

Republic of the Philippines  
**HOUSE OF REPRESENTATIVES**  
Quezon City

NINETEENTH CONGRESS  
First Regular Session

**HOUSE BILL NO. 58**



---

Introduced by **REP. JOSE FRANCISCO "KIKO" B. BENITEZ, Ph.D.**

---

**EXPLANATORY NOTE**

We are on the cusp of the Fourth Industrial Revolution. Great advances in science and technology are increasingly blurring the boundaries of the digital, physical and biological worlds, with enormous impact on the creation of economic value and on social relations. It draws endless possibilities and we are only beginning to fully comprehend the breadth and depth of how it will transform our way of life.

GPS navigation software that directs you to less congested roads. Autonomous robots and voice-activated virtual assistants powered by artificial intelligence. Immersive consumer experience through virtual or augmented reality technologies. Automated irrigation systems facilitated by sensors and solar power. Decentralized digital currency systems supported by blockchain technology. Tissue engineering enabled by 3D printing. Science fiction is fast becoming our reality. And these are only the tip of the iceberg.

The fundamental changes driven by emerging technologies present both opportunities and challenges to Filipinos. The use of new technologies can increase production and enhance consumer experience. A 2017 Microsoft study estimates that digital transformation will contribute \$8 billion to or around 40 percent of the Philippines' GDP by 2021.<sup>1</sup> Another Microsoft survey finds 86 percent of business leaders believe that digital transformation will enable future growth and that data analytics can lead to new revenue streams.<sup>2</sup>

**Digital-creative economy nexus**

Creative industries, for example, stand to benefit from digital transformation. Digital technologies are enabling new forms of artistic and creative expression, opening new distribution pathways, broadening audiences and markets for creative content, and affecting consumption patterns. The United Nations Conference in Trade and Development calls creative industries as "a powerful, growing economic force" as "it intersects with the digital and sharing economy, e-commerce."<sup>3</sup>

In the Philippines, export of creative goods and services are valued at \$915.45 million in 2014, an 18 percent increase from \$775.83 million in 2005, mainly driven by fashion, interior design, toys and jewelry products.<sup>4</sup>

---

<sup>1</sup> Microsoft Asia. (2017). *Unlocking the Economic Impact of Digital Transformation*. Retrieved from <https://news.microsoft.com/en-ph/2018/02/14/digital-transformation-contribute-us8-billion-philippines-gdp-2021/>

<sup>2</sup> Microsoft Asia. (2017). *Microsoft Asia Digital Transformation Survey*. Retrieved from <https://news.microsoft.com/en-ph/2017/02/27/86-of-business-leaders-in-philippines-believe-they-need-to-be-a-digital-business-to-succeed-microsoft-study/>

<sup>3</sup> UN Conference on Trade and Development. (2018). *Creative Economy Outlook*.

<sup>4</sup> Ibid.

The National Economic and Development Authority, in its 2018 Socioeconomic Report, admits “there is a need to consolidate all creative industry players, create opportunities, and develop a pool of creative talent and experts for a more inclusive creative economy.”

The Technical Education and Skills Development Authority already provides programs to develop technical skills that are relevant to occupations in the creative economy. However, the challenge really is mainstreaming digital competencies in all technical and vocational education and training programs as TESDA recognizes “the increased integration of ICTs in almost every industry.”<sup>5</sup>

### **Reskilling revolution**

Indeed, the digital transformation of production processes and services across industries require new skillsets. Automation and augmentation of production and service delivery could potentially displace workers without the necessary skills. In a study of G20 economies, the World Economic Forum estimates that 75 million current job roles may be displaced by the shift in the division of labor between humans, machines and algorithms. But on the other hand, 133 million new jobs, such as data analysts, software developers, and e-commerce and social media specialists, may emerge.<sup>6</sup>

While digital transformation of businesses in the Philippines is only starting to take off, with only 32 percent of business leaders having a full digital transformation strategy<sup>7</sup>, it is crucial that the Government facilitates the reskilling of the Filipino workforce so they can adapt to the demands of a digital economy.

A parallel reskilling revolution is necessary to harness the benefits of the Fourth Industrial Revolution. And workers are already clamoring for more investments in digital skills development. A 2017 Microsoft study finds 47 percent of workers expect leaders to close the digital skills gap.<sup>8</sup>

A reskilling revolution calls for the development not only of technical skills to operate or design new technologies but also of human skills such as critical thinking, creativity, originality and initiative, complex problem-solving, flexibility, and emotional intelligence.<sup>9</sup> The development of these competencies must be integrated in our education systems guided by a standards-based framework. This bill references the UNESCO Global Framework of Reference on Digital Literacy Skills, UNESCO Digital Kids Asia Pacific Framework for Education and the Digital Skills Toolkit of the International Telecommunications Union to guide the formulation of standard learning outcomes across different modalities of learning.

