

**Measuring
the Information
Society Report
2017**



Chapter 4: Emerging ICT trends

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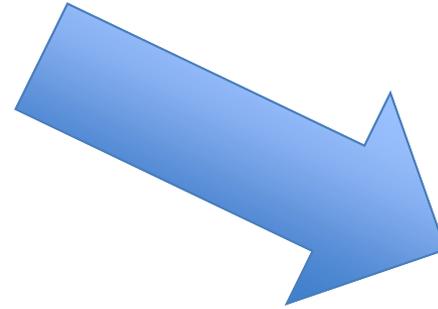
Three points ahead

- Exponential development of advanced ICTs: **AI**, big data, cloud and IoT will have massive consequences.
- Physical infrastructure, connectivity services, and skills are needed to harness power of advanced ICTs.
- The time for metrics is now.

The emerging ICT ecosystem

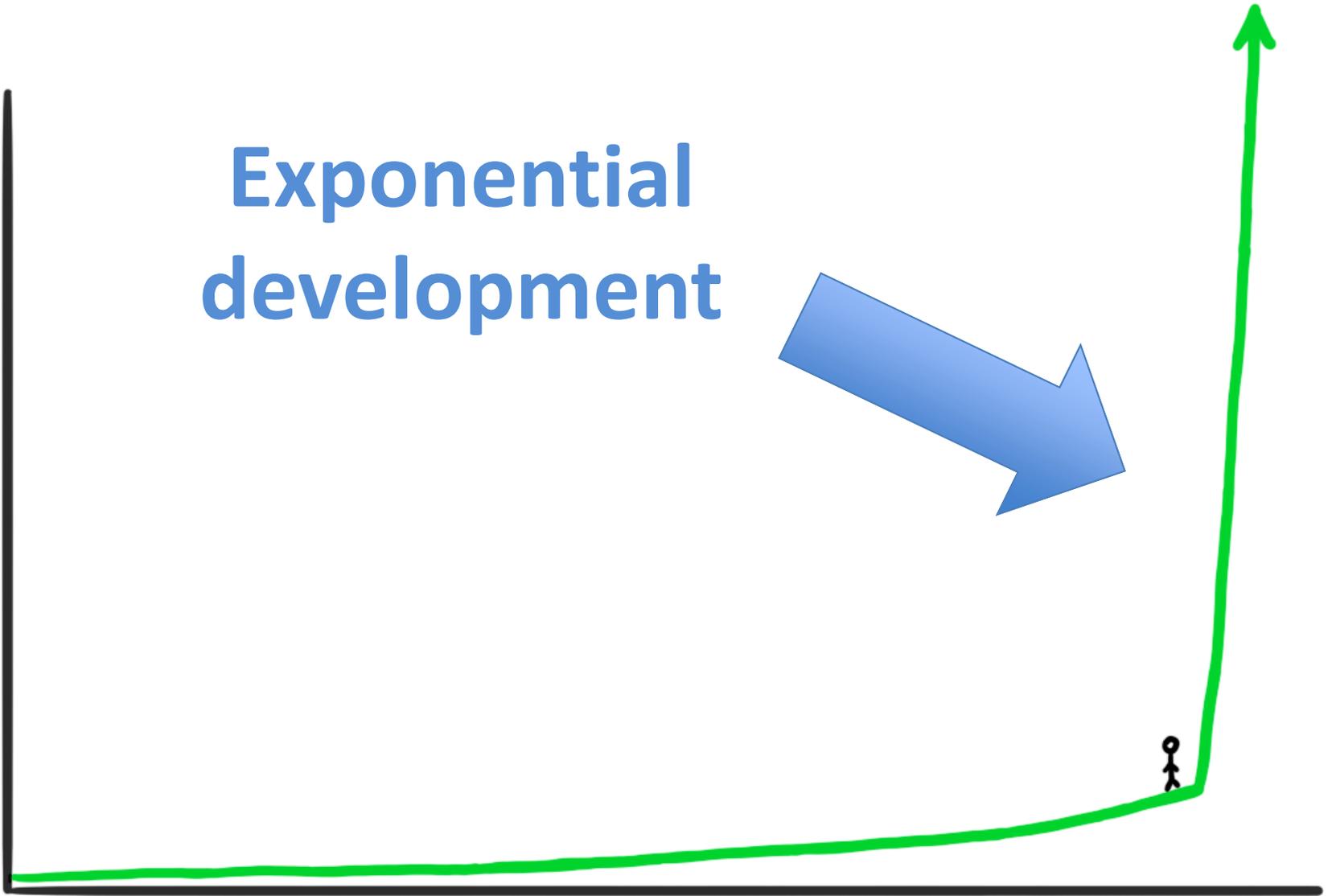


**Exponential
development**

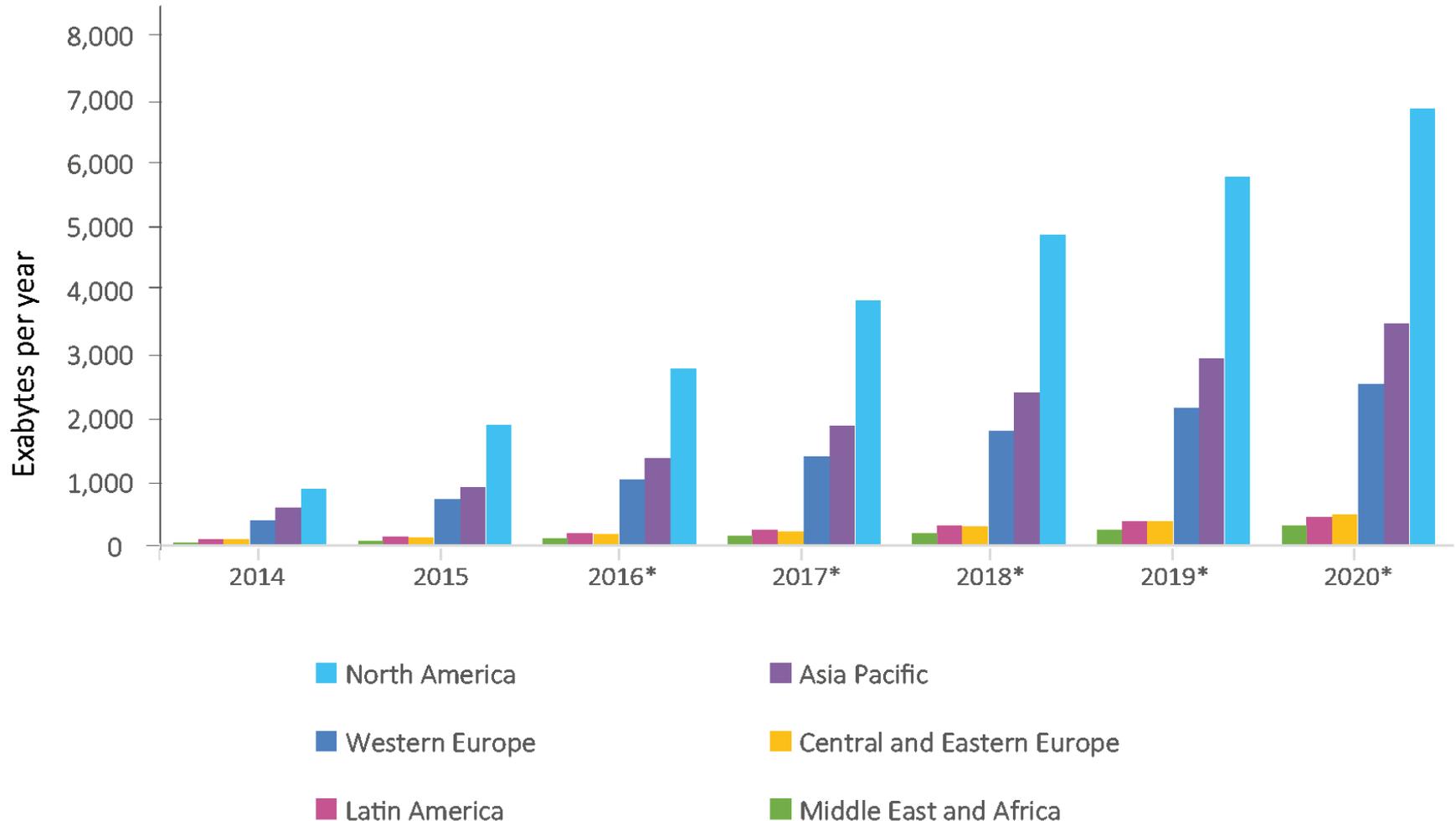


