023, ranking 103/132. Nigeria is ranked 109/132.[xii]

Figure 2: Regional Economic Overviews

Closing the Digital Funding Gap

Figure 3 highlights the different building blocks that make up the digital economy, with infrastructure investment shown as a key first step in enabling the wider ecosystem.



Content & Experiences

Users (consumers and businesses):
- Enterprises in other industries (e.g. healthcare, education)
- Professional consumers (e.g, content creators, product developers, app developers)
- ICT enthusiasts
- Digital services (e-government, e-commerce, m-commerce)

Products, Services & Technologies
- Software and IP development
- Internal portals and platforms
- Technology firms
- Software Engineers
- Professional ICT services (e.g, IT consulting)
- Emerging tech (big data, AI, blockchain etc.)

Hardware, Protocols & Standards
- Computers, Smartphones
- Device Manufacturers
- Operating System

Infrastructure & Connectivity
- Digital infrastucture and dara centers
- Connectivity infrastructure
- Fiber technology

Enablers

Regulation	Digital Skills	Innovation (R&D)	Digital trust	Entrepreneurial Environment	Social Acceptance	Data Flows	Interest among leadership

Figure 3: Components of the Digital Economy

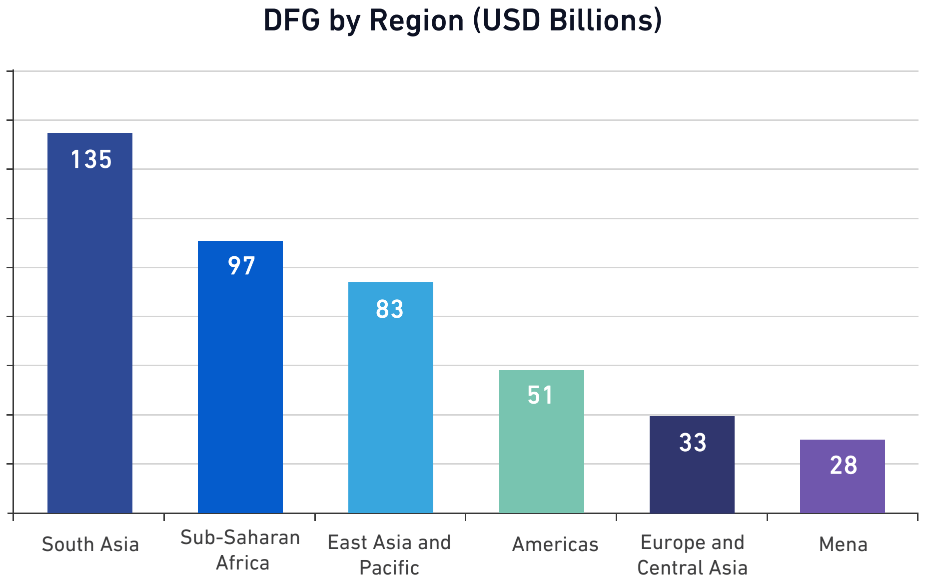
In attracting the required investment in these key areas, one of the main challenges that Member States are facing is how to tackle the 'Digital Funding Gap' (DFG).

Particularly prevalent in emerging economies, the DFG describes the shortage of adequate and affordable financing that is available for important digital infrastructure and wider services investment, and this is exacerbated by several different factors.[xix,xx] Emerging markets often face issues with non-conducive domestic policy environments, high risks and uncertainties associated with digital investments, limited experience and expertise in complex project delivery and insufficient frameworks for public-private collaboration. These challenges can limit the ability of emerging economies to harness the full potential of technological advancement and to participate fully in the expanding digital economy.

DFG Explained: The digital funding gap is the difference between the amount of finance needed to provide universal access to digital services and the amount of money that is **readily available** to do so. It is a measure of how much the world is falling short of achieving digital inclusion for all people, especially those in low- and middle-income countries.

The term "**readily available**" in the context of the digital funding gap refers to funds that are accessible or easily obtainable for investment in digital initiatives. These funds can come from various sources, including governments, international organizations, private sector investments, philanthropic organizations, and development agencies. However, the term does not imply that these funds are necessarily abundant or sufficient to meet the entire financing needs for achieving universal access to digital services. Instead, it suggests that there are existing financial resources that could potentially be allocated or mobilized to address the digital funding gap.

The issue is particularly stark when considering the accessibility of digital connectivity for emerging nations. For example, the International Telecommunication Union (ITU) estimates that the cost to close the funding gap for universal broadband would alone require an estimated USD 428 billion in investment, with 97% of this needing to be sourced from low-income and emerging market economies.[xxi] This significant requirement for increased investment, whether for broadband or other infrastructure upgrades, is unlikely to be solved by any singular initiative or policy change in isolation, and requires concerted effort and alignment across a multiple areas.



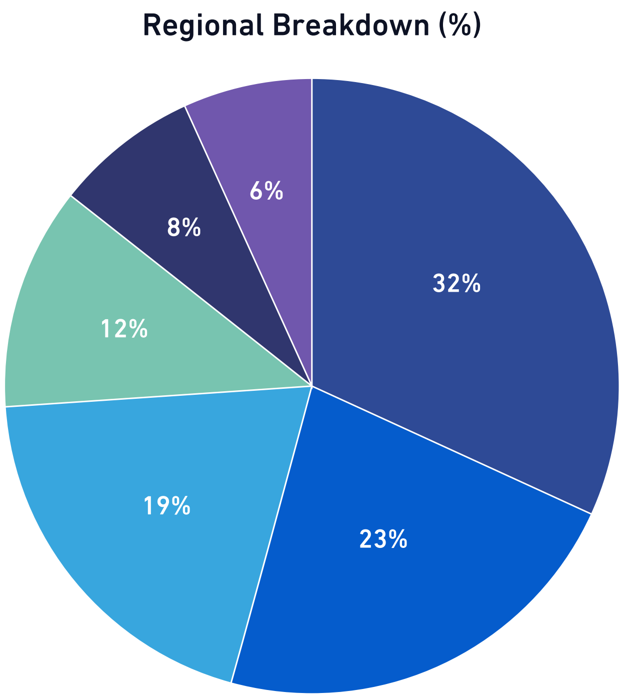


Figure 4: The Breakdown of the Digital Gap

One such area may be increased public and private sector collaboration. Historically, the private sector has played a pivotal role in supporting governments in financing digital and technology investments, both at the infrastructure and supporting ecosystem level, and together they can identify and evaluate innovative opportunities to bring the combination of government and business expertise and investment together, with the aim of further unlocking the potential of the digital economy across countries and providing improved access to digital technologies for citizens.

Collaborating across the Economy

For large-scale, complex investments and projects to be successful, many factors must be carefully considered. Projects and investments in the digital economy require detailed planning and ex-ante evaluation, a range of different skills and experience, and considerable financial investment. When faced with these challenges, governments and individual businesses will often not have all the required attributes if working in isolation, and some projects will require the combination of the public and private sector to be successful.

Governments control domestic policy, regulation, and legislation, and often have access to the required funding and financial support. The private sector can bring innovation, competitive efficiency, deep expertise in key areas outside of public experience and can enhance the quality and sustainability of digital services. By working together, the public and private sectors can leverage their respective strengths and overcome key challenges and hurdles to better cultivate a dynamic ecosystem of innovation, growth, and societal transformation.

When considering collaboration, governments and the public sector have a diverse array of ownership and command models at their disposal and their choices can significantly influence the nature and outcomes of the project engagements. These models span a wide spectrum of operating structures and should be selected and refined based on unique requirements and focus the relevant engagement.

Each model comes with its own set of potential advantages and considerations, and the selection should align with the specific objectives of the project or opportunity being considered.

In the case of the digital economy, PPPs have historically been used for the development of the supporting infrastructure and select enablers such as digital skills. PPPs stand out as the mechanism of choice for the development of the digital economy as these are long-term arrangements between the government and private sector institutions. They are designed to align long-term incentives between the government and private sector finance and reduce the direct burden on the government. PPPs can tackle some of the challenges faced by the government in infrastructure projects by changing the incentive structure. Private investors are also well placed to manage operational and construction risks because they have a financial interest in limiting costs and delays.

PPPs can also help the government to mobilize private sector resources to cover the capital expenditure costs up front and make the public sector pay during delivery of the services, either through availability payments or usage payments. PPPs can incentivize the private sector to deliver projects on time and within budget, impose budgetary certainty by setting present and future costs of infrastructure projects over time, and introduce private sector technology and innovation in providing better public services through improved operational efficiency.

"Anticipating the unforeseen is a key tenet of our digital strategy. We **meticulously evaluate risks**, providing not just solutions, but a roadmap for resilience, ensuring our PPP engagement stands the test of uncertainty."

~ Quote from participant at DCO Roundtable organized in Cape Town in November 2023

In the context of digital infrastructure investments both soft and hard infrastructure levels play critical roles in facilitating the development and deployment of digital technologies,[xxii] where PPPs offer a unique opportunity to bridge the digital divide by combining the efforts of both the public and private sectors. PPPs have a proven track record of advancing digital infrastructure investments and enabling key factors such as education and skills development, which are essential for digital inclusion. PPPs, therefore, emerge as a compelling co-development structure to stimulate investments across the digital economy.

