



Corporate Overview

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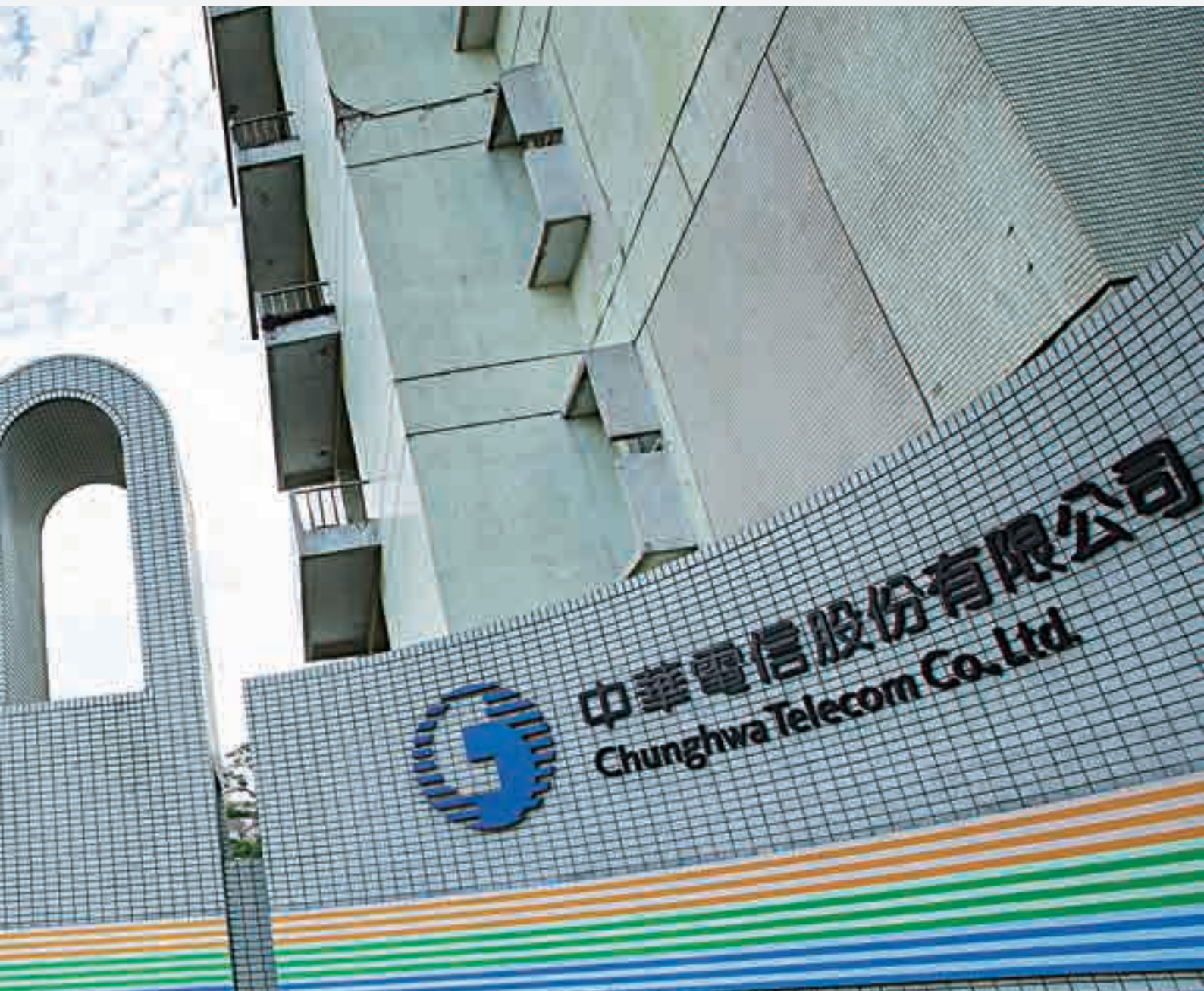


Chunghwa Telecom is the largest integrated telecommunication carrier in Taiwan. Our head office is located at 21-3 Hsinyi Road, Section 1, Taipei. In August 2005, we became a privatized company as the ownership by the government was reduced to less than 50%, and the management system officially transformed from a state-owned enterprise to a privately-owned enterprise.

Our main business consists of three major areas: fixed, mobile, and data communications, providing voice services, private circuits, Internet, broadband Internet, smart network, virtual network, e-commerce, corporate customer integration ICT services and various value-added services. There are 742 service locations. We use the best network and service quality as the backing to create intelligent communication environments and exciting yet convenient digital lives for our users. Chunghwa Telecom is also an important business partner of other international telecommunication carriers. We have been actively involved in different “corporate social responsibility” conducts in recent years, and have won the appraisal of many domestic and international professional organizations consecutively.