ICT

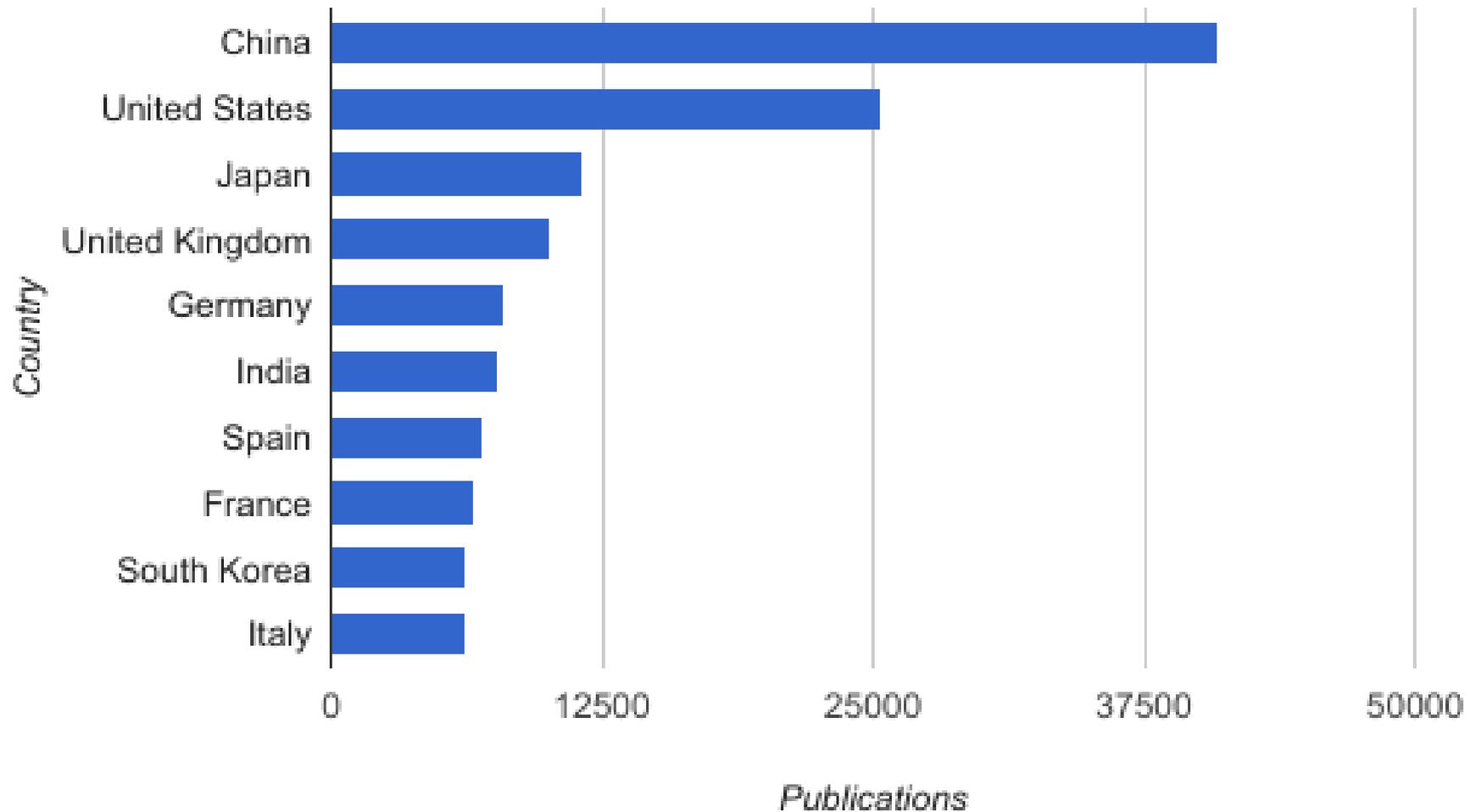
Time



Cloud traffic in different regions



Publications in AI research, 2011 to 2015



Physical infrastructure, connectivity services and skills are needed to unleash power of advanced ICTs



Role for public policy

- Supportive public policies
 - Facilitation of entrepreneurship and innovation
 - Sufficient availability of licensed and unlicensed spectrum
 - Information security and privacy
 - Education policy in general

Toward reliable metrics

- Current data collection largely left to entrepreneurial initiative
 - No agreed conventions on data definitions and measurement
 - Available data often behind paywalls and inaccessible to many users
- Future technological opportunities
 - Harvesting of data directly from the digital infrastructure and services
 - Networks or sensors and devices could generate trusted database
- What is the most effective role for the public sector?
 - Facilitator of data collection (e.g. open data)
 - Curator and archiver of data and transparent algorithms
- Need to develop internationally harmonized indicators on advanced ICTs