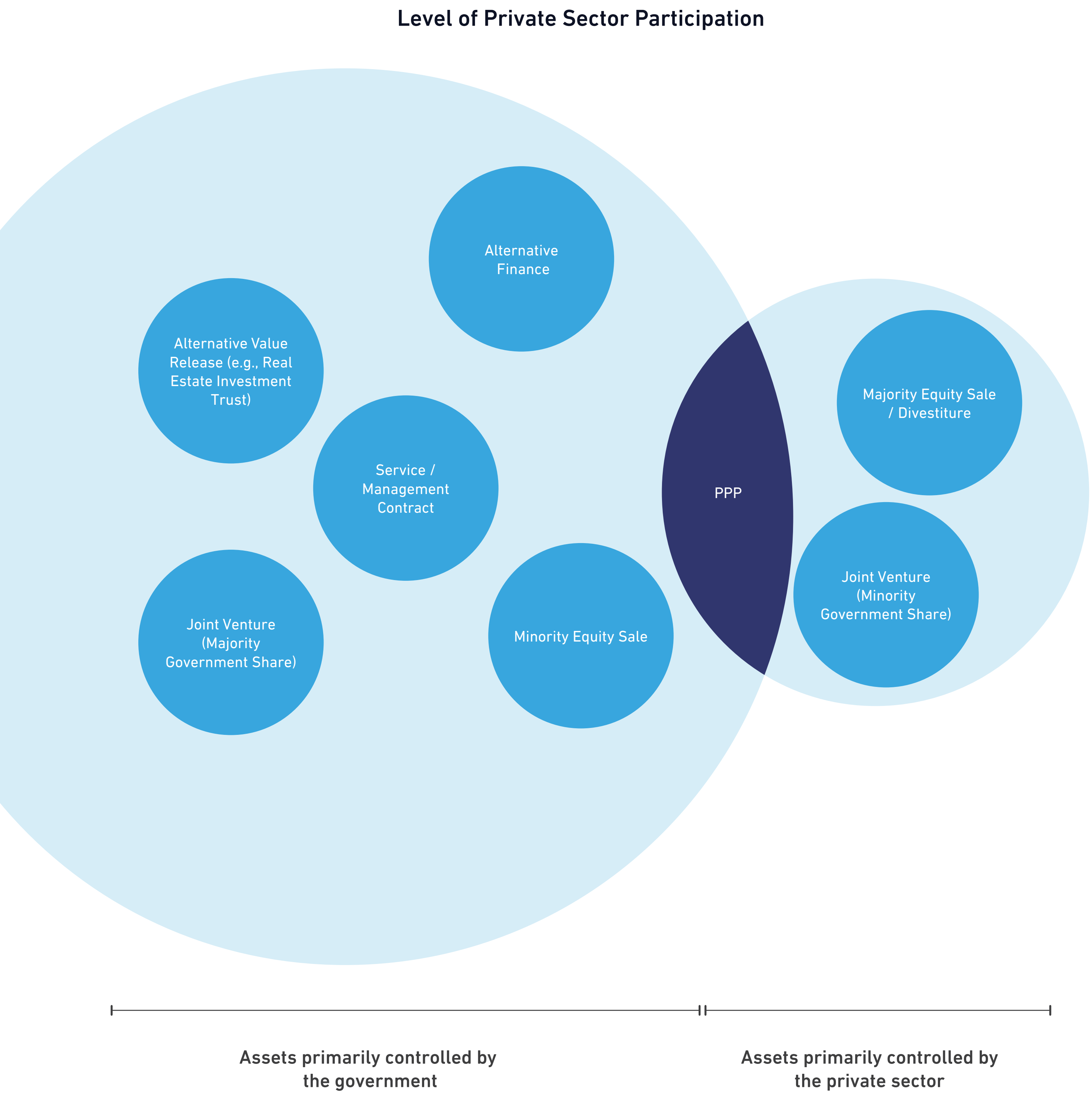


Figure 5: Suite of available private sector engagement models

Here is how they are typically defined

Hard Infrastructure

Hard infrastructure refers to the physical components necessary to support digital technology deployment and usage. This includes tangible assets such as:

- Fiber-optic cables
- Mobile network towers
- Data centers
- Servers
- Hardware devices (e.g., computers, smartphones)
- Electricity grids to power these assets

Investments in hard infrastructure are aimed at building and expanding the physical infrastructure necessary for digital connectivity and access.

Soft Infrastructure

Soft infrastructure encompasses the non-physical elements that are essential for the effective functioning of digital technologies and systems. These include:

- Legal frameworks and regulatory policies governing digital activities (e.g., data protection laws, intellectual property rights)
- Standards and protocols for interoperability and compatibility of digital systems
- Cybersecurity measures and protocols to ensure the safety and security of digital infrastructure and data
- Digital skills development programs to enhance the capacity of individuals and organizations to effectively utilize digital technologies
- Institutional capacity building to support the implementation and management of digital infrastructure projects

Investments in soft infrastructure are aimed at creating an enabling environment for the deployment, adoption, and sustainable use of digital technologies.

Both hard and soft infrastructure levels are interdependent and complementary. While hard infrastructure provides the physical foundation for digital connectivity, soft infrastructure addresses the regulatory, institutional, and human capacity aspects necessary to maximize the benefits of digital infrastructure investments and ensure their long-term sustainability and effectiveness.

4

PUBLIC-PRIVATE PARTNERSHIP IN THE DIGITAL ECONOMY

PUBLIC PRIVATE PARTNERSHIP IN THE DIGITAL ECONOMY

In the pursuit of fostering innovation, growth, and transformation within the digital economy targeted, thoughtful collaboration between the public and private sector can be a solution to address some of the key challenges facing the development and investment of key digital infrastructure and the wider ecosystem of enablement. This section explores the specific use of Public Private Partnerships and how this mechanism of joint investment can be used specifically across the DCO Members to drive sustainable digital development.

Public Private Partnership Structures

A typical Public Private Partnership structure can be complex, involving contractual arrangements and agreements between several parties including the government, project sponsor, project operator, financiers, suppliers, contractors, third parties and customers. There is a spectrum of different structures that can be employed, each tailored to meet the requirements of specific projects.

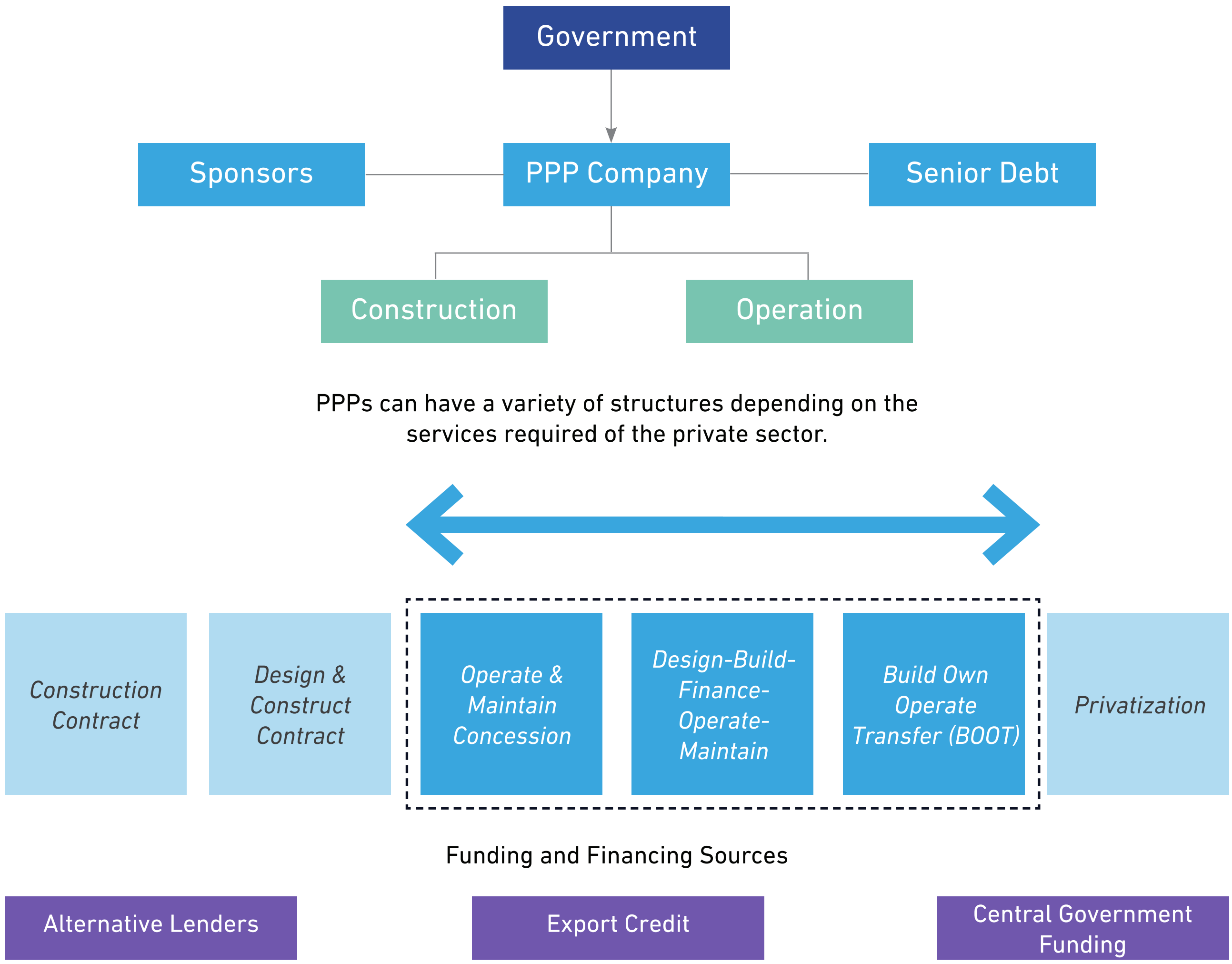


Figure 6: Traditional PPP investment structure

Figure 6 provides an overview of the traditional PPP investment vehicle and sets out a range of potential structures to be considered depending on the specific circumstances and goals of the targeted engagement.