* Three Telecom Laws: <http://goo.gl/678ya>

* The main business of the branches and re-investments: <https://goo.gl/v2iGs6> (p.F2-F16)



We Will



Enhance the operational efficiency of corporations.



Create a gateway to an enjoyable digital life for people.



Facilitate industry scale to expand in a good way with our contribution.



Allow investors to enjoy business profit while receiving compliment from consumers.

Creating Value for Shareholders

Chunghwa Telecom generated consolidated revenues totaling NT\$ 230 billion in 2016, decreased 0.8% from 2015 and represented a 98.5% accomplishment rate given the current year's financial forecast. Due to increasing popularity of smart mobile devices, the Company experienced growing revenues from value-added services, sales, and data subscriptions that covered the decline of voice service. Net income attributable to parent company amounted to NT\$ 40.1 billion while EPS reached NT\$ 5.16 and a full-year accomplishment rate of 100.2%.

In 2016, Chunghwa Telecom's tax expenses were equivalent to an effective tax rate of 16.51%; the difference from the 17% statutory tax rate was mainly attributed to the following: according to Article 4 of Income Tax Act, net dividends or net earnings recognized from local invested businesses are exempted from income tax; and Article 10 of Statute for Industrial Innovation.

Total Number of Employees in the Company Including Subsidiaries	32,856 persons
Paid-up Capital	77,574
Revenue	229,991
Operating Cost	147,552
Operating Expense	33,838
Employee Salaries and Benefits*	47,750
Dividends Paid to Shareholders	42,551
Taxes	9,023
Expenses of Social Investment/Donation*	1,038
Retained Economic Value	(2,973)

Unit: NT\$ million

*Operating costs and expenses included



For You, Always Ahead

In 2016, Chunghwa Telecom witnessed its 4G users exceed **6.71** million, which is a significant milestone for Taiwan's mobile communication and digital convergence industry.

Domestic Fixed Communication 31.6%

	Customer Population	Market Share
Local Network	10.94 million	93.5%
Long-distance Network	26.57 million (traffic volume)	83.0%
Broadband Subscriber	4.48 million	75.0%
MOD	1.33 million	20.4%

Mobile 48.2%

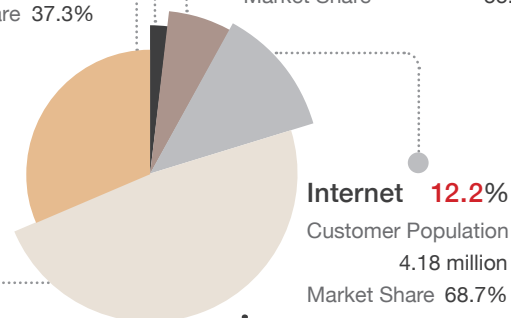
Customer Population
10.79 million
Market Share 37.3%

Other Accounts 1.7%

Traffic Volume 10.22 million
Market Share 55.8%

Internet 12.2%

Customer Population
4.18 million
Market Share 68.7%



Business
Performance

Contribution
of Business



- Domestic fixed network service
- Domestic leased line service
- Internet and value-added service
- MOD (IPTV) service
- International fixed network service



- Mobile communication service
- Wi-Fi service
- International fixed network service



- Integrated service
- Data security service
- Mobile service
- Date service
- International service
- Diversified integrated payment service



