
State of Qatar ICT Development Strategy

ICT Market Overview
Opportunities for Investment
Key Stakeholders and Roles



ICT Market Growth Drivers

Delivering the Qatari National Development plan is the main drive behind ICT Market development

Qatar National Development Strategy & Sectorial Plans

National Development Strategy



Sectorial Plans



ICT Sector Strategy

Mega National Infrastructure Projects Requirements

NDIA



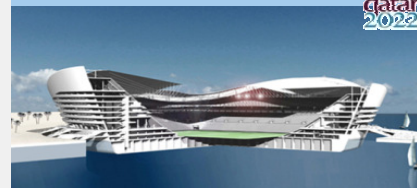
Qatar Rail Network



New Doha Port



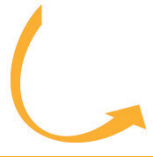
FIFA 2022



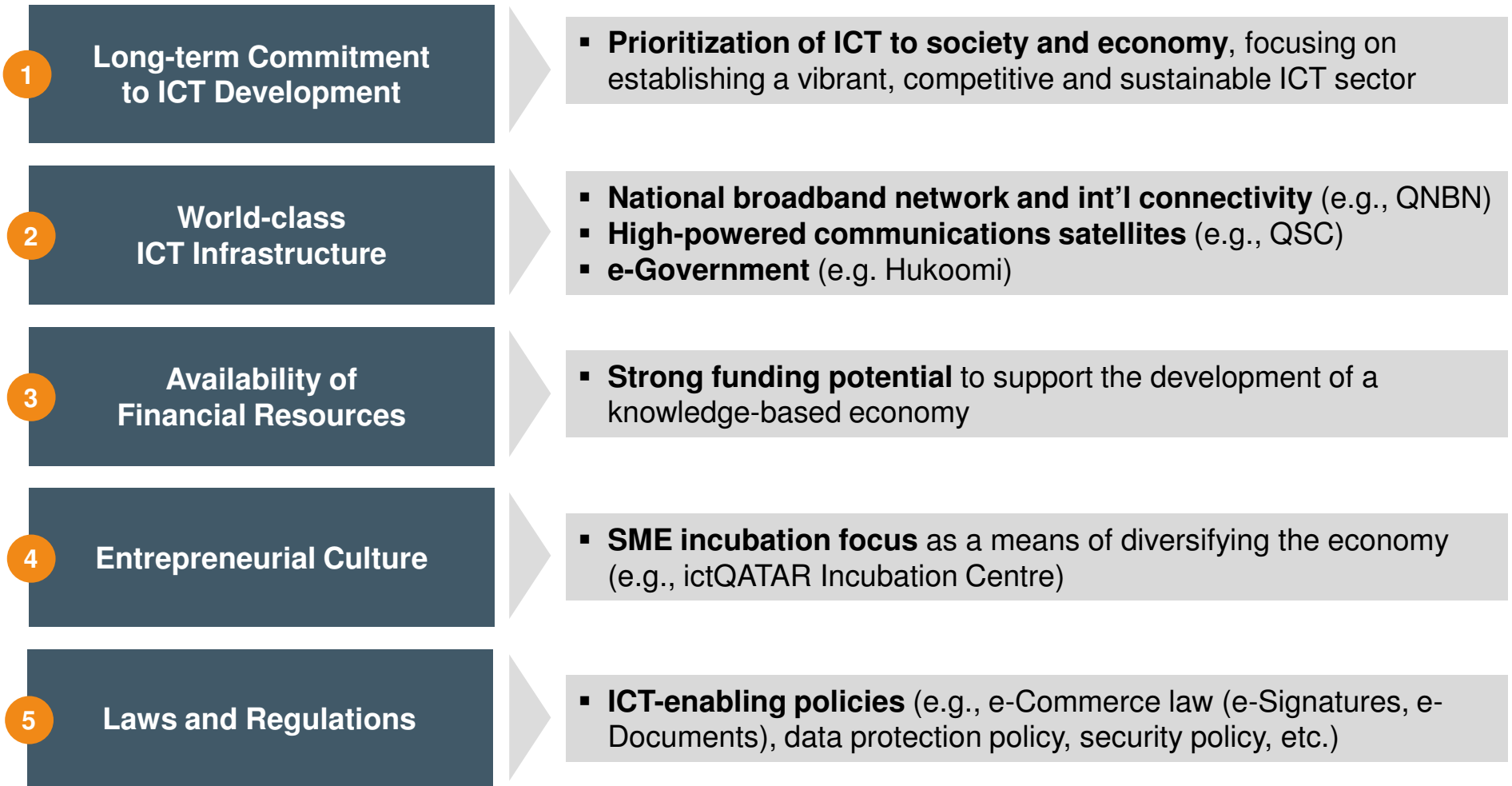
Lusail City

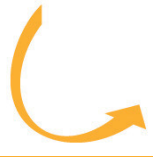


NON-EXHAUSTIVE