---

<sup>5</sup> TESDA. (2019). *Pagkamalikha: The Philippine Creative Industries in the TVET Perspective* (Labor Intelligence Report 5/2019).

<sup>6</sup> World Economic Forum. (2018). *Future of Jobs Report*. Retrieved from <https://www.weforum.org/agenda/2018/09/future-of-jobs-2018-things-to-know/>

<sup>7</sup> Microsoft Asia. (2017). *Microsoft Asia Digital Transformation Survey*. Retrieved from <https://news.microsoft.com/en-ph/2017/02/27/86-of-business-leaders-in-philippines-believe-they-need-to-be-a-digital-business-to-succeed-microsoft-study/>

<sup>8</sup> Microsoft Asia. (2017). *Microsoft Asia Workplace 2020 Study*. Retrieved from [https://news.microsoft.com/en-ph/2017/10/12/new-culture-work-ph-needed-succeed-digital-transformation/#\\_ftn1](https://news.microsoft.com/en-ph/2017/10/12/new-culture-work-ph-needed-succeed-digital-transformation/#_ftn1)

<sup>9</sup> World Economic Forum. (2018). *5 things to know about the future of jobs*. Retrieved from <https://www.weforum.org/agenda/2018/09/future-of-jobs-2018-things-to-know/>

This bill also proposes a competency framework for teachers and trainers as part of continuing professional development. They must harness digital technologies to augment or enhance learning activities. For this purpose, we should adopt the UNESCO ICT Competency Framework for Teachers.

### **Smart governance**

Needless to say, the scale of digital transformation of local economies and learning environments rests in the level of commitment and performance of the Government to build backbone ICT infrastructure to increase access to fast and affordable Internet. In this aspect we are lagging.

The Philippines ranked 63<sup>rd</sup> out of 100 countries in the 2020 Inclusive Internet Index which assesses Internet availability, affordability, relevance and readiness. “The Philippines is among Asia’s weaker countries in advancing internet inclusion, ranking 19th out of 26 nations in the region. Affordability levels of smartphones and mobile data are low in the global context, and mobile users are burdened by relatively slow download and upload speeds,” the Index said.<sup>10</sup>

The UN Broadband Commission for Sustainable Development has set ambitious targets for 2025, which includes:

1. By 2025, Broadband Internet user penetration should reach 65% in developing countries;
2. By 2025, entry-level broadband services should be made affordable in developing countries at less than 2% of monthly Gross National Income (GNI) per capita;
3. By 2025, 60% of youth and adults should have achieved at least a minimum level of proficiency in sustainable digital skills; and,
4. By 2025, overcome unconnectedness of Micro-, Small- and Medium-sized Enterprises (MSMEs) by 50%, by sector.

Achieving these will require a whole-of-government approach. Historically, ICT policies and programs have been developed in silos. It is imperative that government agencies complement each other and operate under a single framework. For this purpose, this bill aims to establish a coordinating body to ensure cohesiveness of government policy to accelerate and harness the digital revolution to transform Philippine cities into smart cities. The bill empowers the National Digital Council to formulate strategies for skills development, digital-creative economy development and smart city development, as well as for backbone ICT infrastructure development.

A smart city represents the totality of digital transformation for the benefit of the people. The bill adopts the smart city framework developed by Dr. Rudolf Giffinger and his team in the Vienna University of Technology, which highlights collaboration and innovation among government, business, academia and citizens. A smart city leverages new technologies to drive sustainable solutions to urban problems, such as poverty, traffic congestion, pollution, and criminality.

---

<sup>10</sup> Flores, Helen. (2020, March 3). Philippines ranks 63<sup>rd</sup> in inclusive internet index. *Philippine Star*. Retrieved from <https://www.philstar.com/headlines/2020/03/03/1997646/philippines-ranks-63rd-inclusive-internet-index>

## **Digital transformation for “new normal”**

The COVID-19 pandemic has exposed economic and social inequalities, particularly in urban areas, that make populations vulnerable. Lockdowns have put economies in coma; businesses, particularly, MSMEs are forced to lay off workers or cut wages to survive. Unemployment threatens to sink families into extreme poverty. School shutdowns have interrupted learning.

Digital transformation is the solution.

Enterprises can leverage digital technology to reach and engage customers and clients, and can improvise processes to drive productivity. Digital technology can enable flexible or distance learning.

But how can the Philippines harness the benefits of digital transformation if we do not address the digital divide?

We must accelerate the digital revolution to foster economic resilience and competitiveness but also, more crucially, social equity. The Government should be in the frontlines of building not only a smart future but a future where no one is left behind.