Business Model



Products and Services

Mobile Subscriber

Customer population **10.79** million
Annual growth rate at **-3.5%**

Mobile Internet

Customer population **6.85** million
Annual growth rate at **14.8%**

100Mbps

Customer population **1.17** million
Annual growth rate at **11.1%**

4G

Customer population **6.71** million
Annual growth rate at **52%**

FTTx

Customer population **3.48** million
Broadband market share **77.8%**

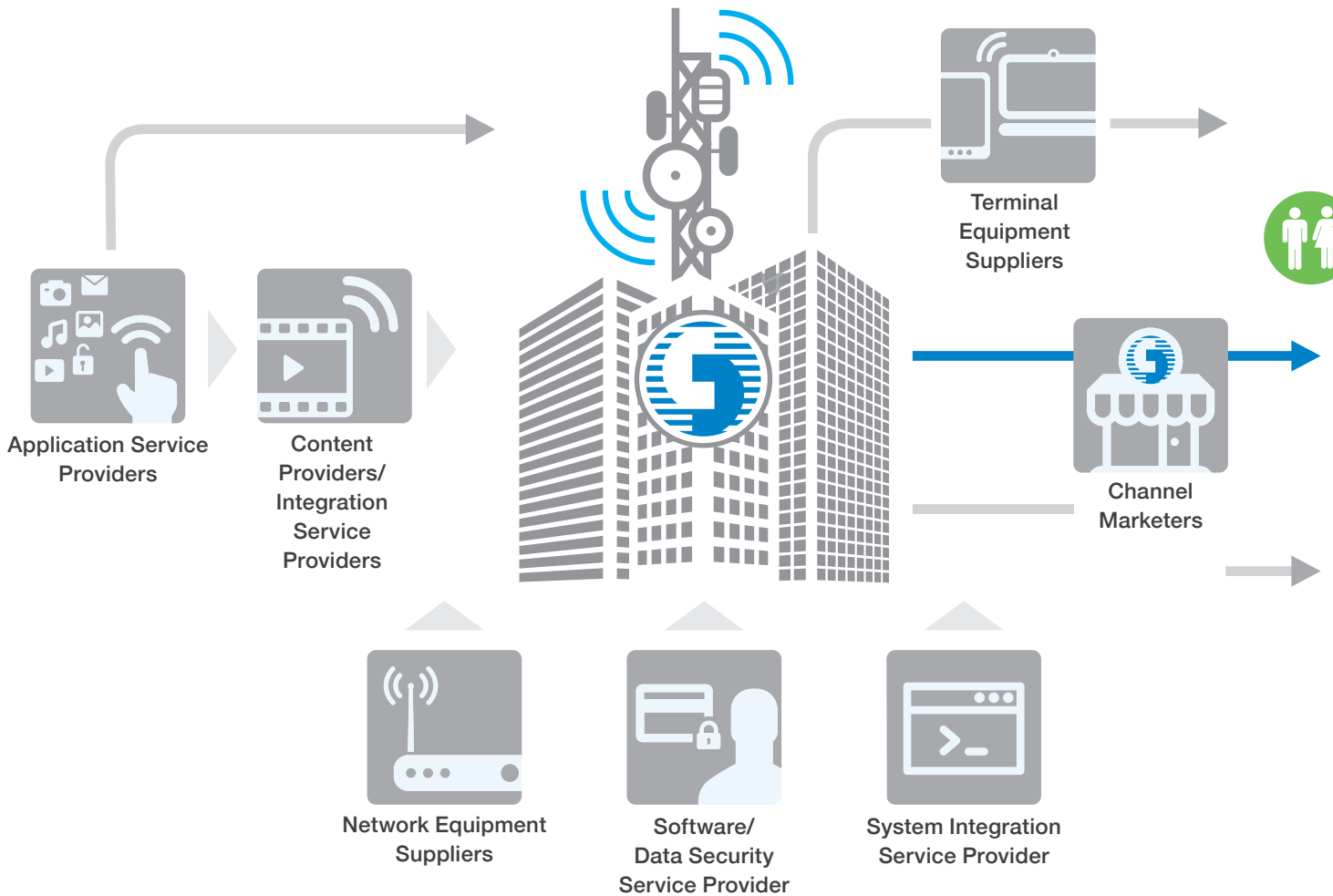
HiNet/Broadband

Customer population **3.76** million
Market share in the **first** place

Telecom Value Chain and Key Performance ¹⁰²⁻⁹

Due to technological advancements, boundaries of specialized markets that we used to know of are starting to shift, thus allowing industry participants to compete outside of their dominant markets. IDC has even combined ICT, e-Commerce, Electronics and Entertainment into a new segment called eICT to recognize the increasingly common cross-industry collaboration.

The wave of digital convergence brings new values to the telecommunication industry and opportunities to meet users' needs by offering innovative eICT services, which makes content providers/integrators, application service providers, network equipment suppliers and terminal equipment suppliers the important value partners to a telecommunication carrier when developing digital convergence services.