In the digital economy, a wide spectrum of models has emerged to enable participation between the public and private sector in providing infrastructure facilities and wider services. The models vary from shorter-term simple management contracts (with or without investment requirements), to longer-term and complex BOOT form agreements. These models vary mainly by the ownership of capital assets, the responsibility for investment, the assumption of risks, and the style and duration of the contract. PPP contracts can be categorized in several different ways, and there is no consistent, international standard for naming and describing these different types of contracts. However, most countries broadly break down PPP contracts in three core areas.

A broad summary of the *most commonly used PPP structures* is provided below:

Operate, Maintain, and Concession (OMC)[xxiii]

In an OMC PPP structure, a private sector entity assumes responsibility for operating and maintaining an existing infrastructure asset, often for a long period. This model places the onus on the private sector to deliver quality and efficiency while also assuming a significant share of the risks, such as demand fluctuations. However, the public sector typically retains ownership of the asset and may regulate the service. The private partner can benefit from the user fees and the concession fee, while the public partner can benefit from the reduced operational costs and the improved asset performance.

Design, Build, Finance, Operate, and Maintain (DBFOM)[xxiv]

In a DBFOM PPP structure, a private sector entity assumes responsibility for designing, building, financing, operating, and maintaining a digital-focused project, usually under a long-term contract with a government or public sector entity. This model transfers most of the risks and responsibilities from the government to the private sector, while the government retains the overall ownership of the project. The private partner can benefit from the availability payments or user fees, depending on the type of the project, while the public partner can benefit from the efficient and quality service delivery and reduced need for public finance or debt.

Build, Own, Operate, and Transfer (BOOT)[xxv]

In a BOOT PPP structure, a private sector entity assumes responsibility for designing, building, financing, owning, and operating a project, usually for a long-term contract. This model transfers most of the risks and responsibilities from the government to the private sector, while the government grants a concession to the private sector to collect revenues from the users of the service. However, the ownership of the project will revert to the government at the end of the concession period. The private partner can benefit from the full control and management of the project, while the public partner can benefit from the reduced public debt and the transfer of a well-maintained asset.

Each high-level structure offers different options for governments and the public sector to tailor and develop a given engagement in the way they think most suitable. It is a key consideration that could be a defining factor in the success of the collaboration, and one that should be thoroughly analyzed and assessed through a defined framework during the conception phase of an engagement.

Identifying Tangible Avenues for Digital Economy Expansion within PPP Frameworks

PPPs represent a key mechanism for supporting the growth of the digital economy for the DCO Member States. By fostering collaboration between public and private entities, PPPs enable the development and diffusion of digital technologies and services that are essential for economic growth and social connectivity and inclusion. In addition, it is crucial to align objectives across a range of stakeholders, ensuring that the outcomes not only contribute to economic prosperity but also address societal needs.

PPPs can support research and development, improve market infrastructure and provide business development services. PPPs can benefit both the public and private sectors by increasing investment, innovation, efficiency and risk-sharing. These partnerships aim to use technology to improve the quality of life, efficiency, and sustainability of urban areas[xxvi]. To date, PPPs have already been extensively used in digitalizing government services, such as smart lighting, waste management, traffic management, parking, security, and e-government with further potential for the digital economy[xxvii].

Social Impact in the Digital Economy refers to the positive effects that digital technologies and initiatives have on society, beyond their economic outcomes. Key aspects include ensuring inclusive access to digital resources, promoting education and skills development through digital tools, improving healthcare accessibility, fostering financial inclusion, empowering communities through digital engagement, and supporting social entrepreneurship. It encompasses a conscious effort to use digital innovations to address societal challenges, enhance well-being, and create a more inclusive and sustainable future.

Social impact investment can be part of a Public-Private Partnership (PPP), depending on the nature and objectives of the partnership. PPPs typically involve collaboration between government entities and private sector organizations to finance, develop, and operate public infrastructure or deliver public services. In some cases, social impact investment may align with the goals of a PPP, particularly if the project aims to address social or environmental challenges alongside its economic objectives. For example, a PPP project focused on renewable energy infrastructure might attract social impact investors who are interested in supporting projects with positive environmental outcomes.

However, it's important to note that not all PPP projects incorporate social impact investment, as the primary focus of many PPPs is often on delivering economic returns to investors while providing essential public services or infrastructure. Nonetheless, there is a growing recognition of the importance of considering social and environmental impacts in infrastructure and service delivery projects, and some PPPs may explicitly incorporate social impact goals into their objectives and investment strategies.

There are many recent examples from countries around the world of successful PPPs that have been used to unlock the potential of the digital economy, often in areas of the economy where previous investment and development has stalled or been sidelined. Several of these examples have been reviewed in the creation of this report to support the analysis and assessment.

In addition to country-specific initiatives, there are also regional examples of innovative financial mechanisms that exemplify the integration of shared value within the digital economy, such as the digital Sukuk developed by the Islamic Development Bank (IsDB). Sukuk, often referred to as Islamic bonds, are financial instruments that comply with Sharia law and its investment principles, which prohibit the charging or paying of interest. The IsDB has pioneered the use of digital Sukuk to fund various development projects, including those aimed at advancing the digital economy.

Digital Sukuk offers a Sharia-compliant way to raise capital for digital infrastructure, serving as an innovative financing solution that aligns with the ethical and social principles valued in Islamic finance. This approach not only adheres to Islamic financial principles but also ensures that the investments are directed towards projects that have a positive social impact, such as enhancing connectivity, supporting digital education initiatives, and fostering tech entrepreneurship.

In essence, the application of digital Sukuk by institutions like the IsDB presents a compelling case of how PPPs can harness innovative financing to drive the digital economy while adhering to the principles of shared value. Such financial instruments could potentially transform how projects are funded in the digital domain, ensuring that the proliferation of digital technologies also advances social objectives and contributes to a more balanced and equitable economic growth.
xxviii

When the DCO Member States are looking to identify different opportunities for collaboration within the Digital Economy, it may be helpful to segment the landscape into different categories. This will help to target specific opportunities, and to clarify thinking on what types of engagement will be most effective.

Figure 7 breaks the digital economy down into four key enablers: infrastructure, digital readiness, sustainability, and regulatory framework. Each of these categories present different opportunities for the DCO Member States, will require different types of collaboration and intervention between the public and private sectors:

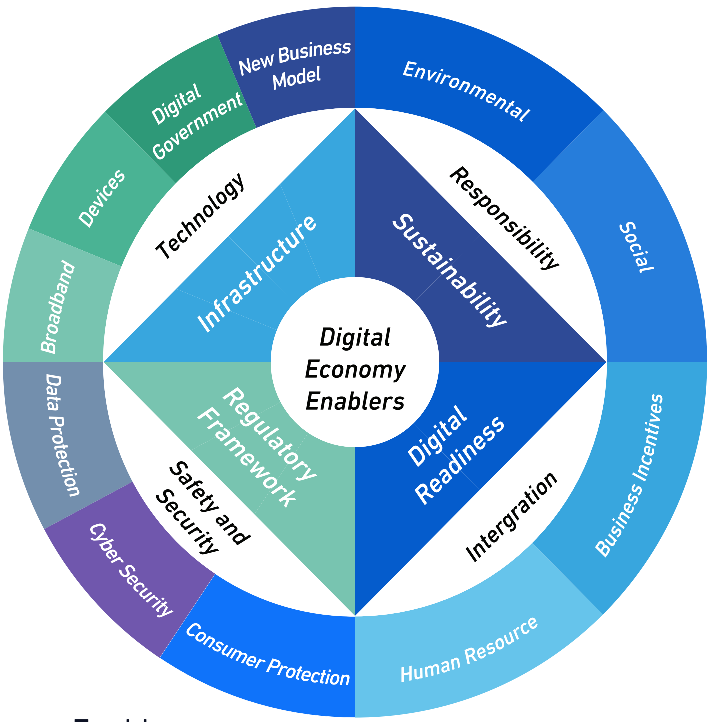


Figure 7: Digital Economy Enablers

Infrastructure

Collaborations between the public and private sectors in developing a nationwide digital or technological infrastructure are common across many countries around the world and can, when delivered efficiently, provide significant advantages when compared to either side working in isolation. Private sector entities often provide significant and unique expertise, while the public sector can bridge funding gaps, provide important incentives, and plan the economic strategies around cross-sectoral collaborations.

Digital Readiness

To ensure that the benefits of digitalization are experienced evenly across industries and sectors, governments must ensure their domestic economies are ready to maximize the benefits of technological advancement and bridge the digital gap in terms of skills and access through upskilling labor and providing incentives to small and medium sized enterprises (SMEs). The private sector can also play a key role in offering training programs, mentoring schemes, and online platforms to enhance digital literacy and employability. The private sector will often have a clear view on the exact skills and expertise they need to support their sector in the medium and longer term and can support in the tailoring of training and skills development accordingly.

Sustainability

Digitalization has the potential to reduce emissions and democratize access to resources across the economy. However, it currently presents a sustainability challenge due to the high levels of computing power it requires and the number of digital devices it necessitates, which can increase greenhouse gas emissions and digital waste. To address these challenges, governments may consider a circular economy model involving recycling devices and reusing rare metals to ensure long-term success. The private sector can traditionally contribute by adopting greener practices, such as using renewable energy sources, optimizing data centers, and designing products for durability and repairability.