Our Constitution heralds the role of technological innovation to promote national development. We need to rise up to the challenge and help our people develop the necessary skills and innovate to adapt, compete and flourish in a brave new world.

In view of the foregoing, the immediate approval of this bill is earnestly sought.

  
JOSE FRANCISCO “KIKO” B. BENITEZ, Ph.D.

Republic of the Philippines  
**HOUSE OF REPRESENTATIVES**  
Quezon City

NINETEENTH CONGRESS  
First Regular Session

**HOUSE BILL NO. 68**

---

Introduced by **REP. JOSE FRANCISCO “KIKO” B. BENITEZ, Ph.D.**

---

**AN ACT**  
**PROVIDING FOR A COMPREHENSIVE POLICY TO ACCELERATE AND**  
**HARNESS THE DIGITAL REVOLUTION TO FOSTER INCLUSIVE ECONOMIC**  
**GROWTH, SUSTAINABLE DEVELOPMENT AND PARTICIPATORY**  
**GOVERNANCE**

**ARTICLE I**  
**STATE POLICIES AND OBJECTIVES**

**SECTION 1.** *Short Title.* – This Act shall be known as the “Digital Philippines Act”.

**SEC. 2.** *Declaration of State Policy.* The State recognizes the critical role of science, technology and innovation in fostering inclusive and sustainable economic growth, and human development. The State shall take appropriate steps to enable all citizens, regardless of age, sex, gender, income class, ethnicity, language, religion, or ability, to access and use information and communication technologies (ICT), and acquire knowledge, skills and values to adapt to the demands of a knowledge economy and digital society.

The State shall accelerate and harness advance digital technologies and ICT-enabled innovations to maximize the benefits and address the challenges of the Fourth Industrial Revolution. The State shall build an enabling ICT ecosystem to reengineer production and management systems towards sustainability, enhance production, generate employment, and facilitate interaction between producers and consumers. The State shall promote digital transformation at all levels of government to streamline and speed up the delivery of government services.

**SEC. 3.** *Objectives.* This Act aims to:

- a) Recognize the significant contribution and vast potential of digital innovation and creative industries to drive economic growth, and enrich our human and cultural capital;
- b) Provide a strategic vision, and comprehensive and cohesive framework to guide anticipatory planning and investment programming to support digital innovation and transformation;
- c) Adopt a whole-of-government approach in promoting digital innovation and transformation in business and government;



- d) Rationalize ICT-enhanced and ICT sector-specific interventions to prevent duplication and ensure complementarity of services, and improve efficiency in its delivery;
- e) Stimulate growth and enhance competitiveness and resilience of service and creative industries by promoting digitization of products and services;
- f) Establish a framework for development of digital skills of all learners in diverse settings and throughout life; and,
- g) Provide the backbone infrastructure to bridge the digital divide and enable and support ICT innovation and digital inclusion.

**SEC. 4. *Definition of Terms.*** As used in this Act:

- a) Digital transformation refers to the strategic adoption of digital technologies to improve processes and productivity, deliver better learning, customer and employee experiences, manage business risk, and control costs;
- b) Digital inclusion refers to the ability of individuals and groups to access and use information and communication technologies. Digital inclusion encompasses not only access to the Internet but also the availability of hardware and software; relevant content and services; and training for the digital literacy skills required for effective use of information and communication technologies;
- c) Digital citizenship refers to the ability to find, access, use and create information effectively; engage with other users and with content in an active, critical, sensitive and ethical manner; and navigate the online and ICT environment safely and responsibly, being aware of one's own rights;
- d) Digital literacy refers to the ability to access, manage, understand, integrate, communicate, evaluate and create information safely and appropriately through digital technologies for employment, decent jobs and entrepreneurship. It includes competencies that are variously referred to as computer literacy, ICT literacy, information literacy and media literacy;
- e) Creative industries refer to the cycles of creation, production, promotion, distribution and/or commercialization of goods, services and activities that use creativity, cultural and intellectual capital as primary inputs. They constitute a set of activities, focused on but not limited to arts, potentially generating revenues from trade and intellectual property rights. They comprise tangible products and intangible intellectual or artistic services with creative content, economic value and market objectives. Creative industries are:
  - 1) Music and Performing Arts
  - 2) Film, Television, Radio and Photography
  - 3) Advertising and Marketing
  - 4) Software Development, Animation and Game Development
  - 5) Writing, Publishing and Print Media,
  - 6) Museums, Galleries and Libraries,
  - 7) Heritage Crafts and Activities, including Gastronomy,
  - 8) Architecture and Interior Design, and,