Strategies for Value Chain Management

Strategy 1

Securing the core telecommunication service

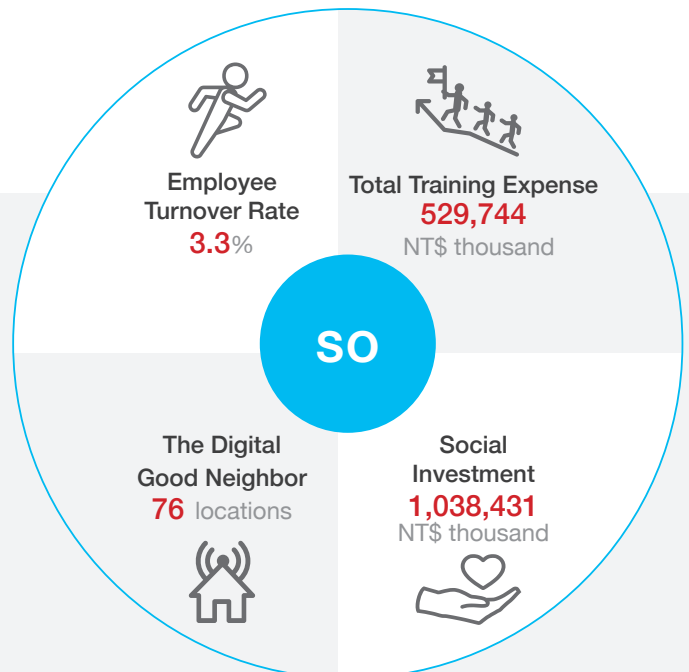
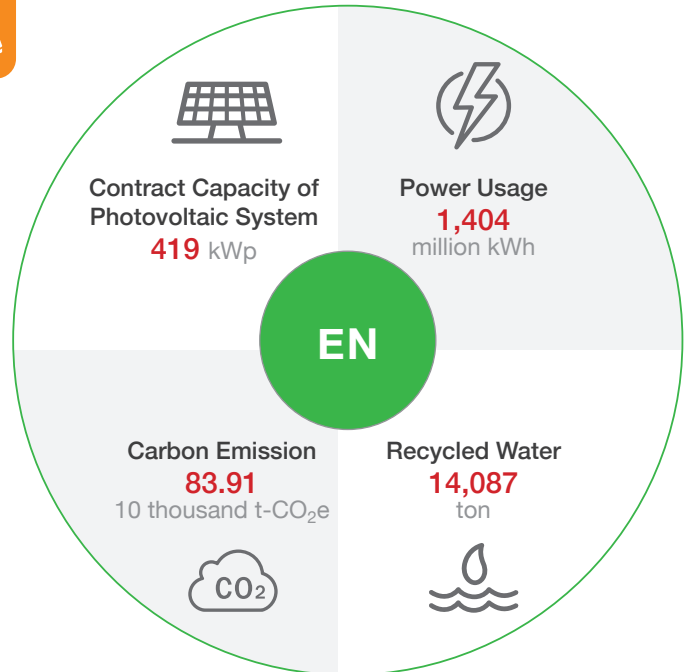
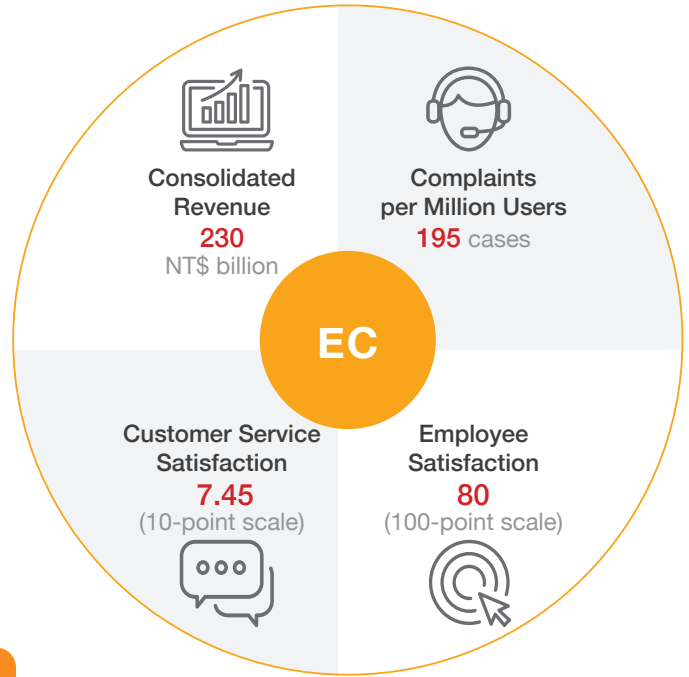
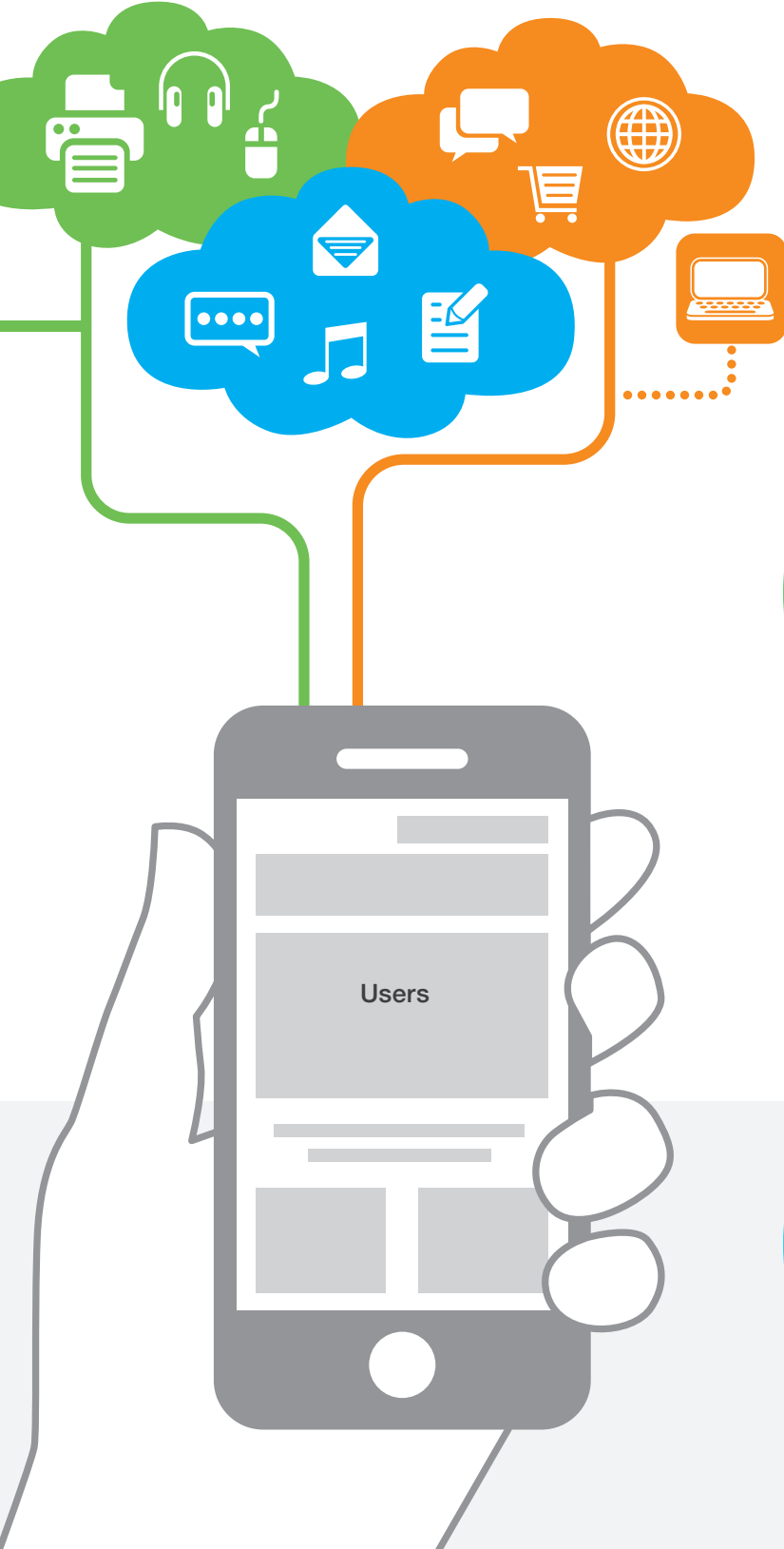
- Provide digital convergence service to the 3 main markets: personal, household and enterprise
- Fiber optic broadband, mobile value-added services, IoT, information security, corporate mobility, big data applications and cloud/IDC