Regulatory Framework

The success of widespread economic digitalization is contingent on implementing overarching regulations that protect businesses and consumers from digital threats and mitigate risks related to fair competition and data security. The success of the digital economy would also require efforts to harmonize local laws and regulations with international standards and innovation policy designs that can evolve in parallel to technological development. The public and private sectors need to work together to establish trust and transparency in the digital ecosystem, as well as foster a culture of collaboration and co-creation.

In conjunction with the *digital finance factor*, which encompasses access to and utilization of digital banking and other financial services, there are significant contributions to the broader digital economy. Digital finance plays a pivotal role in lifting people out of poverty and mitigating inequalities.

By facilitating access to digital banking and financial activities, individuals gain opportunities to participate more actively in the economy. This access empowers them to manage finances efficiently, engage in online transactions, and access credit and investment opportunities previously unavailable. Consequently, digital finance has become a powerful tool for socioeconomic empowerment, particularly for marginalized communities and individuals in underserved regions.

Moreover, digital finance mechanisms enable more inclusive economic growth by reducing barriers to financial services. Individuals who were previously excluded from traditional banking systems due to geographical constraints or lack of documentation can now access financial services through digital channels. This inclusivity fosters greater financial independence and resilience among underserved populations.

Furthermore, digital finance promotes transparency and accountability in financial transactions, reducing the likelihood of corruption and illicit financial activities. By digitizing financial processes, governments and regulatory bodies can more effectively monitor and regulate financial transactions, ensuring compliance with legal and ethical standards.

Overall, the integration of digital finance into the broader digital economy not only enhances economic efficiency but also promotes social equity and financial inclusion. By leveraging digital technologies to expand access to financial services, societies can work towards reducing poverty and bridging socioeconomic disparities.

Ensuring the presence of an enabling environment is essential when implementing PPPs as it is a key catalyst for unlocking value across the digital economy, for creating new opportunities for businesses, markets, and consumers, and for addressing some of the challenges that hinder digital transformation, such as the presence of investment funding gaps.

By adapting PPP structures to country-specific needs and objectives, governments can harness the power of collaboration and stimulate investments that drive innovation, growth, and societal transformation within the digital economy.

Priority Intervention Areas

As the digital sector continues to develop and expand, it is essential that policymakers and government officials invest in the most suitable and beneficial avenues for their people and their countries and prioritize investment areas that add the most value and that effectively deliver to national goals and objectives. In a world of scarce resources, ensuring that investment is reserved for the best opportunities is paramount and identifying these key initiatives needs to be a key priority for Member States.

As a concept, Priority Intervention Areas (PIAs), can help answer the "where" of the investment question and can support Member States to identify the most beneficial opportunities for their respective economies. PIAs are specific domains or sectors that have high potential for digital transformation and can generate positive spillovers for the whole society. The Framework that the 'Public-Private Partnerships (PPPs) for the Development of the Digital Economy' is developing for its Member States will look in detail at the process for identifying suitable opportunities for collaborative investment in the digital economy.

To define the priority areas, DCO has developed a specialized set of tools designed to assist Member States in pinpointing crucial areas for digital investment through the Digital Economy Navigator (DEN). The DEN seeks to create a comprehensive tool of the maturity of the digital economy in Member States as well as a group of select benchmark countries to support the identification of key areas or sectors that require additional investment or improvement. It conceptualizes the digital economy across three core dimensions: Digital Business, Digital Society, and Digital Enablers, as depicted in Figure 8.

Digital Enablers serve as the foundational prerequisites for achieving optimal performance in the digital economy. They represent foundational elements encompassing critical factors like Digital infrastructure, capabilities, government, and finance, forming the bedrock of a digital ecosystem that supports the advancement and sustainability of digital initiatives within economies and societies.

As fundamental pillars underpinning a prosperous and sustainable economy, Digital Business drives economic prosperity, while Digital Society shapes human well-being and fosters economic sustainability. These dimensions collectively capture vital areas of digital service supply and demand, crucial for nurturing the maturity of the digital economy.

The intricate interplay of these pillars ensures the smooth flow of information, innovation, and services, highlighting the significance of a robust digital ecosystem. The ecosystem comprises a dynamic network of digital entities, including platforms, applications, users, and data sources, collaborating harmoniously to establish a technologically interdependent environment. Such an ecosystem is paramount for fostering innovation, improving efficiency, and driving economic growth. It acts as the linchpin for digital transformation, enabling businesses and societies to adapt to the ever-evolving technological landscape.

To leverage the full potential of DEN, understanding how PPP can be used to address Priority Intervention Areas is critical to guide Member States' digital transformation and investment.

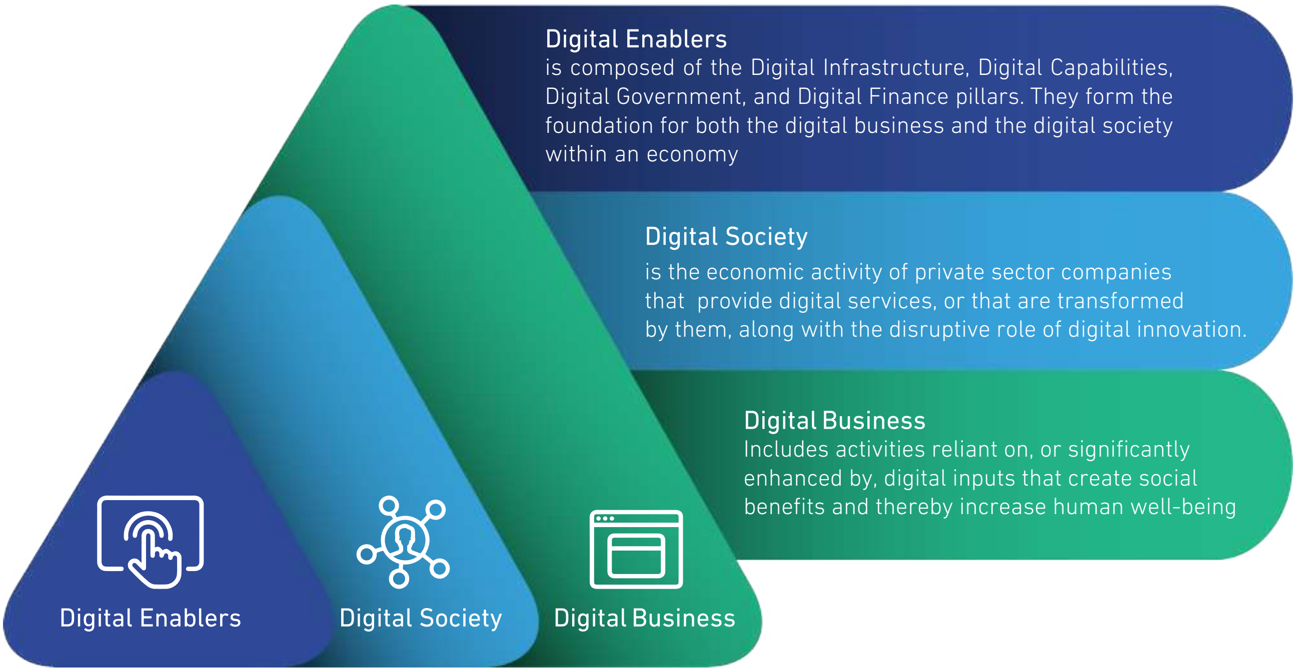


Figure 8: The DCO – DEN Framework

"**Private sector** involvement adds a layer of dynamism; making projects more agile and able to adapt quickly to technological shifts, and this is crucial for the **development of any framework within the digital economy.**"

~ Quote from participant at DCO Roundtable organized in Cape Town in November 2023

5

THE FRAMEWORK FOR COLLABORATIVE INVESTMENT IN THE DIGITAL ECONOMY

THE FRAMEWORK FOR COLLABORATIVE INVESTMENT IN THE DIGITAL ECONOMY (THE FRAMEWORK)

The DCO is dedicated to achieving social prosperity and the growth of the digital economy by unifying the efforts of its members to advance digital transformation. A key catalyst for this advancement is the availability and access to sufficient funding, investment, and the required expertise for affiliate nations to successfully develop their domestic infrastructure and wider digital enablers. PPPs are an important mechanism to increase access, innovation, efficiency, and social impact and, through mobilizing private capital and expertise, can expand digital infrastructure coverage, foster ecosystem development, and support skills growth.

To support this aim, the DCO explored the development and design of an initial Framework to enable collaborative investment and cooperation across the Digital Economy.

Design **Inputs**

Best-Practice Foundation

- Established a strong foundation through a thorough assessment of existing literature and evidence.
- Incorporated global best practices, concepts, and frameworks, enriching the framework with global knowledge.

Collaborative Global Roundtables

- Gathered invaluable insights through global roundtables in Saudi Arabia, South Africa and Switzerland.
- Engaged with international experts, ensuring diverse perspectives and a global understanding of PPPs in the digital landscape.

Future **Development**

Member State-Specific Roadmaps

- Tailoring the Framework into Member States-specific Investment Roadmaps.
- Offering comprehensive guidance, best practice and tools, customized for each stage and aspect of the digital economy PPP lifecycle.

Adaptability

- Crafting the Framework as a dynamic document, poised to adapt to the evolving needs and contexts of DCO Member States.
- Acknowledging the Framework's ability to evolve, reflecting the dynamic nature of PPPs.

Figure 09: The framework has been developed in the context of the DCO Digital Space Accelerators (DSA) through a series of roundtables and consultations.

The Framework has been designed through a collaborative and iterative process facilitated through DCO's Digital Space Accelerators initiative (DSAs), with detailed insights gathered through global and regional roundtable discussions with Member States and stakeholders organized in Africa, Europe and the Middle East, and focusing on the opportunities, challenges, and best practices of digital economy PPPs.