## 9) Visual Arts, and Product, Graphic and Fashion Design.

- f) Decent work refers to work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration;
- g) Informal learning refers to forms of learning that are intentional or deliberate but are not institutionalized. They are less organized and structured than either formal or non-formal education. Informal learning may include learning activities that occur in the family, in the work place, in the local community, and in daily life, on a self-directed, family-directed or socially-directed basis;
- h) Non-formal education refers to education that is institutionalized, intentional and planned by an education provider. The defining characteristic of non-formal education is that it is an addition, alternative and/or a complement to formal education within the process of the lifelong learning of individuals. It caters for people of all ages, but does not necessarily apply a continuous pathway-structure; it may be short in duration and/or low intensity, and it is typically provided in the form of short courses, workshops or seminars. Non-formal education can cover programs contributing to adult and youth literacy and education for out-of-school children, as well as programs on life skills, work skills, and social or cultural development;
- i) Reskilling refers to learning new sets of competencies to transition to a completely new role;
- j) Upskilling refers to learning new competencies to stay in current role, due to the change in skills required, or adding certain competencies for career progression;
- k) Occupational mobility refers to the ease at which a worker can leave one job for another in a different field;
- l) Flexible learning refers to a set of educational approaches and systems concerned with providing learners with increased choice, convenience, and personalization to suit their needs. In particular, flexible learning provides educational choices about where, when, and how learning occurs, by using a range of digital and non-digital technologies to support the teaching and learning process;
- m) Learner-centered pedagogy refers to a pedagogical approach that generally draws on learning theories suggesting learners should play an active role in the learning process. Students therefore use prior knowledge and new experiences to create knowledge. The teacher facilitates this process, but also creates and structures the conditions for learning;
- n) Open educational resources (OER) refer to any educational resources (including curriculum maps, course materials, textbooks, streaming videos, multimedia applications, podcasts, and any other materials that have been designed for use in teaching and learning) that are openly available for use by teachers and students, without an accompanying need to pay royalties or license fees. An OER is an educational resource that incorporates a license that facilitates reuse, and potentially

adaptation, without requiring that permission first be requested from the copyright holder; and,

- o) Community learning center is a physical learning space that promotes human development by providing opportunities for lifelong learning to all people in the local community. CLCs support empowerment, social transformation and improvement of the quality of life of the people. The main functions of CLCs are to provide: i) access to digital technologies, ii) education and training, iii) community information and resource services, iv) community development activities, and v) co-ordination and networking, to promote human development and lifelong learning.

## **ARTICLE II NATIONAL DIGITAL COUNCIL**

**SEC. 5. *National Digital Council.*** There is hereby created a National Digital Council, under the administrative supervision of the Office of the President, to formulate strategies and coordinate government policies and programs to foster digital inclusion and maximize the economic and social benefits of digital and data-driven technologies to promote robust economic growth and resilience, sustainable development, and participatory governance.

**SEC. 6. *Composition.*** The National Digital Council, hereinafter referred to as the Council, shall be composed of a Chairperson, with the rank of Secretary, appointed by the President of the Philippines, and the following:

- a) Secretary of the Department of Information and Communication Technology, as Vice Chairperson;
- b) Secretary of the National Economic and Development Authority;
- c) Secretary of the Department of Finance;
- d) Secretary of the Department of Trade and Industry;
- e) Secretary of the Department of Labor and Employment;
- f) Secretary of the Department of Education;
- g) Secretary of the Department of Science and Technology;
- h) Secretary of the Department of Agriculture;
- i) Secretary of the Interior and Local Government;
- j) Chairperson of the Commission on Higher Education;
- k) Director General of the Technical Education and Skills Development Authority;
- l) Chairperson of the National Commission for Culture and the Arts;
- m) five (5) private sector representatives.

The Chairperson and the five (5) private sector representatives, who shall be appointed by the President, shall be citizens and residents of the Philippines, of proven competence, integrity, probity and independence. They must have distinguished themselves in government, the private sector or the academe in any of the following fields: computer science, engineering, mathematics, economics, business and industry, and education.

Department Secretaries may designate an Undersecretary, whose portfolio covers promotion of innovation and human capital development, as his/her representative, who shall sit in a permanent capacity, and their acts shall be considered the acts of their principals.