Strategy 2

Expand business partnership through alliance, cooperation and investment

- Type II telecommunications: Chief Telecom Inc.
- Distribution: Senao International Co., Ltd.
- System integration: Chunghwa System Integration Co., Ltd.
Chunghwa Sochamp Technology Inc.
- Digital contents: Spring House Entertainment Tech. Inc.
Chunghwa International Yellow Pages Co., Ltd.
Smartfun Digital Co., Ltd.






In the future, Chunghwa Telecom will continue investing in fixed network, mobile, data and eICT framework and strengthen collaborations with upstream, midstream and downstream industry suppliers to offer best services to our customers. By tightening coordination among the upstream, mid-stream and downstream, we shall be able to provide users with better quality service experience.





Capital and Value Creation

In order to give stakeholders a clearer picture of how Chunghwa Telecom creates value, we have incorporated the concept of “Integrated Reporting” into this year’s CSR report and disclosed our commitment and management through the Integrated Reporting Framework.

Capital	Impact on Value Creation	Resource Allocated to Sustain Value Creation
 <p>Financial Capital</p>	<ul style="list-style-type: none"> • Assures eligibility to licensing (e.g., 4G bands) • Provides sufficient financial resources to support value creation efforts • Effective execution of commercial activities • Generates and allocates other forms of capital, including distribution of shareholders’ equity, investments, and capital expenditure 	<ul style="list-style-type: none"> • Contribution of tax revenues to the government • Support development of network infrastructures • Improve quality of telecommunication services
 <p>Human Capital</p>	<ul style="list-style-type: none"> • Employees’ knowledge and skills in the telecommunication field • Human capital represents one of our major operational driving forces 	<ul style="list-style-type: none"> • Introduce compensation and incentive schemes to attract and retain talents • Encourage high value-adding services and innovations • Talent training and development programs
 <p>Intellectual Capital</p>	<ul style="list-style-type: none"> • Licensing, laboratory and R&D expense; acquisition and development of industry technologies • Invest and maintain Chunghwa Telecom’s brand 	<ul style="list-style-type: none"> • Continually invest in R&D, construction and services; maintain service quality and customers’ satisfaction • Invest in the R&D of new technologies and involve in the setting of new protocols
 <p>Production Capital</p>	<ul style="list-style-type: none"> • Allocate financial capital to develop and maintain infrastructure facilities • Operation of Internet Data Center (IDC); installation of wireless facilities and development of software and applications 	<ul style="list-style-type: none"> • Continually construct, maintain and operate network equipment • Exercise procurement control and acquire network equipment that is more cost/energy efficient • Consolidate idle spaces; recycle and dispose of obsolete equipment
 <p>Social Capital</p>	<ul style="list-style-type: none"> • Maintain communication with the authority, which helps ensure the legitimacy of the Company’s operations and competition • Positive feedback from consumers and the general public help build Chunghwa Telecom’s brand credibility, and minimize financial capital outlays 	<ul style="list-style-type: none"> • Communicate with stakeholders to understand their concerns and legitimacy of the Company’s operations • Commit effort into social engagement and social inclusion; exert influence through core activities to narrow the digital divide
 <p>Natural Capital</p>	<ul style="list-style-type: none"> • We need natural capital such as raw materials, and energy sources to operate and allocate human capital • Use of energy-saving actions and solutions can effectively reduce consumption of natural capital 	<ul style="list-style-type: none"> • By procuring environmental friendly products, we can minimize consumption of natural resources and raise energy efficiency • Through the use of carbon management actions, we are able to manage energy consumption and apply renewable energy solutions to a greater extent • Proprietary and commissioned construction of Photovoltaic system; focus on the development of renewable energy sources

