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Standards and welfare maximisation: Towards a competitive and innovative 5G ecosystem in India

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Outline

- ▶ About CUTS
- ▶ Objectives of the study
- ▶ Our 5G enabled common super-connected future and the role of standards
- ▶ Standards development and the opportunity for India
- ▶ Identifying principles of an optimal policy intervention
- ▶ Way forward

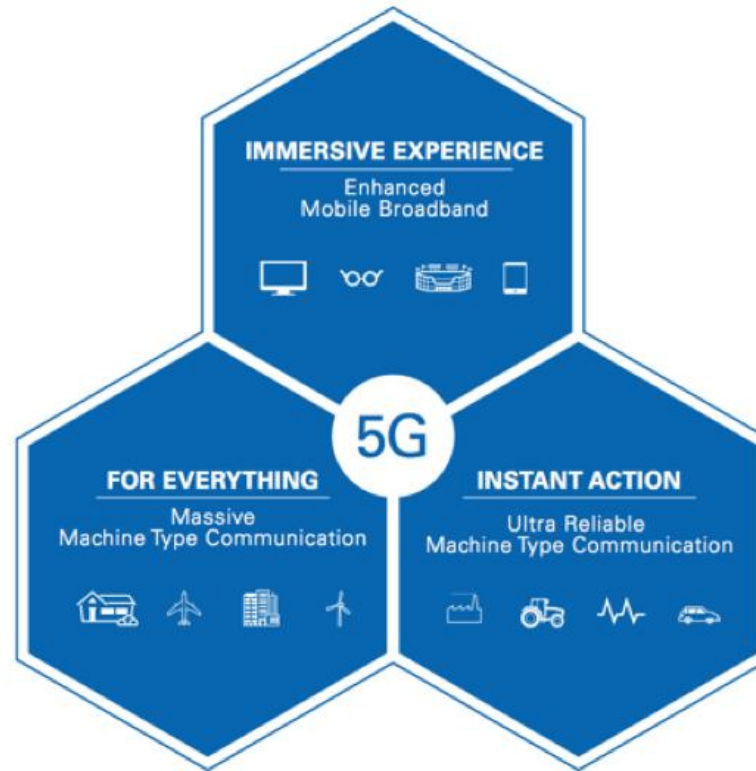
About CUTS

- ▶ Independent non-profit evidence based economic policy research and advocacy organisation
- ▶ Working to ensure consumer sovereignty by improving quality of competition, regulation, investment, governance, consumer protection and trade
- ▶ Worked in > 35 emerging economies in last 35 years
- ▶ Headquartered in Jaipur, present at grassroots, national, regional and global level (Nairobi, Lusaka, Accra, Hanoi, Washington DC, Geneva etc)

Objectives of the study

1. Assessing the role of standards and their development processes in an increasingly digitised, virtual and super-connected society
2. Identifying an optimal policy and regulatory way forward for India vis-à-vis standards development
3. Exploring how India can build and leverage the core technological capacities of Indian firms and start-ups in a global marketplace

Our 5G enabled common super-connected future and the role of standards



Three high level 5G use cases as defined by 3GPP and International Telecommunications Union (ITU).

“The scope of International Mobile Telecommunication system (IMT-2020) is much broader than previous generations of mobile broadband communication systems”

Source: <http://www.ni.com/white-paper/53096/en/> and <https://www.itu.int/en/ITU-D/Conferences/GSR/Documents/GSR2017/IMT2020%20roadmap%20GSR17%20V1%202017-06-21.pdf>