**SEC. 7. *Powers and Functions of the Council.*** – The Council shall exercise the following powers and functions:

- a) Formulate five-year and ten-year digital inclusion plans and strategies to accelerate and harness advances in digital technology to increase competitiveness of service and creative industries, and micro, small and medium enterprises (MSMEs), and Filipino workforce in a global and digital economy, promote sustainable production, enhance value creation, improve efficiencies in value chains, optimize business processes and choices, and build long-term dynamism and resilience against future shocks and crises;
- b) Identify and recommend innovative service and creative industries to the Board of Investments and Fiscal Incentives Review Board for the grant of performance-based and time-bound tax and duty incentives and deductions;
- c) Harmonize and rationalize policies and programs for the promotion of digital innovation in business and government, and development of digital competencies of workers, teachers and learners under a standards-based framework;
- d) Ensure the affordability and sustainability of digital skills development programs;
- e) Advise the President with respect to policies and programs to catalyze digital transformation of enterprises, education systems and government service;
- f) Strengthen international linkages and partnerships to share best practices in accelerating digital innovation and transformation;
- g) Call upon or mobilize any department, bureau, office, agency, or instrumentality of the government, including government-owned and -controlled corporations and local government units, to extend full support towards the attainment of the objectives of this Act;
- h) Create ad hoc committees or technical working groups consisting of relevant national government agencies and stakeholders that address specific concerns relative to the implementation of this Act;
- i) Monitor the implementation of policies and programs and performance of implementing agencies vis-à-vis standards and targets set forth in this Act; and,
- j) Perform other tasks that the President may direct.

**SEC. 8. *Secretariat.*** A Secretariat is hereby created as a separate unit of the Presidential Management Staff to provide technical, administrative and operation support to the Council. The Secretariat shall be headed by an Executive Director appointed by the President. The Executive Director shall have the same qualifications as the Chairperson and the private sector representatives.

### ARTICLE III

## NATIONAL DIGITAL SKILLS DEVELOPMENT STRATEGY

**SEC. 9. *National Digital Skills Development Strategy.*** The Council shall formulate a National Digital Skills Development Strategy, hereinafter referred to as NDS, to provide long-term vision and direction to promote digital citizenship and ensure that all persons understand and can take advantage of the educational, economic and social opportunities and benefits of advanced information and communication technologies. The NDS shall:

- a) Identify and analyze current and emerging trends and changes in technology, trade, consumption, demography and health that impact labor markets;
- b) Define the skills or competencies necessary to adapt, compete and flourish in a knowledge-based and digital economy and society, including but not limited to the competencies identified under Section 6 of this Act;
- c) Determine gaps in existing policies, plans, programs and curricula to promote and support ICT innovation and digital transformation;
- d) Establish goals for digital skills development in basic education, tertiary education, technical and vocational education and training (TVET), and non-formal education for out-of-school children and youth, and adults, and open opportunities for digital skills development through informal learning;
- e) Create a framework for the development of digital competencies of teachers and trainers, guided by the principles of continuing professional development and lifelong learning;
- f) Provide for opportunities for the upskilling or reskilling of workers to build occupational mobility and enable transition from jobs that require manual or physical labor, administrative and management skills to work in industries that require technical skills to use, operate and manage automated or digital technology-augmented systems through lifelong learning;
- g) Establish goals for the development of skills for digital entrepreneurship and lifelong learning;
- h) Provide for a framework of recognition, validation and accreditation of digital competencies obtained through non-formal or informal learning;
- i) Establish a framework for job placement to help graduates of digital skills education and training programs find decent work;
- j) Identify benchmarks, targets and indicators for the level of proficiency in digital skills of key cohorts, adopt best practices in digital transformation in other countries, and provide for its periodic monitoring and review; and,
- k) Provide for mechanisms for collaboration between the government and the private sector to broaden access to and ensure the affordability and sustainability of digital skills development programs.

**SEC. 10. *Digital literacy framework.*** The Department of Education, Commission on Higher Education, Technical Education and Skills Development Authority and other government agencies implementing sector-specific, non-formal skills development programs shall integrate in the curricula and design of the K-12, the Alternative Learning System (ALS), general education programs of higher education institutions, TVET and other training programs, and develop, in consultation with the private sector, modules on the following competence areas:

- a) ICT literacy – to identify, use, operate and manage ICT hardware and software;
- b) Information and data literacy – to search, retrieve, navigate, analyze, interpret, critically evaluate, organize, store, manage and utilize data, information and digital content effectively to make informed decisions;
- c) Communication and collaboration – to be able, using digital technology, to interact, communicate, share and co-create content, and collaborate with people; to participate in social activities; to recognize, seek out and act on opportunities for social influence; and to demonstrate and adapt netiquette or ethical and courteous behavior, and navigate and bridge cultural and generational divides in digital environments;
- d) Creativity, innovation and problem-solving – to represent and express one's identity; create, edit and curate digital content in different formats; to modify, improve, elaborate and integrate data, information and content into an existing body of knowledge; understand how copyright and licenses apply to data, information and content; to identify, assess and troubleshoot technical problems when operating digital devices and navigating digital environments; to develop computational thinking and be able to understand and break down a complex problem into logical and sequential components, and present, create and design solutions transmutable into human and/or computer systems; to be able to code and/or design and develop computer programs; to identify, evaluate, select and use digital tools to solve technical, conceptual and real-world problems, create new bodies of knowledge, and innovate processes and products;
- e) Digital safety and cyber-security – to protect devices, content, personal data, privacy, reputation, and physical and mental health in digital environments; to be able to use and share personally identifiable information protected by safety and security measures; to understand risks and threats in digital environments; to know and understand legal rights and obligations, and privacy policies within global and local contexts;
- f) Career-related competencies – to identify, assess and understand where one's own digital skills need to be improved or updated, and recognize, seek out and act on opportunities for self-development or self-improvement to meet the demands of a digital economy; to operate specialized digital technologies and to understand, analyze and evaluate specialized data, information and digital content for a particular field; and,
- g) Digital emotional intelligence – to recognize, navigate and express emotions in digital environments, which require self-awareness, self-regulation, self-motivation, respect for diversity, conflict management and empathy.

**SEC. 11. *Digital competency framework for teachers and trainers.*** The Department of Education, Commission on Higher Education, Technical Education and Skills Development Authority and other government agencies implementing sector-specific, non-formal skills development programs shall formulate a uniform framework to upskill teachers and trainers to utilize digital technologies to enable innovative pedagogies and enhance learning environments. Aforesaid agencies shall develop effective and appropriate modules to develop the following proficiencies of teachers and trainers:

- a) Knowledge acquisition – to develop basic digital literacy and digital citizenship skills, and to select and use appropriate instructional software to complement curriculum objectives, assessment approaches, and a variety of teaching methods;
- b) Knowledge deepening –to utilize digital technologies, such as visualization, simulation and data analytics tools, to structure and facilitate dynamic, collaborative and student-centered activities to understand concepts and relationships in real-world situations, and apply the same to create solutions; and,
- c) Knowledge creation – to strengthen self-awareness and self-improvement to contribute to knowledge society, and to design ICT-enabled or -enhanced activities to engage students in knowledge creation and innovation through complex problem-solving, communication, collaboration, experimentation, critical thinking and creative expression.

Implementing agencies shall develop diagnostic tools to evaluate the digital competencies of teachers and trainers. The recognition, validation and accreditation of digital competencies shall be integrated into the Philippine Qualifications Framework for continuing professional development as provided in Republic Act No. 10697.

**SEC. 12. *Alternative modes of learning delivery.*** Implementing agencies of digital skills development programs shall take advantage of flexible learning methodologies and learner-centered pedagogies, and make available open educational resources to increase access to digital skills development modules.

**SEC. 13. *Private sector participation in digital skills development.*** The State shall encourage employers to provide, where necessary, their employees access to educational and training opportunities to develop digital literacy skills. An employer may develop, in consultation with their employees and consistent with the digital skills framework provided in Sec. 10 of this Act, and implement in-house training programs for their employees, or may enroll their employees in digital skills development programs of accredited private training providers, at no cost to the employee.

Workers may enroll in a private skills development program of their choice to complement the education and training provided for by their employers. The Council shall formulate a voucher subsidy program for all eligible workers to defray the cost of fees charged by the private training provider.

For this purposes, the Council shall establish a uniform system of registration and accreditation of private training providers, and regulation of the imposition and collection of training fees to ensure the reasonableness and appropriateness of the same.



**SEC. 14. *Community learning centers.*** There shall be established at least one (1) community learning center (CLC) in every municipality and city in the Philippines which shall make available digital devices equipped with appropriate software and stable Internet connection to provide people access online resources and content, and enable them to develop skills and create new content or knowledge; *Provided*, That additional learning centers shall be established such that there is one learning center per 50,000 persons in every city and every municipality with a population of more than 100,000 persons; *Provided, further*, That existing CLCs, and public libraries and reading centers, constructed pursuant to Republic Act No. 7743, shall be upgraded; *Provided, finally*, That the CLC shall be constructed in geographically equitable and accessible locations, and in compliance with relevant building standards and specifications, including the requirements to support or enhance the mobility of persons with disability and senior citizens.

The Council, through its Secretariat and relevant Member Agencies, shall undertake the construction, repair and rehabilitation of community learning centers, and the installation and configuration of ICT hardware and software therein; *Provided*, That local government units shall provide the site for CLCs and shall undertake its operation and maintenance. Local government units may allocate such funds necessary for the operation and maintenance of CLCs from the Special Education Fund, upon approval and authorization of the Local School Board.

