



# CTIF Introduction

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Director, Professor

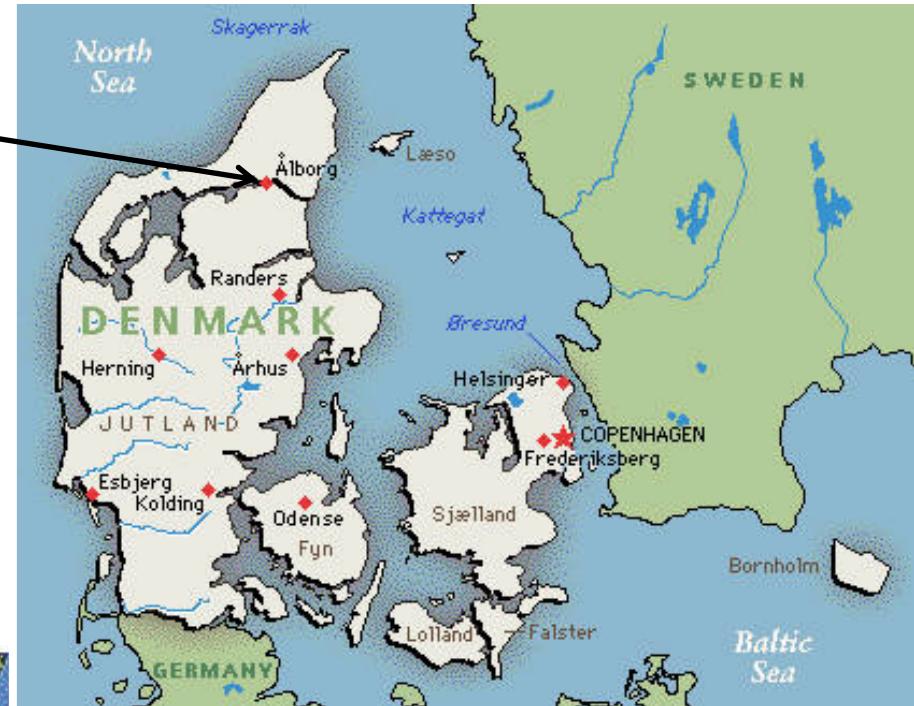
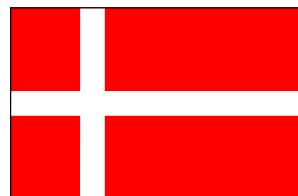
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ITU Standards Education Webinar  
April 30, 2012

# Introduction

## Denmark: Facts

- Aalborg
  - Population: 200 000
  - Aalborg University and Center for TeleInfrastruktur



Area : 43 094 km<sup>2</sup>

Population: 5.6 millions

# Introduction

## Denmark: Facts

- No. 2 in e-readiness<sup>1</sup> worldwide
- No. 3 in the world on availability of information technology skills<sup>2</sup>
- No. 4 in the world on development and application of technology<sup>2</sup>
- No. 2 of 31 European countries in innovation<sup>3</sup>
- World's happiest country<sup>4</sup>

<sup>1</sup>Economist Intelligence Unit, June 2010

<sup>2</sup>The World Competitiveness Yearbook, IMD 2009

<sup>3</sup>Innovation Union Scoreboard, October 2010

<sup>4</sup>Gallup World Poll, April 2012

# Introduction

Aalborg University

- Founded in 1974
- 14,000 students. Approximately 1750 of these are from abroad;
- Approximately 400-500 students are enrolled in the Faculty of Engineering, Science and Medicine.
- Since 1996 AAU offers engineering programmes for International M.Sc. E.E. degree in :
  - Mobile Communications
  - Digital Communications
  - Acoustics
  - Multimedia Communication
  - RF Technology
  - Network Planning & Management
  - Software Defined Radio
  - Innovative Communication Technologies and Entrepreneurship

# Introduction

## CTIF: Divisions - Current and Planned

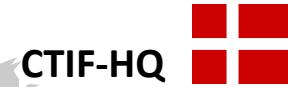
**GISFI** – Global ICT standardisation Forum for India  
<http://www.gisfi.org/>  
**I4CT** – International Institute for Innovation in ICT