We have identified 6 categories of capital that would affect Chunghwa Telecom's value-creating abilities. We have also explained the types of resources/relationships we need to commit to creating values continually, as well as the outcome of our efforts.

Input & Expense (NT\$ thousand)

Output of Sustainability Performance

- Share capital **77,574,465**
- Capital expenditures **23,516,783**

EC

Earnings per share (EPS)	NT\$ 5.16
Consolidated operating revenues	NT\$ 230 billion
Information transparency	We also ranked among the top 5% in TWSE's corporate governance evaluation for 2 years
Member of DJSI	Both DJSI World and DJSI-Emerging Markets for the fourth time
Market share in 4G	Provide service to 6.71 million customers

- Salary and welfare expenses **47,749,908**
- Training expenses **529,744**

SO

Employees:	
Employee salary and welfare	NT\$ 47,750 million
Average salary adjustment	Salary adjustment averaged 0.81% , the highest of which was 1.68%
Average training hours per person	46 hrs
Total training expense	NT\$ 529,744 thousand
Corporate volunteer service hours	13,436 hrs
Occupational accident per thousand people	0.86 for men/ 1.71 for women (1.39 nationwide)
Diversity	795 employees with disability (mandatory quota: 212); 41 employees of indigenous background
Employee Satisfaction	80 (100-scale point)

- R&D expenses **3,784,905**
- Marketing expenses **25,515,844**

Customers and Communities:

Care for disadvantaged telecom users	A total of 7,808 users were covered, with subsidies amounting to NT\$ 33,435,000
Availability of telecommunication service	The Company's 12Mbps broadband service achieved more than 96% coverage
Wi-Fi hotspots	55,000 public Wi-Fi hotspots
Consumer satisfaction	7.45 (10-point scale)
Satisfaction toward customer service hotline	4.64 (5-point scale)
Voice-based personal assistance app for the visually impaired	15,373 downloads by the end of 2016
The Digital Good Neighbor location	There were 76 Digital Good Neighbor locations at the end of 2016

- Network and communication equipment maintenance expenses **14,345,387**
- Base station installation expenses **5,022,710**
- IDC equipment installation expenses **282,605**

- Social investment **586,972**
- Universal services **451,459**

EN

Power usage	1,404 million kWh of power in 2016; our power-saving efforts have saved total 3.05 trillion kWh of power.
Revenues from green product	NT\$ 6.36 billion
Carbon emission	839,172.07 t-CO ₂ e
Water usage	2,479 kiloliter
Green server grade	LEED Gold-rated data center
Waste volume	4,706 tons

- Procurement of green energy **4,240**
- Green purchases **1,379,000**
- Environmental management expenses **286,734**



Industrial Risks and Operating Strategies

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Industrial Risks

- The Executive Yuan has devised the “Digital Nation and Creative Economy” program that sets goals to increase 1G coverage to 90% by 2020, and 2G coverage to 90% by 2025. This government initiative will impact the Company’s financial performance and competitiveness of its broadband service
- There will be more liberal amendments to digital convergence-related laws. Instead of chartering or licensing, new businesses simply need to register to provide similar services. This low barrier of entry will intensify competition in the current environment
- Competition of the mobile broadband (4G) market remains intensive
- Demands for conventional voice call service continue to wither
- Cable TV and other fixed network operators have resolved to aggressive price cuts in an attempt to gain a share in the broadband market, which has caused a significant shift in customers



Telecom Industry



Digital Convergence



Internet of Things



Information Security



Key Industrial Issues

According to Digital TV Research, the value of over-the-top (OTT) services in 2015 had amounted to NT\$ 872.3 billion worldwide and is expected to exceed NT\$ 1.7 trillion by 2020