It is also built on global best practices and incorporates guidance from established works by organizations like the World Bank, United Nations, and International Monetary Fund. A review of existing literature and evidence provided a solid foundation, incorporating relevant concepts, frameworks, and tools, with a view to ensure that the approach aligns with internationally recognized standards.

This collaborative approach, combining expert stakeholder input, and empirical evidence, reflects the dynamic nature of the Framework, reinforcing its ability to assist Member States in successfully navigating the complexities of PPPs in the evolving digital landscape.

Objectives of the Framework

The objective of the Framework is to serve as a guide for Member States to harness PPPs to build and further enable their domestic digital environment, align digital transformation with their overarching strategic vision and national goals, and identify the best opportunities for collaboration that yield the highest value for their economies.

At a Strategic Level, it looks at supporting DCO organizations to leverage the opportunities provided through PPPs as a mechanism to increase access, innovation, efficiency, and social impact across their digital economies. The aspiration is that, through mobilizing private capital and expertise, PPPs can expand infrastructure coverage, foster the development of the digital ecosystem development, optimize resource use, and drive research and innovation.

At the Operational Level, the Framework explores the key aspects of the PPP lifecycle, including strategy formulation and potential collaboration models, as well as providing guidance covering procurement, implementation, and execution decisions.

The Framework has therefore been designed as an operating manual presenting a general roadmap for the DCO and its Member States to identify the existing infrastructure and enabler gaps, select the right PPP structure, assess the available financing options and risks, and provide some best practices to help execute the project.

"**Upskilling is essential.** However, we must tread carefully to ensure that the upskilling initiatives don't **inadvertently widen the existing digital skills gap,** leaving certain segments of the population behind."

~ Quote from participant at DCO Roundtable organized in Cape Town in November 2023

To maintain its relevance to different Member States economies, it was recommended for the Framework to be articulated both as a dynamic document, fed on an ongoing basis by best practices and lessons learnt, and as an overarching framework, easily tailored to national contexts.

Strategic Leveraging of PPPs	›	• Provide guidance and support for DCO Members to leverage PPPs as a tool to drive innovation and efficiency across their domestic digital economy. • Assist in the identification of different opportunities to mobilize private capital and expertise to expand digital infrastructure coverage and foster domestic ecosystem development.
Empowering Domestic Digital Environments	›	• Engage with DCO Members to assess the strategic alignment of the identified opportunities, considering individual requirements and exit plans and timelines. • Collaborate with DCO Members to evaluate and assess PPP structuring mechanisms to choose the most appropriate option.
Lifecycle Exploration	›	• Collaborate with DCO Members to evaluate available financing alternatives, considering innovative funding tools like Digital Sukuks. • Offer advice and assistance to DCO Members in managing the risks associated with PPP investments.

Figure 10: The framework is designed as a high-level business case to support collaborative investment in the digital economy.

"At the **heart of PPPs are people** – citizens who benefit from improved services and businesses that thrive. **Balancing profit motives with societal well-being** is the essence of successful partnerships."

~ **Quote from participant at DCO Roundtable organized in Cape Town in November 2023**

"Private sector involvement adds **a layer of dynamism**; making projects more agile and able to adapt quickly to technological shifts, and this is crucial for the development of any framework within the digital economy."

"Upskilling is essential. However, we must tread carefully to ensure that the upskilling initiatives don't **inadvertently widen the existing digital skills gap**, leaving certain segments of the population behind."

"At the heart of **PPPs are people** – citizens who benefit from improved services and businesses that thrive. **Balancing profit motives with societal well-being** is the essence of successful partnerships."

"**Regulation gaps expose us to risks**, making it imperative to define clear **boundaries for private sector involvement** to safeguard public interests. Ensuring the public sector is equipped with the right skillset is therefore paramount".

The initial Framework focuses on four key components. Within each component, the Framework unpacks the key decisions that need to be assessed at each stage of the development of Public Private Partnerships within the digital economy and provides direction and best-practice guidance on how Member States can analyze and evaluate these decisions.

01 Opportunity Assessment

A detailed, structured assessment of the domestic digital economy. This process is designed to identify potential areas for collaborative investments and to evaluate the tangible impact that potential PPPs could deliver for DCO Member Nations. This involves not only economic considerations but an assessment of societal benefits, aligning choices with broader developmental objectives.

02 Strategic Planning

Planning is more than just selecting key investments; it explores suitable delivery structures, alignment with overarching goals and objectives and the development of key project plans. This phase looks to maximise the impact and long-term success of potential collaboration with between the public and private sectors within the digital economy.

03 PPP Structuring

This stage assesses and evaluates the available PPP structures and financial arrangements and determines the roles and responsibilities of the involved participants in a potential PPP. This is a key step in ensuring a smooth execution for collaboration, and to ensure all risks are identified, mitigated and monitored.

04 Risk, Financing, and Execution

The final component of the Framework touches on the risk, financing, and execution of the potential investment project. It explores the available financing options and assess the potential risks of the project from this angle, and puts in place appropriate monitoring, evaluation and data gathering protocols.

Figure 11: Framework approach

Opportunity Assessment

- Assess the domestic digital economy to identify investment opportunities.
- Evaluate where public private collaboration could be used to drive growth in the digital economy.
- Determine the economic and societal benefits of the shortlisted opportunities.

Strategic Planning

- Determine key details, objectives, outputs and exit strategy for the investment(s).
- Identify the most suitable investment structure for the opportunity.
- Develop a comprehensive and overarching project plan with milestones to monitor progress.

PPP Structuring

- Assess PPP structuring options and analyse most effective delivery model.
- Conduct market research to identify and shortlist eligible private sector entities.
- Determine the roles and responsibilities of the involved stakeholders.

Risk, Financing, and Execution

- Further explore financing options, including blended and innovative instruments.
- Evaluate, assess, and provide risk mitigation strategies for the planned PPP engagement.
- Preparing for implementation of the PPP structure, managing legal and regulatory requirements.

Figure 12: Framework Overview

The Framework is split into four key stages and explores the core questions that need to be considered, and the important factors that need to be properly analyzed and assessed in order to maximize the chances of PPPs in the Digital Economy meeting their objectives and delivering successful outcomes.

These core focus areas are set out in this section of the report and are explored in more detail in the appended Framework.

Opportunity Assessment in the framework prescribes a detailed examination of a country's domestic digital economy to identify strategic investment prospects. The Framework provides guidance on prioritizing opportunities based on potential economic potential and positive societal impact and alignment with domestic investment and broader developmental goals. This process sets the stage for targeted and impactful investments in the digital landscape.

Strategic Planning is more than just selecting investments; it is about analyzing and defining clear objectives, suitable structures, and detailed project plans. This phase ensures alignment with overarching goals and contributes to sustainable digital economic development. Prioritizing strategic planning aims to maximize each investment's impact for long-term success and adaptability.

PPP Structuring goes beyond simple PPP model selection. It involves evaluating multiple options in detail, making informed decisions, and defining clear roles and responsibilities for all stakeholders. Thoughtful structuring and planning can ensure that the chosen PPP structure aligns with wider goals and effectively mitigates risks, fostering successful and sustainable projects in the digital economies of Member States.

Risk, financing, and Execution are pivotal in the Framework, laying the groundwork for the financing and delivery of successful digital projects and investments. This section explores diverse financing, evaluates risks with robust mitigation, and focuses on seamless execution, navigating legal landscapes for financial sustainability. Prioritizing these pillars enhances the overall chances of success for digital initiatives and maximizes the potential of wider legacy benefits.

"**Regulation gaps expose us to risks**, making it imperative to define clear **boundaries for private sector involvement** to safeguard public interests. Ensuring the public sector is equipped with the right skillset is therefore paramount"

~ Quote from participant at DCO Roundtable organized in Cape Town in November 2023

Phase 1

Opportunity Assessment: Evaluating the different opportunities where collaboration with the private sector can support the growth of the Digital Economy is a vital first step in the Framework.

"In navigating the digital landscape, the first step is a keen **assessment of our domestic digital economy**—identifying not just potential but tangible opportunities for growth. It's about seeing beyond challenges and strategically positioning for success."

"Beyond economic gains, the true measure of success lies in the **societal impact of our digital initiatives**. As we shortlist opportunities, let's evaluate not only their economic potential but also how they align with broader developmental goals, ensuring a positive impact on society."

"Public-Private collaboration isn't just an option; it's the engine that propels digital growth. It's in understanding where our strengths align with private expertise, creating a synergy that sparks innovation and propels our digital economy forward."

"Opportunities in the digital economy are more than just transactions; they're **catalysts for transformative** change. Let's not only determine economic benefits but also assess how our choices resonate with the fabric of society, **ensuring our digital journey is inclusive and impactful**."

OPPORTUNITY ASSESSMENT:
FINDING THE RIGHT PROJECTS FOR COLLABORATION

A. Assess the domestic digital economy to identify investment opportunities.

- Analyze the current state of digital infrastructure and enablers in the target economy.
- Highlight areas where significant gaps exist, such as broadband access, mobile connectivity, and digital services.

B. Evaluate where public private collaboration could be used to drive growth in the digital economy.

- Identify high-potential sectors and sub-sectors for potential private sector investment and involvement.
- Evaluate the most feasible and attractive opportunities for private sector participation.

C. Determine the economic and societal benefits of the shortlisted opportunities.

- Analyze the economic and societal costs and benefits of these opportunities.
- Compare different opportunities and policy options, and rank potential options for further assessment and analysis.

Figure 13: Opportunity Assessment framework, which breaks into three component parts

A B C

Opportunity Assessment: Deep Dive into the Digital Economy

What are some Considerations for the DCO and Member States ?

