Standardization and IPR for Future Growth

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Standardization and IPR

IMPORTANCE OF ICT SECTOR

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Role of ICT Sector

- Services are becoming seamlessly linked through mobile, internet and other modes of delivery (e.g., location-based services).

- ICT stimulates proliferation of relevant applications (e.g., a farmer in a village can operate his agricultural pump set remotely using the mobile phone)

- For industries: a whole range of value added services that can be delivered through computers, mobile phones or other devices

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Challenges FOR an Interconnected World

- Interoperability of technological solutions

- <u>Cross-sector Challenges</u>: Although technical restrictions to access services and communicate may be minimized, other constraints such as regulatory, national, provider and environmental constraints may impose further restrictions

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Challenges OF an Interconnected World

- <u>Cyber Security and Security of the ICT Infrastructure</u>

- <u>Stimulating competition in an open interconnected world</u>

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Overcoming the Challenges

- **Fostering synergy between ICT research, innovation and standardization**:

    - R&D projects lead to highly relevant research results. However, they are often insufficiently translated into concrete applications that can be commercialized at a later stage.

    - Standards are one important way to promote the translation of research results into practical applications.

Link standardization and research already during the planning of projects

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IMPORTANCE OF STANDARDIZATION AND IPRS FOR ICT

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Importance of ICT Standardization

- Creates:
  - Stronger technological ICT base
  - Adverse International Environment
- Builds:
  - an Enabling ICT Eco-System
  - Interdependent and synergistic ICT policies

- International standards that support a number of applications already exist

- Additional standards are necessary for effective global solution deployments;

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Attributes of Standards

Maintenance and Availability:

- Ongoing support and maintenance of published standards, including swift adaptation to new developments which prove their necessity, efficiency and interoperability, is guaranteed over a long period.

- Resulting standards are publicly available for implementation and use at reasonable terms (including for a reasonable fee or free of charge).

IPR

- IP essential to the implementation of standards is licensed to applicants on a (fair) reasonable and non-discriminatory basis
- Standards need to respond to market needs and regulatory requirements

Relevance, Stability and Neutrality

- Performance oriented rather than based on design or descriptive characteristics.
- Should not distort the global markets; should maintain a capacity to build competition and innovation upon them and should be based on advanced scientific and technological developments
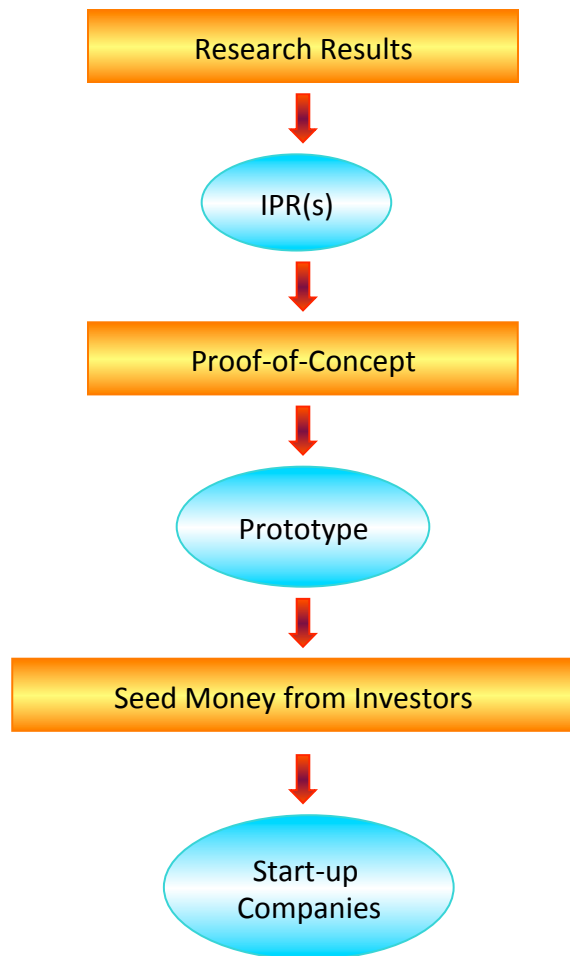
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Benefits of ICT Standardization

Industrial collaboration

- Joint ICT solutions for industrial compatibility and IPRs
- Access to global markets

Coherent and aligned ICT standards

- Trade and Regulatory convergence
- Respond to market dynamics

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Commercialization of Research Innovations

Research Results

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IPR(s)