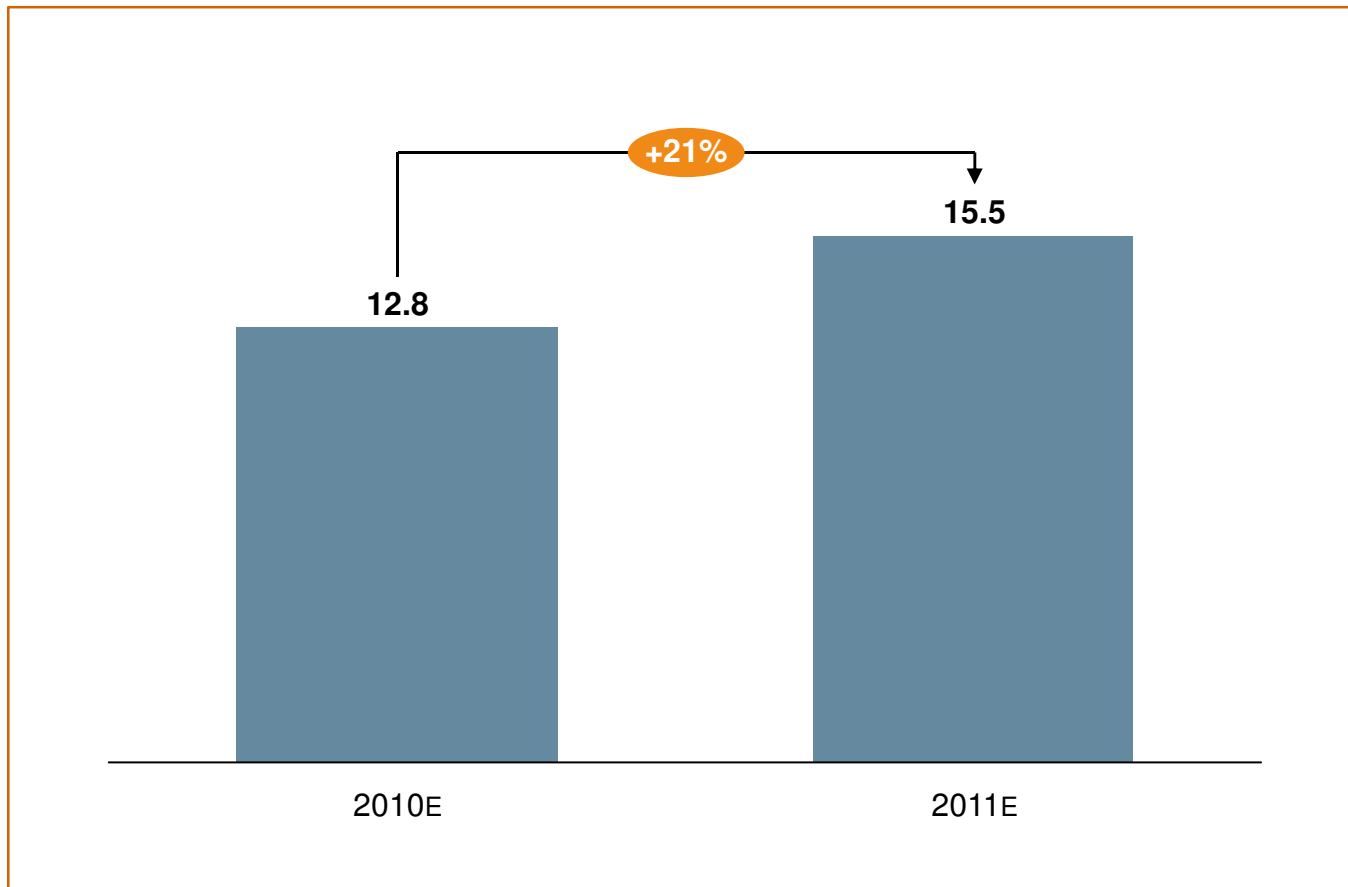
ictQATAR Initiatives



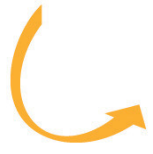


Qatari ICT market grew in value by ~21% between 2010 and 2011

Qatar – ICT Market Size
(QAR Billion)(2010E, 2011E)

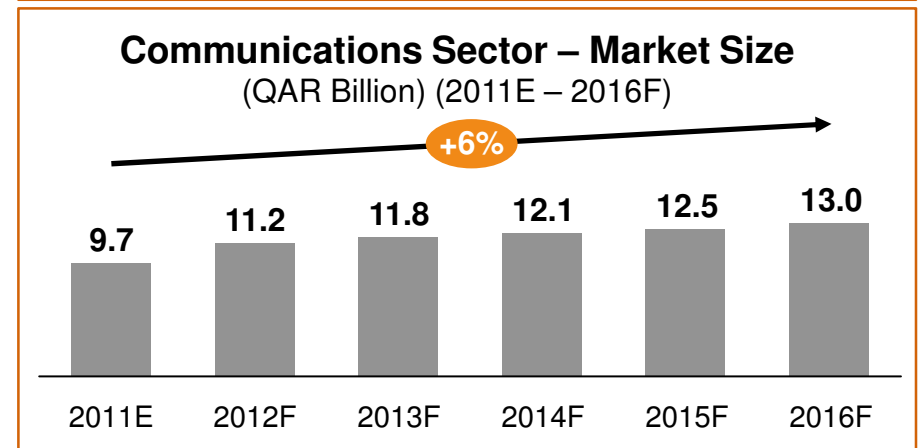
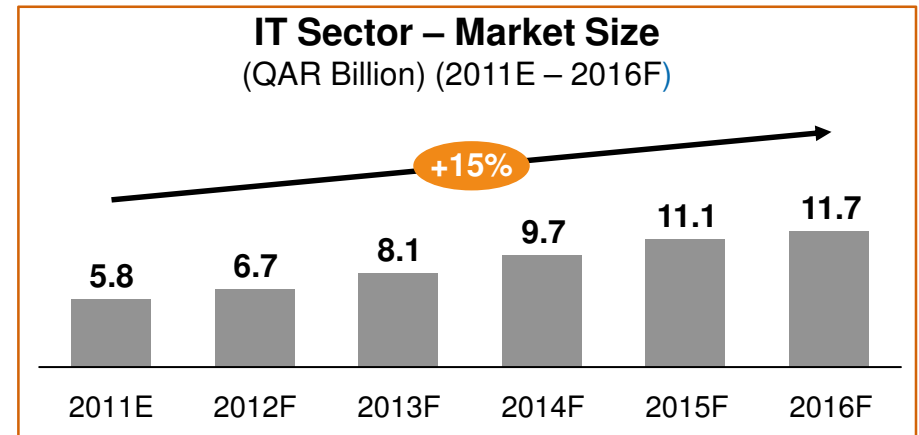
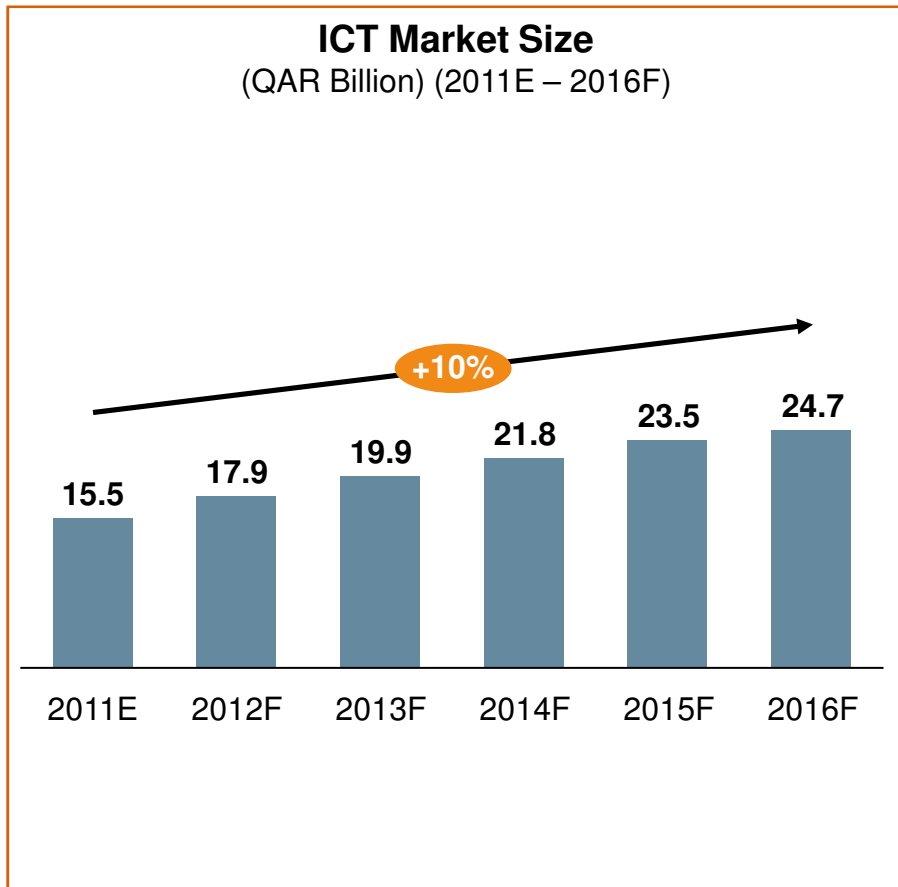