01

Current Digital Landscape

- Evaluate the current state of digital infrastructure, including broadband accessibility, data center capabilities, and the regulatory environment.
- Analyze technology adoption rates, considering the prevalence of key technologies such as artificial intelligence, internet of things, and blockchain.
- Examine levels of digital inclusion, assessing access to digital services and digital literacy rates.
- Investigate regulatory frameworks to understand the existing policies governing the running and development of digital economy.

02

Emerging Trends

- Identify emerging trends in the digital economy, including advancements in cybersecurity, quantum computing, and edge computing.
- Evaluate the potential impact of frontier technologies such as 5G and augmented reality on the digital landscape.
- Consider evolving consumer behaviors and preferences in response to technological advancements.
- Examine global and regional benchmarks to gauge the DCO Member States' standing in the adoption of emerging technologies.

03

Market Analysis

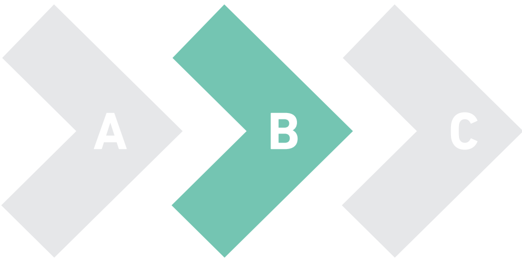
- Conduct a detailed market analysis, identifying specific sectors within the digital economy with high growth potential.
- Analyze market dynamics, including competitive forces, barriers to entry, and potential for disruptive innovation.
- Identify gaps in current digital offerings and assess unmet needs within the market.
- Evaluate the regulatory environment's impact on market dynamics and potential opportunities.

04

Competitive Picture

- Evaluate the competitive landscape by assessing the strengths and weaknesses of local and international players.
- Analyze market share, customer satisfaction, and innovation capabilities of key digital players.
- Consider partnerships and collaborations among industry participants and potential implications for DCO Member States.
- Assess the adaptability and resilience of the digital ecosystem in response to global and regional challenges.

Figure 14: Showcasing the considerations for a detailed assessment of the domestic digital economy.



Opportunity Assessment: Shortlisting Potential Opportunities

What are some Considerations for the DCO and Member States ?

01

Screening Criteria

- Define specific screening criteria, considering market demand, scalability, alignment with national development priorities, and potential for innovation.
- Incorporate considerations for environmental, social, and governance (ESG) factors in the screening process.
- Establish clear benchmarks and thresholds for each screening criterion.
- Ensure alignment with the broader objectives of the digital economy roadmap.

02

Private Sector Relevance

- Assess the degree of alignment with private sector competencies, considering technology expertise, financial capabilities, and innovation capacity.
- Identify areas where private sector involvement can bring additional value, such as industry knowledge, networks, or strategic partnerships.
- Consider potential synergies with existing private sector initiatives and investments within the local economy.
- Evaluate the readiness of the private sector to engage in collaborative ventures, and what specific support is required.

03

Feasibility

- Assess the feasibility of each shortlisted opportunity by considering factors such as technical viability, resource requirements, and regulatory compliance.
- Develop an implementation strategy outlining key milestones, timelines, and resource allocation.
- Identify potential delivery challenges and mitigation strategies to ensure a smooth implementation process.
- Consider the adaptability of the opportunity to changing market conditions and technological advancements.

04

Sustainability

- Evaluate the sustainability of each opportunity, considering its environmental impact, social implications, and long-term viability.
- Incorporate principles of sustainable development and corporate social responsibility into the shortlisting process.
- Assess alignment with international sustainability standards and agreements.
- Ensure that shortlisted opportunities contribute positively to the overall sustainability goals of the digital economy roadmap.

Figure 15: Shortlisting the opportunities that would benefit from potential private sector participation.

A B C

Opportunity Assessment: Opportunity Assessment: Economic and Societal Impact Assessment

What are some Considerations for the DCO and Member States ?

01

Economic Impact

- Identify the various economic impacts of the proposed investment(s)
- Quantify potential economic benefits, including estimates of job creation & GDP
- Assess the potential for economic spillover effects, including increased demand in related industries.
- Consider the timing of economic benefits and their contribution to short-term and long-term economic goals
- Compare different options based on their impacts, and weight impacts based on internal objectives as required

02

Societal Benefits

- Identify and measure wider societal benefits, such as improved access to essential services, enhanced digital literacy, and social inclusion.
- Assess the potential for increased employment opportunities, particularly in sectors with a strong societal impact.
- Consider the implications for education, healthcare, and other social indicators both the in short-and longer-term.
- Develop indicators and metrics to track the progression of societal benefits over time.

03

Shared Value Alignment

- Ensure shortlisted opportunities align with the concept of shared value, maximizing both economic and societal benefits for all stakeholders.
- Develop a shared value framework that clearly outlines the distribution of benefits among stakeholders.
- Facilitate dialogues and collaboration to ensure shared understanding of value creation and distribution.
- Establish mechanisms for ongoing monitoring and evaluation of shared value alignment.

04

Innovation Potential

- Evaluate the innovation potential of each shortlisted opportunity, considering its contribution to technological advancements and industry growth.
- Assess the extent to which the opportunity fosters creativity, research, and development within the digital economy.
- Identify potential breakthroughs and transformative impacts on the industry, setting new standards for innovation.
- Consider the scalability and adaptability of the opportunity to future technological advancements.

Figure 16: Analyzing the potential economic and societal benefits of the shortlisted opportunities.

Phase 2

Strategic Planning: Evaluating the different opportunities where collaboration with the private sector can support the growth of the Digital Economy is a vital first step in the Framework.

“Choosing the right investment structure is like selecting the perfect architectural design for a building. It’s not just about options; it’s about **informed decisions that align with the essence of the opportunity**, ensuring a sturdy foundation for digital growth.”

“Every digital investment is a story waiting to unfold. Through strategic planning, we not only set the stage but craft the narrative, **detailing key objectives, defining the structure, and mapping out the journey**—ensuring a compelling and successful digital narrative.“

“In the digital realm, **a comprehensive project plan is more than just a timeline**—it’s our compass, guiding us through the intricacies of implementation. It’s about setting milestones, tracking progress, and **adapting as needed to stay on course**.”

“Crafting a digital future **requires precision in details, clarity in objectives, and a well-defined path forward**—a journey guided by thoughtful decisions and forward-thinking exits.”

STRATEGIC PLANNING:
TURNING VISION INTO REALITY

A. Determine key details, objectives, outputs and exit strategy for the investment(s).

- Conduct a market analysis and assessment of the potential investment target and identify the key drivers of value creation.
- Develop a clear exit strategy based on the optimal holding period, and the availability of exit options.

B. Identify the most suitable investment structure for the opportunity.

- Evaluate the pros and cons of different structures and determine if PPPs are the most suitable option.
- Compare the financial, operational outcomes of the chosen structure with alternative options to justify the decision.

C. Develop a comprehensive and overarching project plan with milestones to monitor progress.

- Create a detailed project plan with clear timelines and milestones to track progress.
- Highlight the importance of ongoing project monitoring, risk management, and the ability to adapt the plan as needed.

Figure 17: The Framework breaks the second stage into three component parts in order to support Member States in their assessment.

A B C

Strategic Planning: Investment Objectives, Details, and Exit Strategy

What are some Considerations for the DCO and Member States ?

01 **Conducting Market Analysis**

- Perform a thorough market analysis encompassing market size, growth potential, and competitive landscape.
- Identify key drivers of value creation, understanding the needs and requirements of all stakeholders, especially customers and end users.
- Assess potential risks and opportunities associated with the investment target and develop the required mitigation and management plans.

02 **Objective Setting**

- Clearly define investment objectives, ensuring alignment with broader national and organizational goals.
- Specify quantitative and qualitative targets, such as revenue projections, market share, and social impact metrics.
- Establish key performance indicators (KPIs) to measure progress towards objectives and introduce project management expertise.

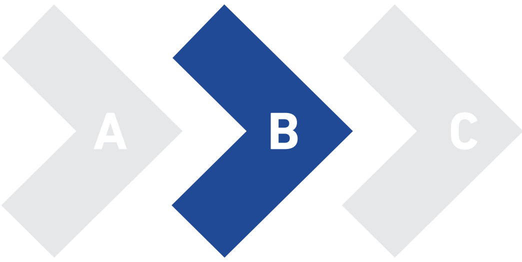
03 **Key Details Definition**

- Identify and define key details critical to the success of the investment, including resource requirements, stakeholder engagement, and regulatory compliance.
- Consider environmental, social, and governance (ESG) factors in the decision-making process.
- Ensure that key details align with the overall investment strategy.

04 **Exit Strategy Development**

- Develop a comprehensive exit strategy, considering factors such as market timing, potential exit routes and ongoing management strategies.
- Specify optimal holding periods based on market conditions and the nature of the specific investment(s) being considered.
- Incorporate contingency plans to address unforeseen circumstances.

Figure 18: Determining objectives, key delivery details, and exit opportunities for the proposed investment.



Strategic Planning: Choosing the Right Investment Structure

What are some Considerations for the DCO and Member States ?

01 Evaluate Structure Options

- Conduct a detailed evaluation of various investment structures, such as PPPs, joint ventures, and alternative financing models.
- Analyze the legal, regulatory, and financial implications of each structure option.
- Consider the risk-sharing mechanisms and incentives associated with different structures.

02 Alignment with Project Goals

- Ensure the selected investment structure aligns with the specific goals and objectives of the project.
- Evaluate the compatibility of each structure with the nature of the investment and the desired level of private sector involvement.
- Assess the potential impact of different models on project scalability and long-term sustainability.