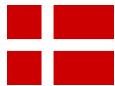
**CTIF-USA**  
*Princeton, 26-04-2011*



**CTIF-HQ**  
*Aalborg, 29-01-2004*



**CTIF-CPH**  
*Copenhagen, 11-03-2008*



**CTIF-China**



**CTIF-Italy**  
*Rome, 28-09-2006*



**CTIF-South-East-Europe**  
*Greece*  

**CTIF-India**  
*Kolkata, 07-12-2007*



**CTIF-Japan**  
*Yokosuka, 03-10-2008*

# Introduction

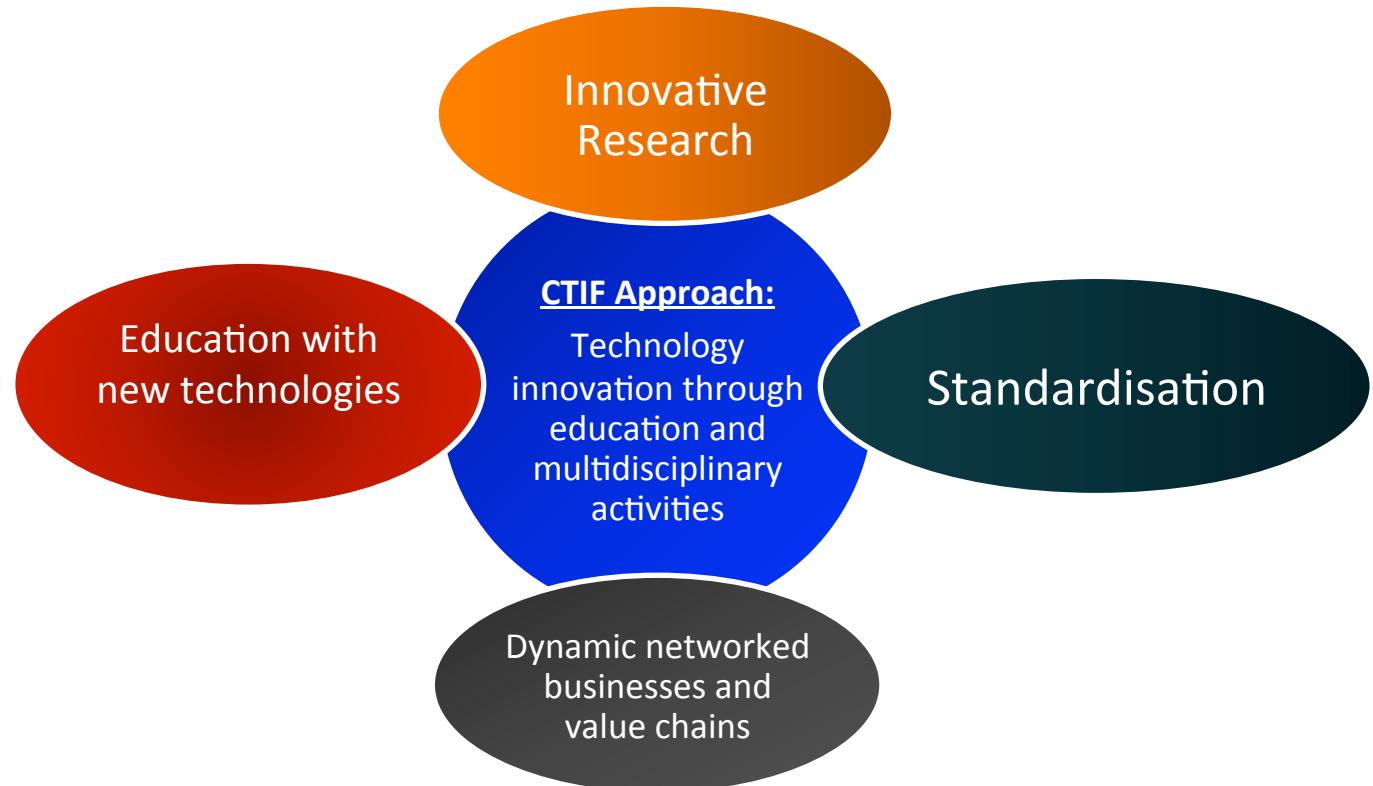
## CTIF: Networks



# Introduction

## CTIF: Concept

CTIF is a global ICT-based inter- and cross disciplinary research center with focus on scientific innovation and academic education