Value of the IoT economy is expected to reach US\$ 11 trillion by 2025, US\$ 1.7 trillion of which will be contributed by the infrastructure, US\$ 1.6 trillion by healthcare, US\$ 1.2 trillion by retail and US\$ 900 billion by logistics

Driven by cloud computing and mobile applications, demands for information security in Taiwan are expected to grow from NT\$ 31.2 billion in 2014 to NT\$ 46.9 billion by 2018 at a compounded average growth rate of 10.7% per annum



Response in Terms of Products and Services

Value-added communication service, intelligent man-machine interactive technology, location-based application and content service, e-commerce and lifestyle, video streaming

IoT platform, driving behavior analysis, smart production solutions, health cloud

Identification solution, enterprise information security solution

In order to capture the unlimited opportunities presented in the era of digital convergence, Chunghwa Telecom will continue to invest in the development of related technologies. In the meantime, we recruit, train and empower talents for the various tasks involved. By consolidating network and marketing resources and working closely with strategic partners, the Company shall aim to introduce new products and services that satisfy customers' needs, and build its reputation as "the motivator of digital economy and the pilot of creative industry" for the benefit of its customers, shareholders, employees and the society.



Chunghwa Telecom

Responding Strategies

- Assemble corresponding groups to prepare and anticipate changes in competition in response to new regulations
- Utilize advantages such as brand image, distributions, customer base, and technologies to create new digital convergence opportunities for the 3 main markets: personal, household and enterprise
- Explore value-added service opportunities for the broadband market; analyze customers' demands for ICT service and satisfy them with matching solutions
- Stay involved in new technology applications including smart city, smart production, IoT, smart traffic management, smart green energy management, smart security, smart building and smart home
- Support the government's creative initiatives including the "Asia Silicon Valley Development Plan" and develop brand leadership in Taiwan's IoT service.
- Develop creative, value-added emerging services such as IDC/cloud, IoT, information security, and corporate mobility; support industry growth and evolution



Big Data

According to forecasts made by research institution IDC, global market value for Big Data and analysis is expected to reach US\$ 187 billion by the end of 2019

Mass data computing, storage and analysis solution



Cloud Computing

The size of cloud computing service is estimated to grow from US\$ 45 billion in 2016 to US\$ 73.1 billion in 2019

Virtual data center solution, integrated ICT equipment monitoring solution



Smart Broadband

According to data published by Small Cell Forum, shipment of small cells had reached 14 million units as of May 2016; demand for Small Cell is expected to reach US\$ 6 billion in 2020

LWA (LTE-WLAN Aggregation) solution, telecommunication cloud server positioning and resource planning, multi-band carrier aggregation, voice and broadband supply/installation package, smart traffic volume forecast

Risks, Opportunities, and Mid/Long-term Strategies

The 6 CSR sub-units have also clarified the risks and opportunities associated with each of the key value creation factors, and proposed short-term, mid-term as well as long-term plans in response to current and future challenges.

Key Factors to Creating Value	Risks	Opportunities
 Standardization and development of 5G technology	5G technology will bring bandwidth to everywhere and everything, and would require substantial costs to license radio bands and construct the needed infrastructures. This investment may yield poor return if the billing model is not adjusted properly	Progression into the next generation of communication technology requires well-developed technical background and solid foundation; both of which are part of Chunghwa Telecom's existing competitive advantage
 Supplier CSR training	Due to rising CSR awareness, industry leaders have been assigned the responsibility to guide the entire supply chain towards fulfilling CSR. Failure to do so would compromise the leader's brand image and reputation	<ul style="list-style-type: none"> The Company has the potential to lead or influence CSR development across the telecommunication supply chain Reduce suppliers' risk exposure to environmental or human rights-related issues, thereby minimize possible incidents and disputes
 Collaborate with suppliers on CSR initiatives	The Company also needs to collaborate with suppliers on new CSR initiatives for broader and more profound effects. Failure to do so would compromise future opportunities or affect social relations	<ul style="list-style-type: none"> Collaboration with suppliers on CSR initiatives By engaging supply chain partners of different industries and specialties, we are able to raise our social image and brand value
 Subsidies for the socially disadvantaged (low-income households and persons with disabilities)	Broadband subsidies for the socially disadvantaged (low-income households and persons with disabilities) would result in loss of revenues	Long-term subsidies to the socially disadvantaged not only assure them of their basic right of communication, but also help raise corporate image
 Renewable energy- powered base stations at remote locations	<ul style="list-style-type: none"> Disclosing the locations of base stations may result in protests by residents, and eventually forces the Company to remove its infrastructure Solar power, wind power, and renewable energy sources, in general, are unable to provide consistent power supply over the long term 	Provide power for emergency communications at remote areas in situations such as natural disaster or unexpected power disruption, and thereby promote the Company's social image
 Climate changes affect base station communication	Climate change causes extreme weather conditions; major natural disasters often disrupt base stations in remote areas	Through robust network planning, design and construction, Chunghwa Telecom will be able to improve the resistance of its base stations against disasters
 Disruption of knowledge transfer	The average age of employees is increasing. A significant number of employees are due for retirement over the next 10 years, which may affect transfer of knowledge	<ul style="list-style-type: none"> Recruit to quickly cover the talent shortage Devise succession plans
 Recruitment of new-generation talents	Low fertility rate affects the overall workforce structure and makes good talents and rare skill workers increasingly difficult to find	<ul style="list-style-type: none"> Take accurate count of Chunghwa Telecom's talent shortage in the emerging and growing businesses, and attempt to recruit talents from campus Devise a recruitment plan
 Enhance workplace health and safety within the Company and among suppliers	Failure to enforce occupational safety and health management renders existing protection measures ineffective	<ul style="list-style-type: none"> Review, re-establish, execute and improve the workplace safety and health management system Enforce the occupational safety and health management strategy; offer rewards as incentives for achieving top performance in occupational safety and health management