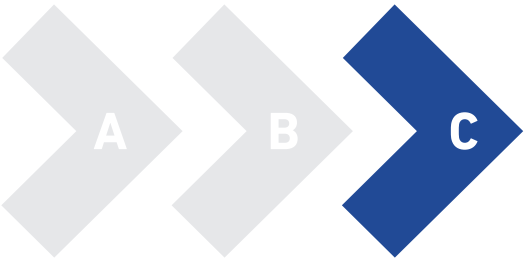
03 Comparative Financial Analysis

- Conduct a comparative financial analysis to determine the financial implications of each structure, and how they aligns with project objectives and resources.
- Assess in detail the cost of capital, expected returns, and potential risks associated with the chosen structure.
- Consider the impact on project financing and the ability to attract private sector investment.

04 Operational Considerations

- Evaluate the operational aspects of each structure, including governance models, decision-making processes, and project management.
- Consider the level of control and involvement each structure affords to both public and private partners.
- Assess the potential for innovation and flexibility within the chosen structure, and link with the objectives, risks etc. outlined in the earlier process.

Figure 19: Identifying the most suitable investment structure for the opportunity.



Strategic Planning: Project Planning and Monitoring

What are some Considerations for the DCO and Member States ?

01 Comprehensive Project Plan

- Develop a detailed project plan outlining specific tasks, milestones, and timelines.
- Identify key deliverables and dependencies to ensure a structured and well-coordinated implementation.
- Align the project plan with the overarching investment strategy and objectives.

02 Risk Management Strategy

- Develop a robust risk management strategy to identify, assess, and mitigate potential risks.
- Consider both internal and external factors that may impact project progress.
- Establish contingency plans and response mechanisms for addressing unforeseen challenges.

03 Ongoing Monitoring and Adaptation

- Emphasize the importance of ongoing project monitoring to track progress against milestones.
- Implement regular progress reviews and assessments to identify deviations from the project plan.
- Highlight the need for flexibility and adaptation to respond to changing circumstances.

04 Stakeholder Engagement

- Define a stakeholder engagement plan, outlining communication strategies and mechanisms for involving key stakeholders.
- Identify key decision-makers and influencers within the project.
- Emphasize the importance of transparent communication and collaboration throughout the project lifecycle.

Figure 20: Developing a project plan with milestones to monitor progress

Phase 3

PPP Structuring: Structuring Public Private Partnerships goes beyond just selecting the engagement model, it involves the evaluation of multiple options, defining clear roles and responsibilities and engaging with relevant stakeholders and partners.

"In navigating the complexities of digital collaboration, we **meticulously analyze delivery models to ensure the most effective partnership**—an intricate dance where each player contributes to the rhythm of digital development."

"Market research isn't just about data; it's a compass guiding us to partners who share our vision. **We sift through possibilities to find private entities aligned with our commitment to advancing the digital frontier.**"

"Defining roles and responsibilities in our digital journey is akin to orchestrating a symphony. **Every stakeholder has a part to play,** ensuring harmony in the execution of digital initiatives and sustained success."

"In crafting our digital future, **we embark on a journey of partnership where roles and responsibilities are well-defined**. This collaboration is not just strategic; **it's a commitment to a shared vision for advancing our digital ecosystem**."

PPP STRUCTURING:
CRAFTING THE IDEAL PPP MODEL

A. Assess PPP structuring options and analyze most effective delivery model.

- Choose the PPP model that aligns with the project's specific goals (e.g., BOOT, Concession).
- Evaluate and evidence why this model is the best fit based on existing stakeholder requirements.

B. Conduct market research to identify and shortlist eligible private sector entities.

- Define the criteria and parameters for selecting the potential private sector partners.
- Collect and analyze data on existing private sector entities using the defined criteria and parameters.

C. Determine the roles and responsibilities of the involved stakeholders.

- Identify the key stakeholders and their interests, expectations, and influence on the project.
- Define the roles and responsibilities the stakeholders and document them in a stakeholder register.

Figure 21: The Framework breaks this stage into three core sections, supporting DCO members throughout the whole process.

A B C

PPP Structuring: Assessing PPP Structuring Options

What are some Considerations for the DCO and Member States ?

01 Choose the Appropriate PPP Structure

- Evaluate PPP structuring options such as Operate, Maintain, and Concession; Design, Build, Finance, Operate, and Maintain; and Build, Own, Operate, and Transfer.
- Consider the specific characteristics and goals of the project to determine the most suitable PPP model.
- Highlight the key features of the chosen model and its alignment with the project's long-term objectives.

02 Alignment with Project Goals

- Assess and explain why the selected PPP model aligns with the overarching goals of the project.
- Showcase how the chosen model addresses specific project requirements, including financial sustainability, risk allocation, and stakeholder collaboration.
- Emphasize the benefits and advantages offered by the selected PPP structuring option.

03 Existing Stakeholder Requirements

- Discuss how the chosen PPP model meets the requirements and expectations of existing stakeholders.
- Highlight stakeholder input in the decision-making process and their assessment of the selected structuring option.
- Demonstrate the consensus-building process to ensure alignment with stakeholder interests.

04 Financial Viability Assurance

- Outline strategies for ensuring the financial viability of the chosen PPP model.
- Consider mechanisms for attracting private sector investment and financing.
- Highlight how the chosen model mitigates financial risks and enhances overall project sustainability.

Figure 22: Assess PPP structuring options such as Build-Own-Operate-Transfer (BOOT) or Concessions

A B C

PPP Structuring: Market Research for Private Sector Entities

What are some Considerations for the DCO and Member States ?

01

Criteria and Parameters Definition

- Clearly define the criteria and parameters for selecting potential private sector partners.
- Consider factors such as financial strength, technical expertise, and experience in similar projects.
- Develop a comprehensive set of criteria to ensure a thorough evaluation process. Create a competitive tender/engagement process for potential partners

02

Data Collection and Analysis

- Implement a systematic approach to collect data on existing private sector entities.
- Analyze the gathered information using the defined criteria and parameters.
- Shortlist eligible private sector partners based on the evaluation results.

03

Transparent Evaluation Process

- Communicate the selection criteria and evaluation process to potential private sector partners.
- Emphasize transparency and fairness throughout the evaluation to build trust.
- Provide feedback to entities not selected, fostering positive relationships for future collaborations.

04

Strategic Partnership Considerations

- Consider the strategic value that each shortlisted private sector entity brings to the project.
- Evaluate potential synergies, innovation capacity, and long-term commitment.
- Demonstrate how the chosen private sector partners align with the project's overall objectives.

Figure 23: Conduct market research to identify and shortlist eligible private sector entities.

PPP Structuring: Roles and Responsibilities of Stakeholders

What are some Considerations for the DCO and Member States ?

01 Identify Key Stakeholders

- Identify and list the key stakeholders involved in the PPP project.
- Undertake detailed market analysis of potential partners
- Classify stakeholders based on their level of influence, interests, and expectations.
- Ensure a comprehensive understanding of the stakeholder landscape.

02 Understanding Interests and Expectations

- Outline the interests and expectations of each key stakeholder.
- Conduct stakeholder consultations to gather insights and align expectations.
- Consider potential conflicts of interest and develop strategies for resolution.
- Conduct detailed planning and exploratory workshops, working through all key parts of delivery.

03 Define Roles and Responsibilities

- Clearly define the roles and responsibilities of each stakeholder.
- Document the expectations and contributions of public and private partners.
- Create a stakeholder register to serve as a reference for ongoing collaboration.

04 Collaborative Governance Approach

- Emphasize a collaborative governance approach that fosters effective communication and decision-making.
- Establish mechanisms for ongoing dialogue and feedback among stakeholders.
- Highlight the importance of shared responsibility for project success.

Figure 24: Determine the roles and responsibilities of the involved stakeholders.

Phase 4

Risk, Financing and Execution: The final stage of the Framework provides advice and guidance on how to execute a PPP and maximize the chance for ongoing success.

"In the dynamic realm of digital financing, we **explore diverse options**, blending traditional mechanisms with innovative instruments to secure the resources needed to **propel our digital ambitions forward**."

"Implementation isn't just a phase; it's a **legal and regulatory ballet**. We carefully choreograph every move, ensuring that our digital initiatives comply with the intricacies of the legal landscape, **fostering a secure and compliant journey**."

"Anticipating the unforeseen is a key tenet of our digital strategy. We **meticulously evaluate risks**, providing not just solutions, but a **roadmap for resilience**, ensuring our PPP engagement stands the test of uncertainty."

"Navigating the intricate dance of risk, financing, and execution, **our approach is not just strategic; it's a well-crafted symphony** where every note, from financing innovations to legal compliance, contributes to the success of our digital PPP structure."

RISK, FINANCING, AND EXECUTION: NAVIGATING RISKS AND FINANCING STRATEGIES

A. Further explore financing options, including blended and innovative instruments.

- Further explore financing mechanisms, including traditional, blended finance, and, where appropriate, Islamic finance.
- Showcase how these options support the project's capital needs and are aligned to the strategy.

B. Evaluate, assess, and provide risk mitigation strategies for the planned PPP engagement.

- Identify potential risks, such as political, regulatory, financial, and operational risks.
- Develop a risk mitigation strategy, including risk sharing to help de-risk investments.

C. Preparing for implementation of the PPP structure, managing legal and regulatory requirements.

- Address legal and regulatory requirements for project execution.
- Allocate responsibilities for managing and mitigating risks across the government and private sector.

Figure 25: This stage of the Framework is split into three sections, culminating in the execution of the Public Private Partnership.

Risk, Financing and Execution: Further Exploring Financing Options

What are some Considerations for the DCO and Member States ?