**SEC. 15. *Recognition, validation and accreditation of competencies.*** Pursuant to Sec. 9 (h) of this Act, the Council shall formulate guidelines for recognition, validation and accreditation of competencies and learning outcomes obtained in non-formal and informal digital skills development programs. Inasmuch as Republic Act No. 10647 provides for a ladderized education system that enables transition and progression of students between TVET and higher education, the Council shall develop equivalencies for the competencies and outcomes of sector-specific non-formal skills development programs and informal learning, and integrate the same in the Philippine Qualifications Framework.

**SEC. 16. *Education to employment.*** Digital skills development programs shall include a presentation of pathways for students after graduation from the program. Providers of digital skills training shall formulate and implement job placement programs to assist graduates find decent work, and enable viable and desirable job transition. For this purpose, the Council shall strengthen academe-industry linkages.

#### **ARTICLE IV PHILIPPINE DIGITAL ECONOMY STRATEGY**

**SEC. 17. *Philippine Digital Economy Strategy.*** The Council shall formulate the Philippine Digital Economy Strategy, hereinafter referred to as PDES, to accelerate and harness digital innovation to transform major industries and enhance their competitiveness and resilience. The PDES shall:

- a) Identify, measure and analyze current and emerging trends and changes in technology, culture, trade, demography, health and climate that impact consumption, supply chains, and labor markets;



- b) Determine the physical, technical and investment requirements to increase access of the population to affordable and high-speed Internet and ensure the equitable geographic distribution of backbone ICT infrastructure;
- c) Provide a framework for the utilization of digital technologies, such as but not limited to robotics, artificial intelligence, Internet of Things and interoperable systems, cloud computing, data analytics, three-dimensional printing, and digital payment systems, by businesses to augment or automate business analytics, production, content creation, marketing, trade and financial services;
- d) Determine the need for upskilling and reskilling of current and future workforce to enable job transition and occupational mobility;
- e) Promote innovative and flexible business models that utilize digital technologies for personalization and interactive tactics, such as immersive consumer experience and user-generated content, to penetrate markets;
- f) Consolidate and streamline registration and regulatory structures and procedures, and rationalize the grant of assistance and incentives to MSMEs, the business processing outsourcing sector, creative industries, startups and agro-enterprises, as provided by various laws, to minimize redundancies;
- g) Identify a multidisciplinary research and development to support and sustain digital innovation; and,
- h) Establish benchmarks, targets and indicators to guide periodic monitoring, review and updating.

**SEC. 18. *Digital-creative economy nexus.*** The National Commission for Culture and the Arts and its attached agencies, the Design Center, the Film Development Council of the Philippines, Movie and Television Review and Classification Board, Optical Media Board, and the National Book Development Board shall establish, as a component of the National Digital Economy Strategy, programs that will leverage digital technologies to enable innovative content creation stimulate growth of creative industries, and promote Filipino talent and creative products, with distinctive design that represents our rich cultural heritage and identity, in domestic and international markets.

**SEC. 19. *Integrated Performance and Incentive Framework.*** The Council shall establish and recommend uniform criteria to the Board of Investments and Fiscal Incentives Review Board for the evaluation of qualification of businesses utilizing digital technology to avail tax and duty incentives and deductions, as provided for in various laws, such as but not limited to Republic Act No. 6977, as amended by Republic Act No. 9501, or the "Magna Carta for Micro, Small and Medium Enterprises", Republic Act No. 11321, or the "Sagip Saka Act"; and Republic Act No. 11337, or the "Innovative Startup Act".

Nothing in this Act shall be interpreted or construed to diminish or limit, in whatever manner, the incentives granted or provided under aforesaid laws, and existing orders, issuances and regulations.

## ARTICLE V

## **DIGITAL INFRASTRUCTURE**

**SEC. 20. *Backbone ICT infrastructure.*** The Department of Information and Communication Technology shall accelerate the construction of backbone ICT infrastructure to enable widest broadband penetration.

For this purpose, the DICT shall ensure the full implementation of Republic Act No. 10929, otherwise known as the Free Internet Access in Public Spaces Act, within five (5) years since the approval of this Act.

