

#### CALL FOR PARTNERSHIP Study of ICT (4) SDGs

#### **Rising to the Challenge:** *Economic Growth, Innovation and Job Creation*



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## What are the Sustainable Development Goals (SDGs) ?

The Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.





## What are 17 SDGs ?

Sustainable Development Goals

Approved by the United Nations General Assembly

Goal 1. End poverty in all its forms everywhere

Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Goal 3. Ensure healthy lives and promote well-being for all at all ages

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 5. Achieve gender equality and empower all women and girls

Goal 6. Ensure availability and sustainable management of water and sanitation for all (6.a, 6.b)

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Goal 10. Reduce inequality within and among countries

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 12. Ensure sustainable consumption and production patterns

Goal 13. Take urgent action to combat climate change and its impacts

Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

(See https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals)





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**Chapter 1** contains a general introduction to the subject, as well as definitions of various terms, and a selected review of the existing and relevant literature. There is a wealth of existing literature (including books, reports, and scholarly papers) on the impact of ICTs in general, and the Internet in particular on sustainability in development; and the objective of the literature review is to highlight the differences of this report compared with the existing literature. Regarding the scope it will clearly justify the choice of SDGs selected. It also identifies important organizations, entities, and stakeholders that are active in this area and the main audience of the report.

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**Chapter 2** identifies how ICTs engage with the sustainability agenda and the critical elements of the ecosystem such as: education, resources (finances and capital), infrastructure, policy, market, culture/environment, opportunities) and the stakeholders that are indispensable for ensuring resilient and sustainable development activities in developing countries in spite of some chronic shortages coupled with fast changing and fluid situations that can negatively hamper the efforts.

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**Chapter 3** explains that the digital divide can be transformed into the digital multiplier if a multi-stakeholder approach (governments, industry, academia, consumers, venture capitalists, entrepreneurs etc..) is taken to ensure achieving realistic but unconventional objectives. Focus will be on ICT as an enabler for innovation and entrepreneurship, the importance of right **PPPs** (examples of campus innovation centers, start-ups etc. in the Republic of Korea, Singapore, Thailand, UK, USA etc.) and a network-centric approach with an international dimension. Chapter will also focus on open innovation networks. There are many paths to innovation and thus should be outwards looking while also taking into account inherent capabilities and potentials in each territory. Innovation adoption and adaptation alongside mobility will also be considered. It also identifies the pitfalls and various sources of failure that can prevent establishing a vibrant, energetic, forthcoming, and forward looking ICT-centric innovative environment for progress and development.

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**Chapter 4** discusses the critical role of governments (as catalyst, trust & risk capital provider and demand generator) in setting and leading public policies, long term planning, and the legal frameworks that are conducive to sustainable development. It also identifies various enabling governmental collaborative regulatory and facilitation measures (level playing field-competition policies), and incentives (such as tax exemption and reduction, low-interest loans, grants, temporary exemptions from labor laws, etc.) and examines how ICTs transform efficiency and transparency of administrations for governments. It also discusses whether USO strategies including funds can be utilized to encourage ICT-centric innovation that can eventually lead to the introduction of new services in under-privileged and remote areas.

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**Chapter 5** will explore new business models and analytics and their potential for growth and impact that are essential to the formation of new innovation-based businesses and their appropriateness to the development phases. It also discusses the belief that conventional business models and approaches are disappearing and prevent the creation of new jobs in developing countries. It will consider the needs for outward looking approach, dominant market position (e.g., Silicon Valley) vs fair, reasonable and non-discriminatory market environment. It will explore the economics of information and network externalities.

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**Chapter 6** will discuss the proposition that, far more new jobs would be created by introducing ICTs than would have to be curtailed due to the need for improving efficiency. This is evidenced by the impact of the ICT ecosystem on the economies of those countries that have made creation of new ICT-based industries and introduction of novel services, training and new skills, for the benefit of their citizens as their top strategic priority. The above will consider a balanced approach, the new implications of robotics and AI and issues such as productivity and inequality vs inclusive growth. In today's world, unemployment is a serious concern for governments and societies, and has many negative consequences, among which radicalization and social disruptions that are on the rise. Creation of new jobs by introducing new business opportunities through ICTs will alleviate the alarming situation today.



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**Chapter 7** will present the need for education and academia to respond actively and positively to the new and changing needs. It will focus on the mutuality of ICT and learning, the use of ICT in knowledge transfer, new modes of learning, curriculum design & delivery and needs for introducing new courses that are essential for making progress in the new job environment. It highlights specific areas that need to be urgently considered such as digital literacy and importance of entrepreneurship in education because of the existing imbalance and gap between what academia produces and what industry or society - the smart society in particular - needs.

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**Chapter 8** discusses that creation of new small and medium enterprises with expertise and focus on innovation. It highlights that these enterprises should not necessarily be considered as a competitive threat to big business, as they complement each other. It also examines whether acquisitions of and collaborations with SMEs have culminated in the growth of big business by introducing new areas of growth which otherwise would not exist. It will consider issues such as cooperation and competition, diversification, time evolution from small to big, start-ups, importance of peering between big and small business, importance of IXPs in the internet environment

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business



# **Chapter 9** summarizes the report and highlights the important points raised in previous chapters.

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### Appendices: Case Studies and Success Stories

- Examples:
  - Digital Financial Inclusion and Economic Growth
  - Health Initiative (BE HE@LTHY, BE MOBILE)
  - Many more !!

Share with us your Case Studies







#### WTDC 9-20/Oct/2017 (Buenos Aires)

Final Results Launch.