CTIF



## CTIF: Expertise and Thematic Areas

- Security and Management
- Cognitive and cooperative radio networks
- Spectrum Sensing and sharing
- Green ICT
- Internet of Things
- Cognitive Communications
- Network without Borders
- Embedded and Optimal Resource Computing
- Multimedia Applications and Services
- Positioning and Localization
- Personalized Medicine
- Experimental activities to support above research

# Introduction

## CTIF: PBL

Problem-based learning (PBL) is a student-centered instructional strategy in which students collaboratively solve problems and reflect on their experiences.

Characteristics of PBL are:

- Learning is driven by challenging, open-ended problems.
- Students work in small collaborative groups.
- Teachers take on the role as "facilitators" of learning.

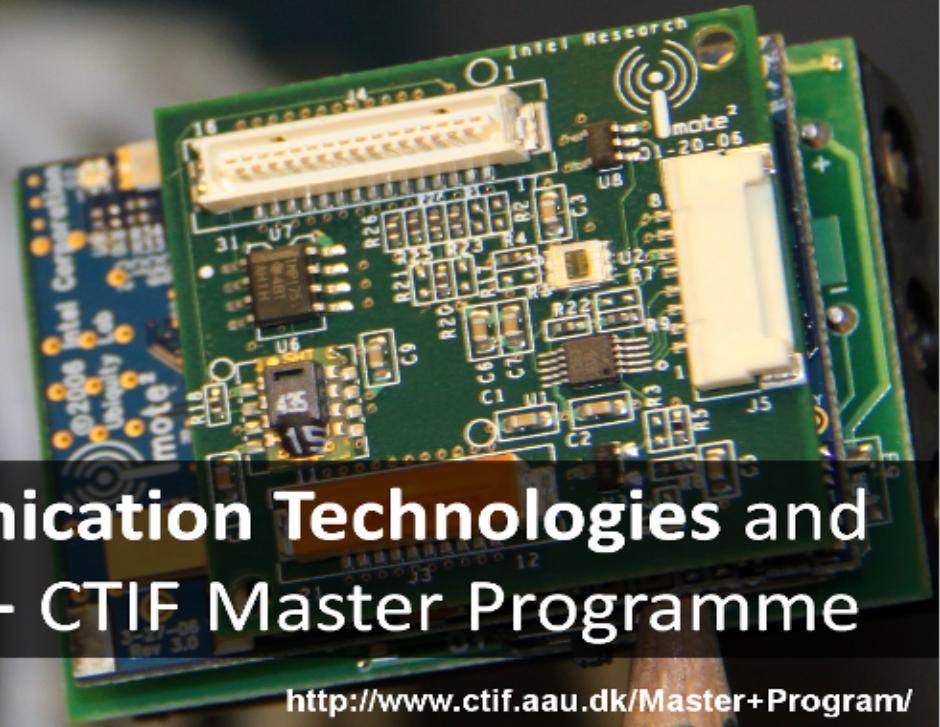


# Introduction

## CTIF: Education



# CONNECTING TO THE FUTURE

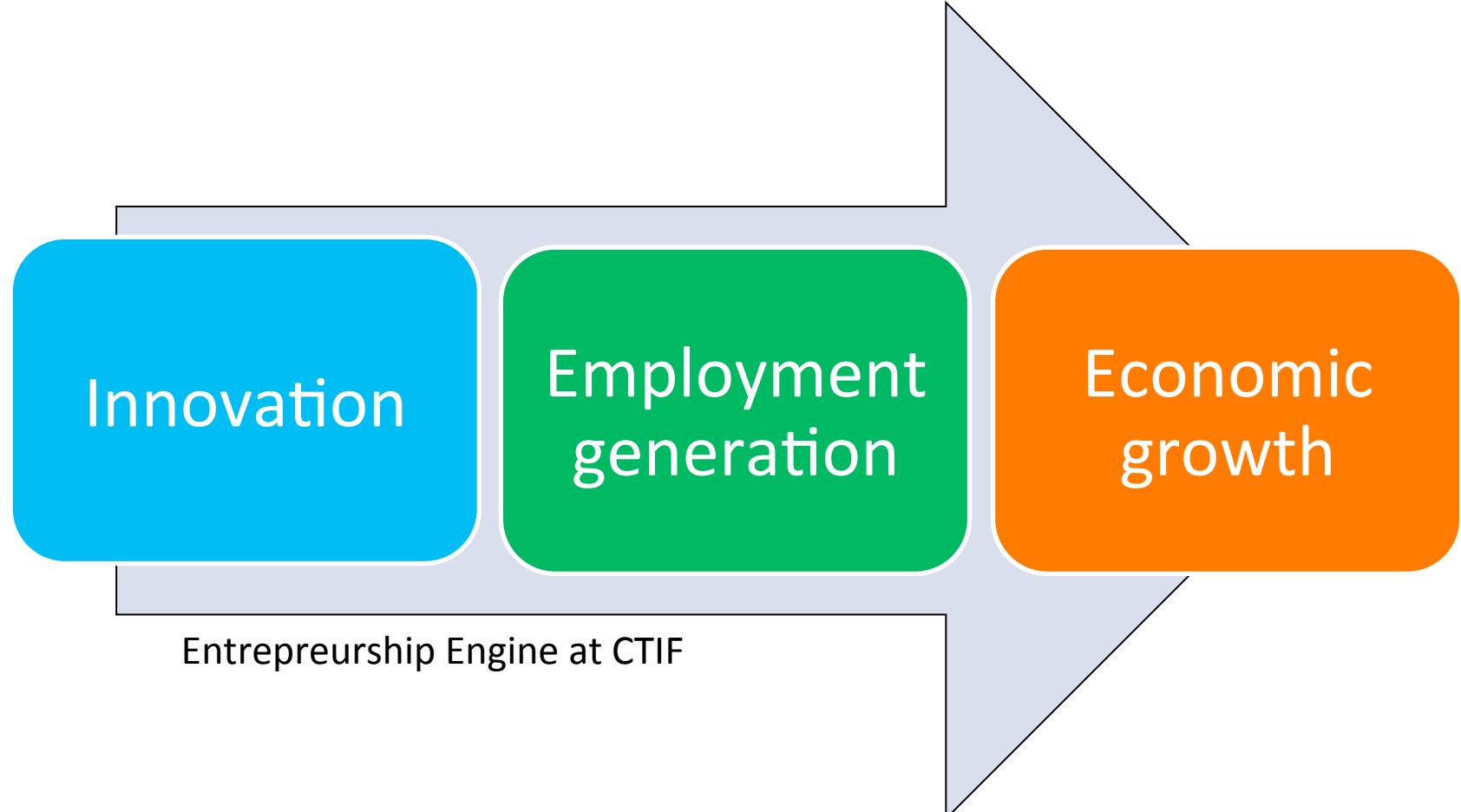