01 Explore Financing Mechanisms

- Delve into diverse financing options, including traditional, blended finance, and Islamic finance, where appropriate/applicable.
- Evaluate the advantages and characteristics of each mechanism to align with project goals.
- Emphasize the flexibility and adaptability of these options to varying project needs.

02 Capital Needs and Strategic Alignment

- Showcase how the explored financing options cater to the project's capital requirements.
- Highlight the strategic alignment of chosen financing mechanisms with the overall project strategy.
- Illustrate specific instances where each financing option complements the project's financial objectives.

03 Innovative Financing Instruments

- Explore innovative financing instruments that may include green bonds, impact investing, or other emerging tools.
- Assess how these instruments might contribute to the project's financial sustainability.
- Highlight instances where innovative financing aligns with the project's broader objectives.
- The Islamic Development Bank's use of digital Sukuk showcases innovative financing in the digital economy, aligning with ethical principles and highlighting how Public-Private Partnerships can drive shared value.

04 Market Analysis

- Consider how financing options promote inclusivity, ensuring accessibility for various stakeholders.
- Showcase mechanisms that support participation from diverse investors, fostering a robust financial ecosystem.
- Illustrate how the project's financial structure accommodates both public and private sector contributions.

Figure 26: Exploring financing options, including blended and innovative instruments.

A B C

Risk, Financing and Execution: Risk Evaluation and Mitigation Strategies

What are some Considerations for the DCO and Member States ?

01 **Identify Potential Risks**

- Conduct a comprehensive risk assessment, identifying potential risks spanning political, regulatory, financial, and operational domains.
- Consider external factors and internal dynamics that may impact the project's success.
- Utilize scenario analysis to anticipate and categorize potential risks.
- Anticipate potential challenges, ensuring that the project is well-prepared to navigate uncertainties.

02 **Risk Mitigation Strategy**

- Develop a robust risk mitigation strategy that includes risk-sharing mechanisms to de-risk investments.
- Highlight specific strategies for addressing identified risks, ensuring a proactive approach.
- Showcase how risk mitigation aligns with broader project objectives and fosters investor confidence.

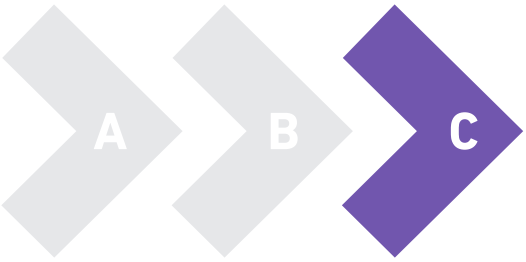
03 **Operational Risk Management**

- Focus on operational risk management, emphasizing strategies to ensure project continuity.
- Illustrate measures to enhance operational resilience and adaptability.
- Showcase how operational risk management contributes to the project's long-term sustainability.

04 **Continuous Monitoring and Adaptation**

- Emphasize the importance of continuous monitoring to assess the effectiveness of risk mitigation strategies.
- Outline mechanisms for adapting risk mitigation strategies based on evolving circumstances.
- Showcase instances where adaptive risk management has positively impacted project outcomes.

Figure 27: Evaluate, assess, and provide risk mitigation strategies associated with the project.



Risk, Financing and Execution: Preparing for Implementation of a PPP Structure

What are some Considerations for the DCO and Member States ?

01

Address Legal and Regulatory Requirements

- Outline the legal and regulatory requirements essential for project execution.
- Emphasize compliance with local laws, international standards, and sector-specific regulations.
- Illustrate how adherence to legal requirements enhances project credibility and stability.

02

Government and Private Sector Responsibilities

- Allocate responsibilities for managing and mitigating risks across both government and private sector entities.
- Emphasize collaboration and shared accountability for the success of the PPP structure.
- Showcase instances where effective collaboration has led to successful project outcomes.

03

Transparent Governance Mechanisms

- Highlight transparent governance mechanisms that ensure accountability and fairness.
- Illustrate how clear roles and responsibilities contribute to a smooth execution process.
- Showcase examples of successful PPP structures that have navigated legal and regulatory landscapes effectively.

04

Adaptability to Changing Regulations

- Emphasize the project's adaptability to changing legal and regulatory landscapes.
- Showcase instances where the PPP structure has successfully navigated regulatory changes without compromising project objectives.
- Highlight strategies for staying abreast of evolving regulatory requirements.

Figure 28: Implement the PPP structure, considering legal and regulatory requirements.

6

CONCLUSIONS

CONCLUSIONS

The development of the Framework is the commencement of an ongoing journey between the DCO and its Member States to help unlock digital opportunities in the pursuit of further digital transformation and reform. Designed as a dynamic platform, the framework is poised to adapt and evolve in response to the evolving needs and contexts of the DCO Member States and stakeholders. In its current form, the Framework can help start equipping Member States with the required tools to facilitate conversations on to how best to leverage PPPs for the development of the digital economy.

By harnessing the framework, DCO Members States can strategically intensify efforts in cultivating local expertise within the public and private sectors to enhance their capacity for designing and administering PPPs that are well-suited to the needs of the digital economy. As the digital landscape continues to rapidly advance, the imperative for well-informed professionals who can adeptly steer through the complexities of such specialized PPPs becomes ever more crucial.

Looking ahead, it will serve to inform wider investment roadmaps to support DCO Member States' ecosystems for impactful PPP for the digital economy and serve as the bedrock for the DCO to set-up an Investment Coalition, bringing together experts from the public and private sectors to take a more active role in driving strategic investments.

The DCO will consider the following guiding principles to inform and catalyze the development of impactful collaborations for the digital economy:

01 Prioritizing the closing of the development gap by benchmarking against leading economies and implementing best practices tailored to their unique regional context. Capacity building in the public sector is essential, particularly in enhancing digital skills to design and manage PPPs effectively.

02 Embracing technological advancement, ensuring the domestic workforce is prepared for the changing demands of the digital era. Empowering the private sector through clear communication and supportive policies will help harness its full potential.

03 Adapting to digital trends is crucial, as is sustaining investment in Information and Communication Technologies (ICT) to foster a robust digital infrastructure. Innovation and entrepreneurship should be at the heart of economic strategies, supporting a culture where both are actively encouraged and rewarded.

04 Managing risks collaboratively between public and private entities will enhance trust and lead to more sustainable partnerships, in particular by leveraging blended finance models to de-risk digital economy investments, making them more attractive to private investors. Establishing robust regulatory frameworks will provide clarity and stability, attracting more investment and participation in PPPs.

05 Engaging diverse stakeholders, including civil society and end-users, ensures that multiple perspectives are considered, leading to more inclusive and effective solutions. A focus on sustainability is critical to ensure that digital economy initiatives have long-term viability and alignment with global environmental goals.

06 Ensuring country ownership of digital strategies will lead to more committed and coherent implementation as will adopting a people-centered approach ensure technological advancements improve the quality of life for all citizens.

By concentrating on these important areas, DCO countries can not only strengthen their PPP strategies, but also contribute significantly to a competitive global digital economy, ultimately resulting in substantial economic and societal benefits. This working document is the first step of DCO's journey that will continue to inform the development of PPPs to reconcile business and social imperatives to enable digital prosperity for all.

ENDNOTES

i. OECD. (2016). Stimulating digital innovation for growth and inclusiveness: The role of policies for the successful diffusion of ICT.
ii. World Economic Forum. (2022). Why digital trust is key to building thriving economies.
iii. Huawei. (2017). Digital Spillover: Measuring the true impact of digital economy.
iv. Ibid.
v. Brookings. (2020). Technology and the future of growth: Challenges of change. ; World Economic Forum. (2022).How digital transformation is driving economic change.
vi. Brookings. (2020). Technology and the future of growth: Challenges of change. ; OECD. (2020). OECD Digital Economy Outlook 2020
vii. Huawei. (2021). Middle East digital economy outlook.
viii. WIPO. (2023). Global Innovation Index 2023 – Innovation in the face of uncertainty.
ix. Google Blogs. (2020). Understanding Africa's $180 billion internet economy future.
x. The Star. (2021). Kenya remains top e-commerce market in Africa.
xi. WIPO. (2023). Global Innovation Index 2023 – Innovation in the face of uncertainty.
xii. IMF. (2018). Asia's Digital Revolution.
xiii. WIPO. (2023). Global Innovation Index 2023 – Innovation in the face of uncertainty.
xiv. Americas Market Intelligence. (2021). Latin America E-commerce Sales and Data 2021-2024.
xv. WIPO. (2023). Global Innovation Index 2023 – Innovation in the face of uncertainty.
xvi. European Parliament. (2019). Economic impacts of artificial intelligence.
xvii. PWC. (2020). Blockchain technologies could boost the global economy US$1.7 trillion by 2030 through raising levels of tracking, tracing and trust.
xviii. ThirdWay Partners. (2023). Funding the Digital Infrastructure Gap
xix. Ibid.
xx. ITU. (2020). Connecting Humanity: Assessing investment needs of connecting humanity to the internet by 2030.
xxi. PPIAF. (2009). PPP Modalities.
xxii. U.S. Department of Transportation, Federal Highway Administration. (n.d.) FHWA - Center for Innovative Finance Support - Alternative Project Delivery Defined: New Build facilities.
xxiii. PPIAF. (2009). PPP Modalities
xxvi. UNECE (2023) PPPs can drive digital and green transformations for sustainable development
xxvii. infoDev (2009) Public-Private Partnerships In E-Government: Knowledge Map
xxvii. IsDB (2021) Beyond Recovery: Resilience and Sustainability

Digital Cooperation Organization

Follow us on

@dcorg | www.dco.org