Standards development and the opportunity for India

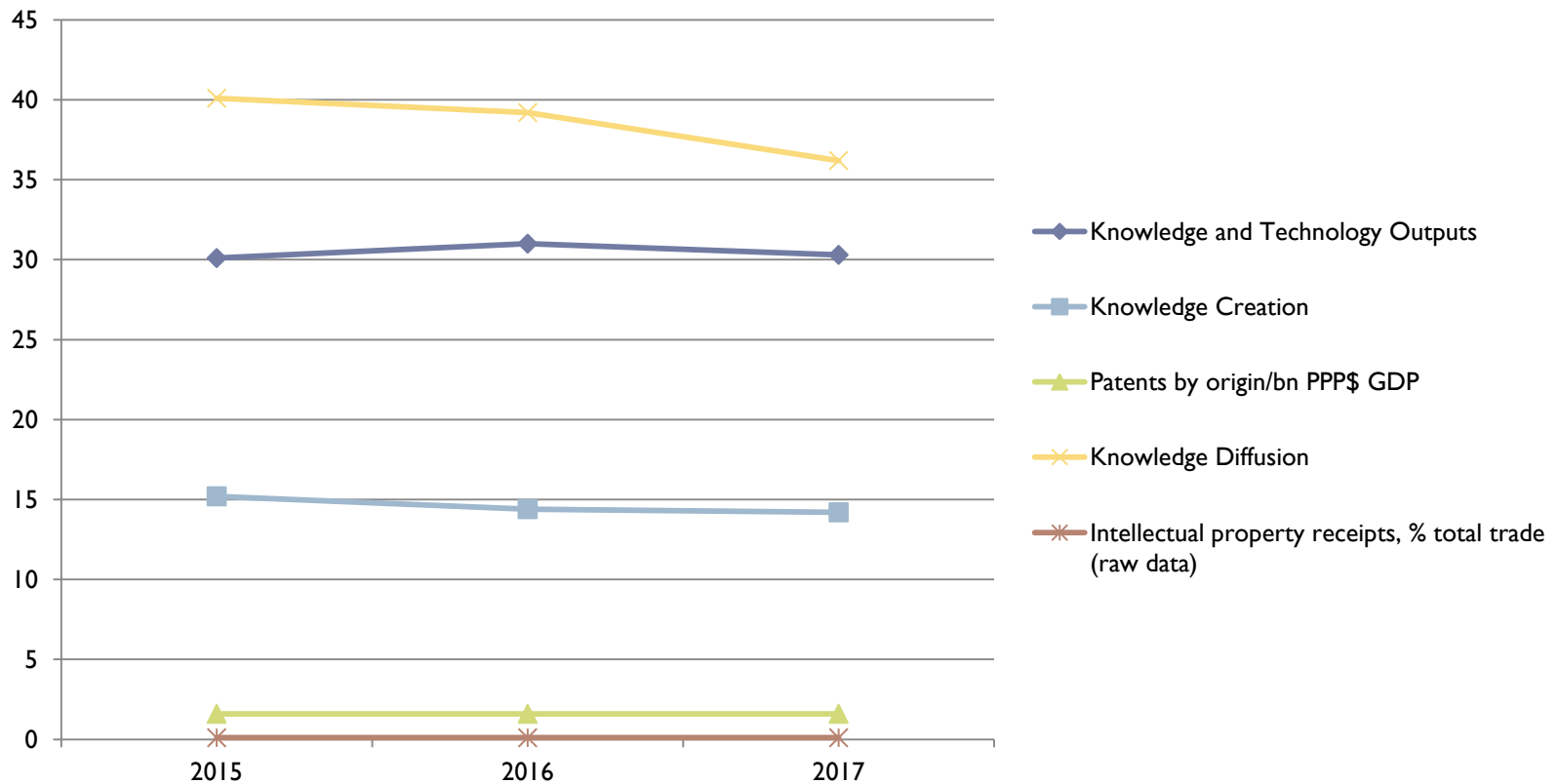
- ▶ Opportunity to contribute to and move up the Global Value Chains through promotion of innovation
- ▶ Opportunity to generate and leverage indigenous IP and increase competitiveness of Indian start-ups and firms, thereby enabling economic growth and job creation
- ▶ Building an innovation and competition friendly ecosystem for emerging digital technology players and enhancing consumer welfare

“The expected success in making India a global hub of domestic manufacturing, development of state of the art technologies through R&D, and creation and incorporation of Indian IPRs in global standards is yet to be achieved”

– TRAI inputs on draft NTP-2018

The present Indian Scenario: Innovation Outputs

- ▶ General trends of key pillars/sub-pillars and indicators based on Global Innovation Index's value/raw data

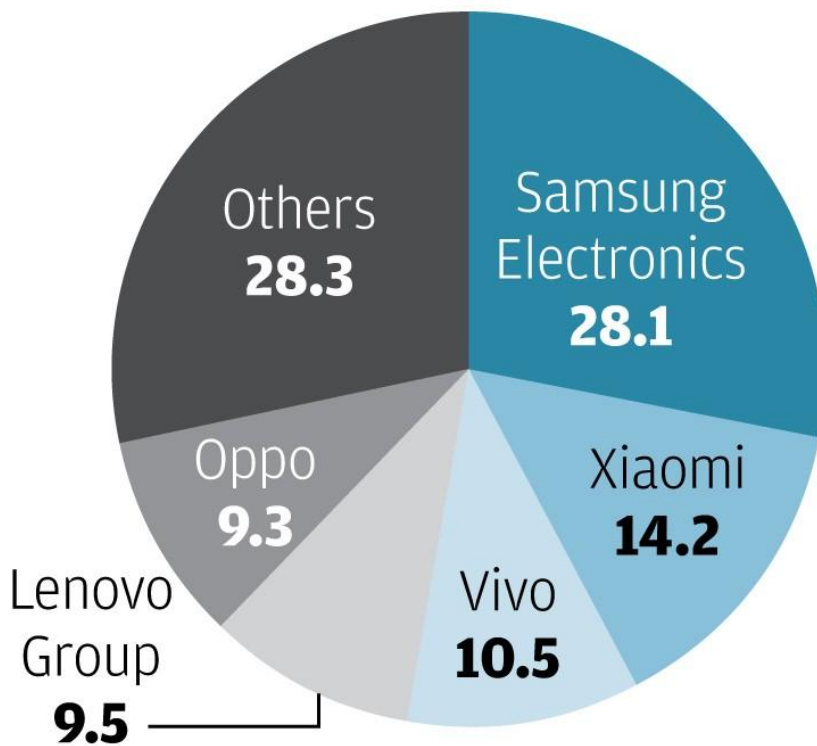


Source: GII Report, 2017

Case in point: Indian smartphone industry

Extending reach

Market share of top 5 smartphone companies in India in Q1 2017 (%)



Sources: IDC, India Ratings & Research

Indian smartphone market by vendors



SCMP

Identifying principles of an optimal policy intervention

1. Leverage, to the maximum extent possible, the opportunities of collaborative and open processes of standards development
2. Maintain the fine balance between IP protection and competition
3. Foster evidence-based, well-informed optimal regulation and policy formulation

The way forward for Indian policymakers vis-à-vis standards development

- ▶ Encourage active participation in international standards development bodies and influence the process of standards development by voicing core domestic needs
- ▶ Need to increase firm level specialisation and provide incentives for firms to move up the Global Value Chain
- ▶ Capacity Building of domestic firms
- ▶ Increase firm-level awareness about standards and exposure to Standard Essential Patents