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Proof-of-Concept

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Prototype

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Seed Money from Investors

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Start-up Companies

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Innovation, Entrepreunirship and Economic Growth
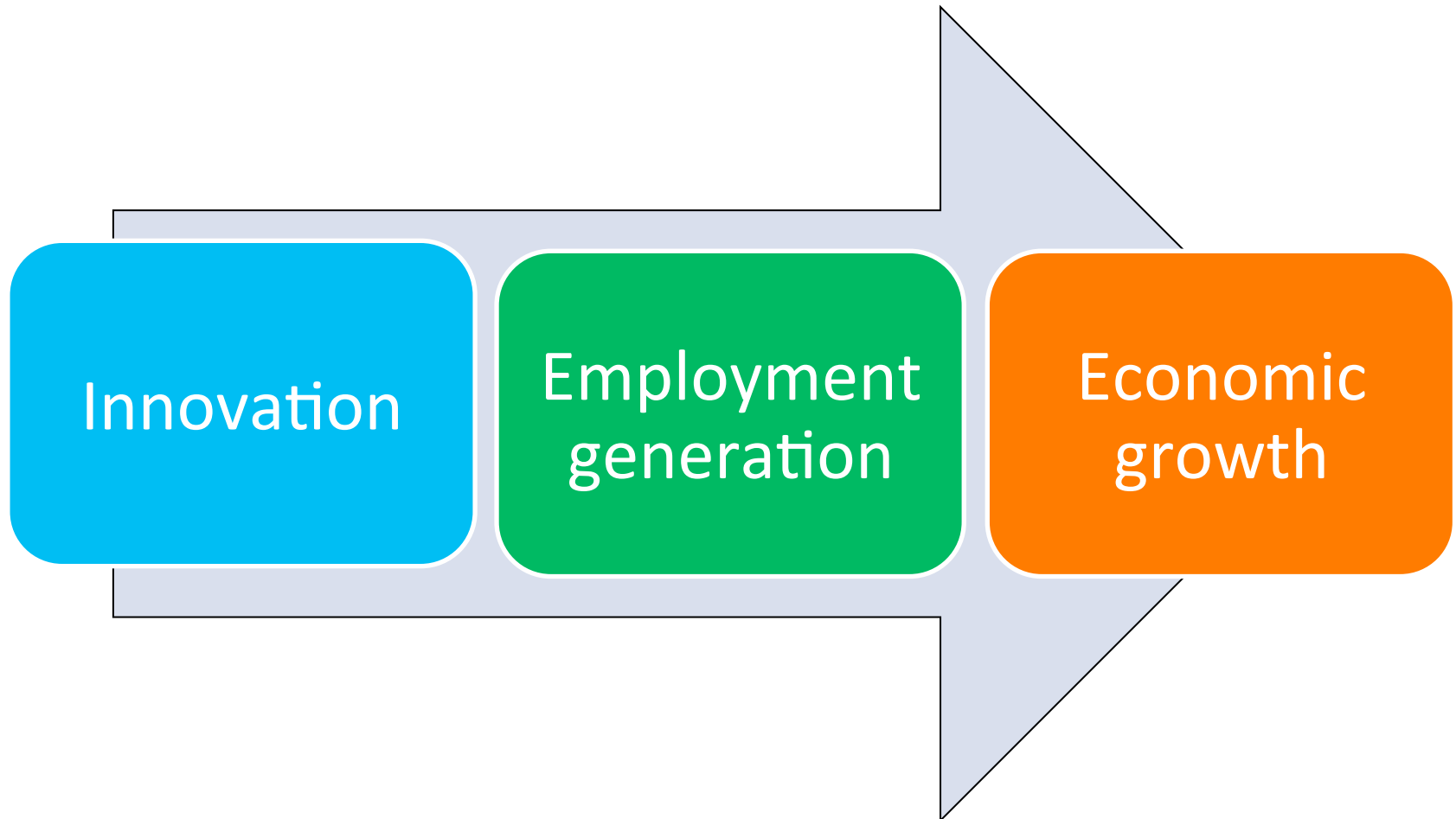
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IPR and Standardization Challenges

- The increasing complexity of innovative services and applications can give rise to a multitude of essential patents resulting in a complex situation and a cumulative IPR burden in standards.

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- Interoperability is key to achieving an interonnected world:

  - IPR has an important role in standardisation in order to respect proprietary rights covering various technology solutions needed for interoperability

  - Standards should not lead to a restriction of competition

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- Differences do not in themselves pose a problem, provided that IPR relevant to the standard are given proper consideration in the process and policies comply with competition rules.

- Standard-setting policies should also be stable, predictable, transparent and effective and enable competition and facilitate product innovation.

- Openness, easy access and availability of standards to all interested parties are important prerequisites to the implementation of effective IPR policies.

Standardization and IPR

- Standards are part of every entrepreneurial strategy for business growth in a modern digital economy.

- National and global standardization should go in hand to ensure that novel technologies developed at I4CT as well as the proposed solutions take into account the essential technology and market requirements