## **ARTICLE VI SMART CITIES**

**SEC. 21. *Smart cities.*** The Council, the Department of Human Settlements and Urban Development, the Department of Environment and Natural Resources, Department of Transportation and other concerned agencies shall formulate a Smart Cities Framework to guide municipalities and cities in developing policies, plans and programs towards digital inclusion and transformation urban development. The Smart Cities Framework shall conform with the following principles:

- a) Smart Economy – utilization of digital technology and innovative business models; the development of digital skills of the workforce; and the adoption of sustainable production systems to enhance efficiency and competitiveness;
- b) Smart People – promotion of lifelong learning, digital inclusion, creativity and innovation; development of knowledge, skills and values to adapt, compete and flourish in a digital economy and society, to enable job transition, occupational mobility, innovation, and digital entrepreneurship;
- c) Smart Governance – utilization of new technologies and methodologies, such as crowdsourcing, to strengthen connections and interactions between the local government and citizens, businesses, and civil society;
- d) Smart Mobility – promotion of new and multiple sustainable modes of transportation, including mass transportation, such as electric vehicles, autonomous vehicles, bicycling, and carpooling, to enable affordable, efficient and safe mobility for all;
- e) Smart Environment – utilization of innovative technology to manage and monitor waste production, pollution, and carbon emission, promote energy efficiency and accelerate local energy transition; and, utilization of data analytics for planning and management of built and natural environments to improve efficiency, minimize environment impact and build resilience; and,
- f) Smart living – increasing access of all citizens to electronic services, digital platforms and ecosystems to promote digital inclusion, strengthen civic engagement and social cohesion, and expanding access to ICT-enabled and -enhanced healthcare systems.

## **ARTICLE VII SMART GOVERNANCE STRATEGY**

**SEC. 22. *Smart Governance Strategy.*** The Council and the Anti-Red Tape Authority shall develop a Smart Governance Strategy, hereinafter referred to as SGS, to guide the phased transition of processes and procedures towards full automation and enhanced interoperability to eliminate bureaucratic red tape, improve efficiency of government services, support planning and decision-making, promote transparency and strengthen citizen engagement and participation, as provided for in Republic Act No. 9485, as amended by Republic Act No. 11032.

The SGS shall provide for a framework to rationalize the structure of all departments, bureaus, offices, agencies, or instrumentalities of the government, including government-owned and -controlled corporations, state universities and colleges, and local government units, to abolish positions that will be rendered redundant by automation; Provided, That the Legislature, Judiciary and constitutional commissions may, on a voluntary basis, apply the parameters contained therein; Provided, further, That the SGS shall identify the skills or competencies necessary to adapt to digital transformation of government services; Provided, finally, That reskilling and upskilling programs shall be established for government employees.

The SGS shall also identify standards, targets and indicators to guide the gradual digital transformation of the bureaucracy.

**SEC. 23. *Government information systems.*** All concerned agencies shall within two (2) years establish the information systems and data registries on health, agriculture, business enterprises and other relevant demographic, economic and social statistics as provided in various laws, such as but not limited to UHC, AFMA, Sagip Saka, SMSE, and shall regularly update the same to enable access to public information, and promote transparency, accountability and participatory governance.

## **ARTICLE VIII FINANCING**

**SEC. 24. *Public-private partnership.*** The Council shall develop policies to promote and encourage partnerships between the government and private sectors or non-government organizations for the implementation of this Act, subject to existing rules and regulations on public-private partnerships.

**SEC. 25. *Appropriations.*** The amount of one hundred million pesos (100,000,000.00) as initial funding for the Council to be charged against the unexpended Contingency Fund of the Office of the President is hereby appropriated. Thereafter, the amount needed for the implementation of this Act shall be included in the annual General Appropriations Act.

## **ARTICLE IX MONITORING AND OVERSIGHT**

**SEC. 26. *Implementing rules and regulations.*** The Council shall issue the implementing rules and regulations within sixty (60) days from the effectivity of this Act.

**SEC. 27. *Congressional oversight.*** The Council shall, on the first Monday of July every year, submit a report to Congress of the achievement of objectives and targets of this Act.

For this purpose, there is hereby created a Congressional Oversight Committee. The Committee shall be composed of five (5) Senators and five (5) Representatives to be appointed by the Senate President and the Speaker of the House of Representatives, respectively. The Minority shall be entitled to pro rata representation.

**SEC. 28. *Sunset review.*** Within five (5) years after the effectivity of this Act, or as the need arises, the Congressional Oversight Committee shall conduct a sunset review. For purposes of this Act, the term “sunset review” shall mean a systematic evaluation by the Congressional Oversight Committee of the accomplishments and impact of this Act, as well as the performance and organizational structure of its implementing agencies, for purposes of determining remedial legislation.

## **ARTICLE X FINAL PROVISIONS**

**SEC. 29. *Repealing Clause.*** All other laws, decrees, executive orders and rules and regulations contrary to or inconsistent with the provisions of this Act are hereby repealed or modified accordingly.

**SEC. 30. *Separability Clause.*** If any provision of this Act is held invalid or unconstitutional, the same shall not affect the validity and effectivity of the other provisions hereof.

**SEC. 31. *Effectivity.*** This Act shall take effect fifteen (15) days after its publication in the *Official Gazette* or in any newspaper of general circulation.

Approved,