Source: Booz & Company analysis



Qatari ICT Market is expected to keep growing with high rate over the next 5 years

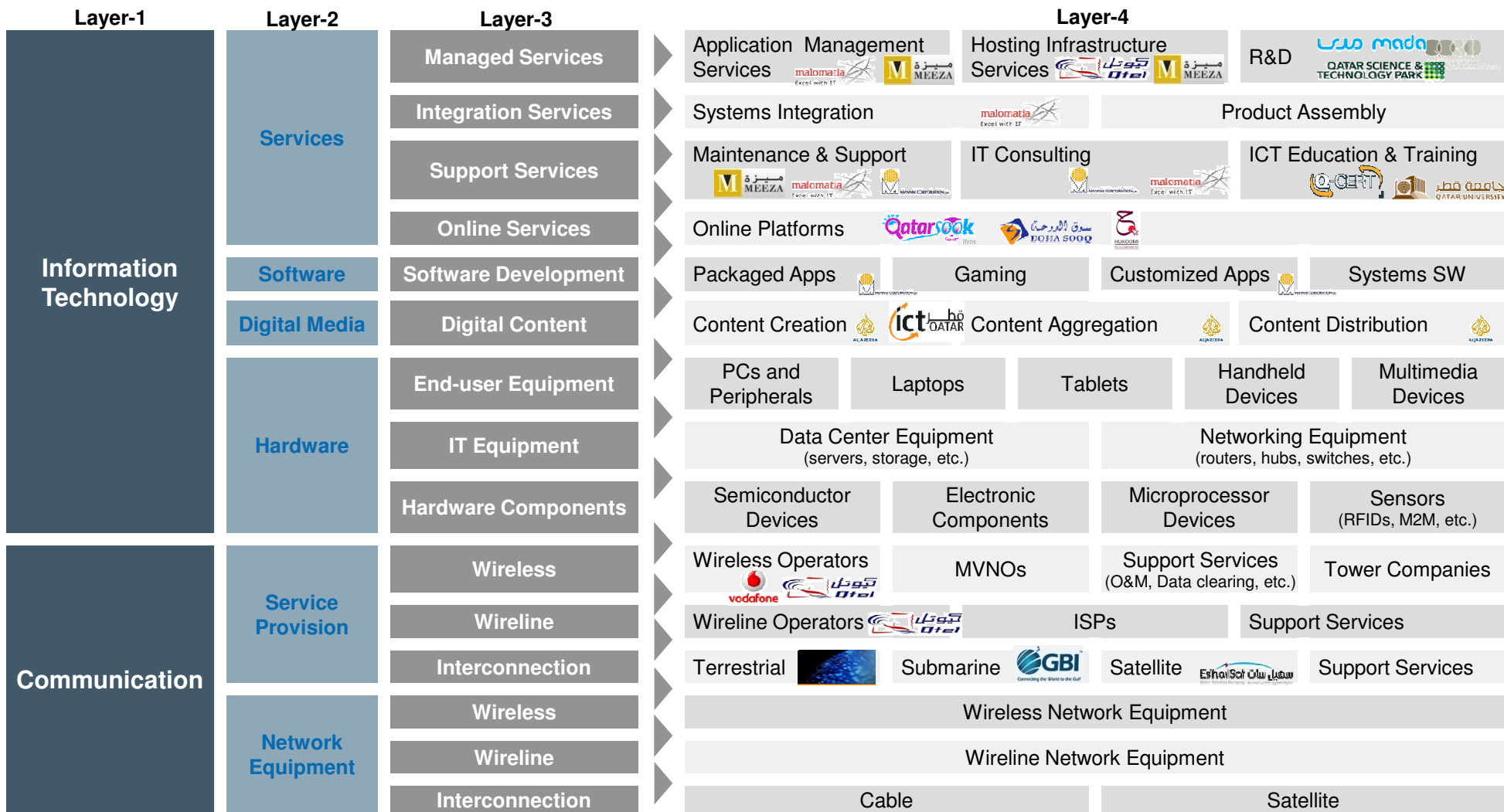
Qatar – ICT Market Growth 2011 - 2016



Source: Booz & Company analysis

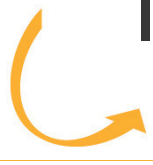
ICT Universe

Detailed Breakdown of ICT investment opportunities



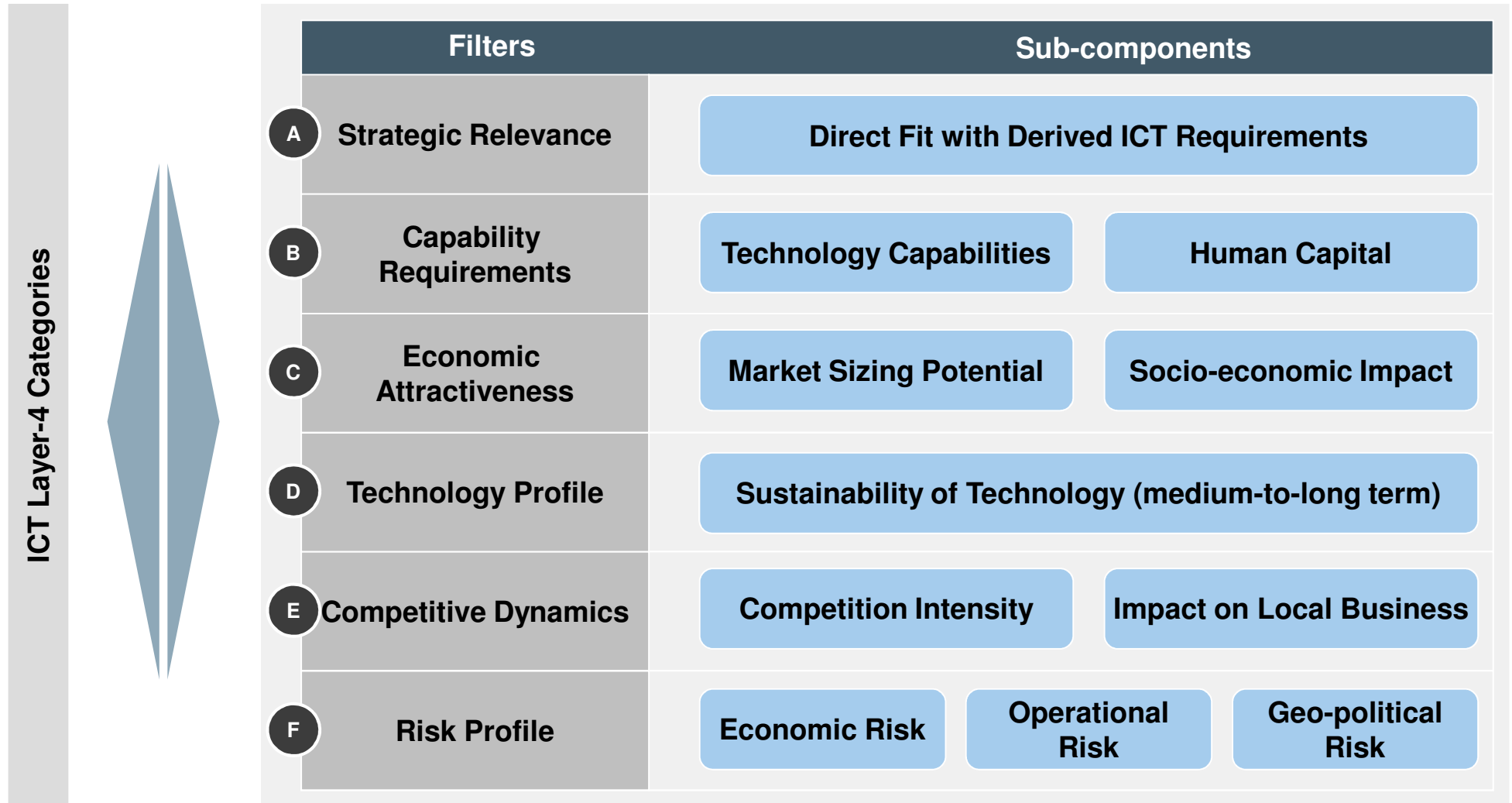
Source: IDC, SPEquityResearch, Gartner, US Universities Academic Publications, Gartner; Booz & Company analysis analysis

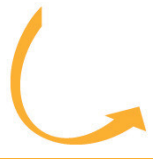
EXAMPLES ARE NON-EXHAUSTIVE



ICT Categories Assessment Criteria

Assessing all ICT investment categories to set prioritized opportunities





Assessment of ICT categories produced 68 Opportunities

68 ICT Investment Opportunities

1	Cyber-Security
2	Integrated Data Mgmt. and Monetization
3	Cyber Physical Systems
4	ISP
5	ICT Training & Education