## Innovative Communication Technologies and Entrepreneurship — CTIF Master Programme

<http://www.ctif.aau.dk/Master+Program/>

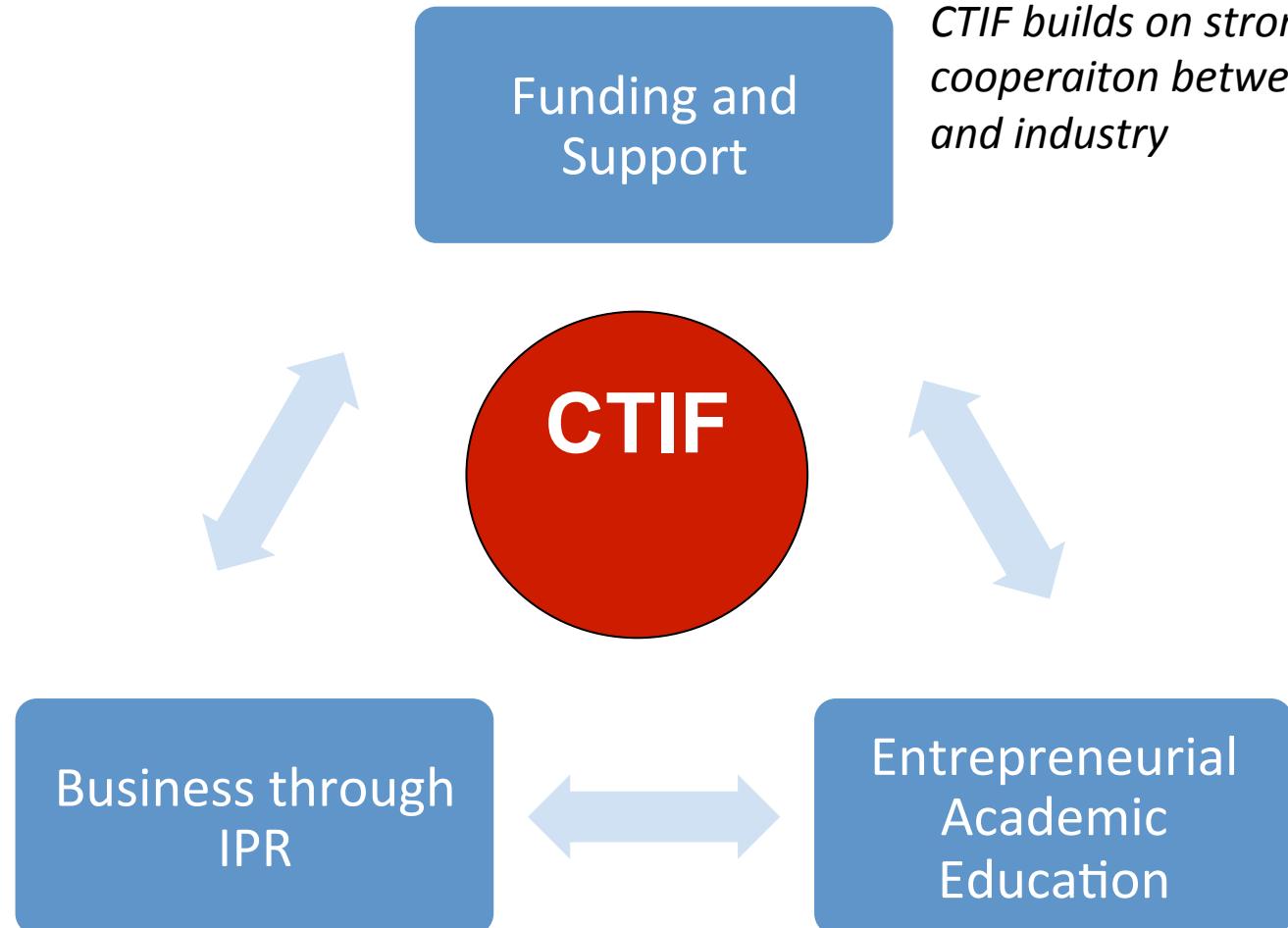
# Introduction

## CTIF: Concept of Entrepreneurship in Education

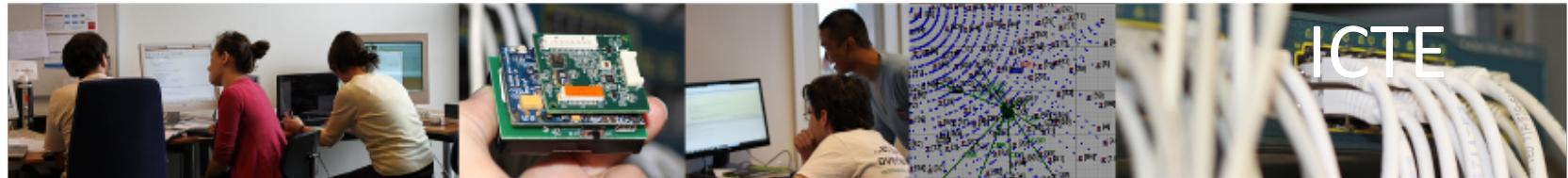


# Introduction

## CTIF: Main Elements



*CTIF builds on strong cooperation between academia and industry*



ICTE

# CONNECTING TO THE FUTURE



# Thank you!

Innovative Communication Technologies and  
Entrepreneurship — CTIF Master Programme

<http://www.ctif.aau.dk/Master+Program/>