Possible Challenges	Short-term Plans	Mid/Long-term Plans
The 5G standards have yet to be defined, and it is uncertain as to which band is available and needed. It is difficult to estimate product development timelines at this point	Engaged international organizations for grasp over the direction of technological trends; keep track of government policies and band plans; perform system simulations and develop experimental networks to build up early advantage in new technologies	Connect with global technology, make plans for future band requirements, construct backhaul and the 5G environment
Suppliers vary in size, talent, and awareness; investigate and maintain records of suppliers that may not yield the expected results	Invite supply chain partners to participate in courses and offer broader variety of learning topics based on course feedback	Perform one-on-one CSR communication and trainings for suppliers that are influential to the environment and society
<ul style="list-style-type: none"> Without long-term relationship, there would be no mutually beneficial grounds to engage suppliers in sustainability initiatives, which reduces the Company's efforts to one-time events and hence contributes little to the shaping of corporate value It takes long-term engagement, working relationship, and trust to explore common grounds and the right CSR initiatives that can be communicated and executed with suppliers 	Introduce Chunghwa Telecom's proprietary green label, and encourage all suppliers to apply for green label as part of the green procurement system	Take counts of green label-certified suppliers. Record and review performance on a yearly basis to find the best method of collaboration with suppliers
Many persons with disability have been considered as high-income earners; providing subsidies to them may give rise to concern for fairness	Refine the existing subsidy plan to direct broadband privileges toward the socially disadvantaged	Explore subsidy policies and solutions that are beneficial to the society and the Company
<ul style="list-style-type: none"> Renewable energy-powered base stations are costly to construct; these investments may produce minimal yields because of the low power generation efficiency Infrastructures are harder to construct and maintain in remote areas 	Expand constructions of solar power facilities, including proprietaries and commissioned constructions. The capacity of proprietary solar power plants estimated to exceed 500kWp in 2017	In the future, the Company will focus on raising power generation efficiency while paying attention to government policies; new infrastructures will be constructed on a yearly basis at carefully chosen locations
<ul style="list-style-type: none"> Additional construction costs are required to make base stations more resistant to natural disasters After installing disaster-resistant equipment (e.g., power generator), the Company may be required to perform regular maintenance and drills to the dislike of local residents 	<ul style="list-style-type: none"> Provide backup power supply to extend service duration of base stations in the event of a power disruption Organize base station disaster prevention and rescue drills to enhance employees' response to disasters 	Continue deployment of wired and wireless routers to improve the reliability of the network
<ul style="list-style-type: none"> Complex business portfolio takes time to sort out Talents for emerging businesses such as cloud computing, information security and IoT are in short supply Managerial staff take longer time to train 	Take accurate count of key staff who are due for retirement and develop succession plans accordingly	<ul style="list-style-type: none"> Develop a talent development plan and speed up development of mid-level and senior management reserves Identify successors for key roles and direct line managers who are due for retirement
<ul style="list-style-type: none"> Talents for emerging businesses such as cloud computing, big data and 5G are in short supply Salary offered to talents of emerging businesses and for rare skills are not attractive enough 	Recruit talents for emerging businesses such as cloud computing, big data and 5G	Continually invite talented students to be involved in Chunghwa Telecom's operations and recruit those who are suitable
Disruption of knowledge transfer undermines the Company's management efforts, thus results in lack of training or inefficient execution of current strategies	<ul style="list-style-type: none"> Adopt occupational safety and health management as part of daily activities Engage and inspire employees in the planning and enhancing occupational safety and health management system on a larger scale 	Continuously invest resources into the promotion of occupational safety and health management system (OSHMS) and progressively make "hazard prevention and health management" part of the audit system