6	IT Consulting
7	e-Commerce
8	e-Payment
9	Mobile Wallet
10	Mobile Applications
11	Digital Content
12	Digital Advertising
13	Hosting Services
14	e-Learning
15	Logistics
16	Multi-Purpose Smart Cards
17	Ticketing
18	Centralized MIS and Workflow Tools
19	Location-based and Tracking Services
20	Self-service Terminals
21	e-Information
22	Access Solutions to Physical Systems
23	Data Processing Tools and Services
24	Traffic Control Systems & Services
25	Global Customs Gateways
26	Surveillance Systems and Services
27	Fleet Management
28	Planning Tools
29	Data Acquisition, Tele-Command, Tele-Control Systems and Services
30	Message Handling Systems
31	Geospatial Info. Sys. & Road Advisory Serv.
32	Cloud Computing for SMEs
33	Live Streaming
34	AV Monitoring
35	Geographic Information Systems
36	Data Monitoring Systems
37	Smart Metering Systems
38	Wind Power Forecasting
39	Virtual Plants Management Tools / Services
40	Grid Management Solutions
41	Demand Side Management Tools / Services
42	Business Process Automation
43	Business Process Outsourcing
44	e-Society
45	G2G / G2C / G2B e-services / Applications
46	e-Services Terminals Management
47	Defense Systems & Applications
48	Customer Analytics (BI) Tools
49	IT Systems Maintenance & Support
50	Financial Software & Services
51	e-Banking
52	Multi-site IP-VPN
53	Information Management Systems
54	Online Service Bundling
55	Systems Monitoring
56	Market Places/ Aggregators
57	Campaign Automation
58	Medical Devices Asset Management
59	Healthcare Applications
60	Clinical Informatics
61	e/m-Health
62	Social forum / e-forum
63	Gait Recognition
64	Arabic Speech Recognition Solutions
65	Social Affairs Web-portals
66	Extended Enterprise Integrated Solutions
67	Integrated Software Solutions for Education
68	CAD Tools

