The Role of Academic Institutions in filling the Skills Gap

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Introduction

A good indicator of economic success could be how *small or wide the development gap* is between an Innovative research finding and the translation of such finding into new products and industrial processes.

- **HIGHER EDUCATION**

- **COLLABORATIVE RESEARCH**
  - ➤ **University-University Partnerships**
  - ➤ **University-Industry Partnerships**
  - ➤ **University-Industry-Government Partnerships**

  "Science invents, Industry adapts and Society conforms"

Good Approaches to reduce skills gap

University-University Partnerships

❑ Tripartite mission – Teaching, Research and Service

❑ Promotes civic and democratic engagement, Cultivates international economic development

❑ International Research-80% of a country's research impact is influenced by their Research collaboration with researchers in other countries

➢ Joint research initiatives, academic exchange programmes, joint degree programmes, joint classroom projects and joint events like conferences and symposia.

➢ Community service projects, sustainable development initiatives, professional development activities and university-school-community partnerships

Good Approaches to reduce skills gap contd…

University-Industry Partnerships

- ➢ Flexible curriculum design to balance practical and academic curriculum-Challenged based education
- ➢ Formalized internship
- ➢ Industry-ordered training programs
- ➢ Human resource sharing (teachers and industrialists mingle) -Technology Awareness
- ➢ Technology Transfer –Joint patents, IPs
- ➢ Job Creation & Direct business profits

CHALLENGE:

Laws and policies on transfer of research from University to Industry (IPs, Patents…)

University-Industry-Government Partnerships

- ➢ Tripartite collaboration –Asian context
- ➢ Guide, Legalize, and Co-finance

A Sample : Partnership activities with an Industry Partner

INMARSAT

- IoT Brainstorming, Use Case Mapping, Accelerating Prototyping –input into academic research topics.

- Creating opportunity for students to participate in Real World Experimentation through projects in collaboration with Inmarsat and it's ecosystem of partners and customers. Potential for internships within the ecosystem.

- Benefits to ACEIoT & Inmarsat:
  - Strengthen the link between academic domain, industry and the client domain and enabling technologies.
  - Involvement of vendors, partners and students early in the experimental phase.
  - Inmarsat - Better Return of investment in the long term
    - ✓ Recording the experiences for both academic and for further business analysis
    - ✓ Increasing sector domain expertise across the studies
    - ✓ Generating the right souvenirs on the journey as inputs to product and business development

- Inmarsat to participate with ACEIoT in establishing some IoT infrastructure at the University and around Kigali or other sites to be used in potential research, specifically LoRaWAN so students can utilize as a basis for research.

THANK YOU

Winning due to a technicality

Einstein, Newton, and Pascal are hanging out one afternoon.

Einstein is bored, so he suggests, "Let's play hide-and-seek. I'll be it!"

The others agree, so Einstein begins counting. "One... Two... Three..."

Pascal runs off right away to find a place to hide.

But Newton merely takes out a piece of chalk and draws a mid-sized square.

He finishes and steps into the square just as Einstein shouts, "Ready or not -- here I come!"

Einstein looks up and immediately spots Newton standing right in front of him.

He says, "I found you, Newton!"

Newton replies, "No, you found one Newton per square meter -- You found Pascal!"