Source: Booz & Company analysis



17 Opportunities categorized as Top Priority

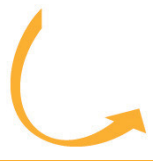
68 ICT Opportunities



Prioritize opportunities where; **no sufficient supply in Qatari market** or present **new trends in ICT space**

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1	Cyber Security	9	Mobile Applications
2	Integrated Data Management & Monetization	10	Digital Content
3	Smart Systems (Cyber Physical Systems)	11	Digital Advertising
4	ISP	12	Hosting Services
5	ICT Training and Education	13	e-Learning and Open-Source Institutes
6	IT Consulting	14	Logistic Systems (Intermodal)
7	e-Commerce	15	Multi-purpose Smart Cards
8a	e-Payment	16	e-/m-Ticketing
8b	Mobile Wallet	17	Centralized MIS and Workflow Tool for Government Entities



Key Players and Roles to be played

Stakeholders



Investors and Fund Providers

- Provide funds to establish new players in the market
- Invest in the development of innovative opportunities



Entrepreneurs & Innovators

- Kick-start businesses in innovative opportunities
- Provide new solutions and offerings in the market
- Stimulate innovation



Sector Developers & Enablers

- Develop industry sector by promoting adoption of enhanced solutions
- Ensure quality and availability of services
- Facilitate solutions' development (e.g. provision of incubation services)



Private Sector and International Companies

- Develop, or support in developing, new opportunities
- Provide know-how
- Establish partnerships with key players



Experts & Academics

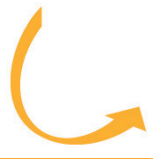
- Provide technical expertise, support and know-how to developers
- Share research results and innovative ideas that contribute to the development of ICT opportunities



Consumers

- End consumers of ICT opportunities
- Provide feedback to ensure quality and diversity of offerings

NON-EXHAUSTIVE



ictQATAR will conduct regular pulse-checks to ensure that opportunities are being pursued and to refresh ICT Investments Strategy

Enactment of ICT Development Strategy

Quarterly Review of Investments Execution ...

... and Annual Review to Refresh Strategy

Opportunity	Progress
1 Cyber-Security	●
2 Integrated Data Mgmt. and Monetization	●
3 Cyber Physical Systems	●
4 ISP	●
5 ICT Training & Education	●
6 IT Consulting	●
7 e-Commerce	●
8 e-Payment	●
9 Mobile Wallet	●
10 Mobile Applications	●
11 Digital Content	●
12 Digital Advertising	●
13 Hosting Services	●
14 e-Learning	●
15 Logistics	●
16 Multi-Purpose Smart Cards	●
..	●

● Opportunity not Considered Yet ● Opportunity under Consideration ● Opportunity Pursued

Cyber security is evolving from 'nice-to-have' to 'must-have'; multiple threats are emerging in an increasingly digitized world ...

Global ICT trends lay the via Cyberspace across all

Preventing security breaches is top of (~41%)-50% IT professionals

Cyber Attacks - Impact Level

Provision of policies and regulations are at the root of information security

Development of cyber security combined effort from public and private sectors

Data Monetization is recommended for the private sector

External auditing companies should be established by Private Sector - State could play role of a Financier and/or Facilitator

Legal Frameworks