

# 7th IT STAR WS on Electronic Business

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## Teaching eBusiness in Albania

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# History of Teaching Informatics

- First computers in Albania in 1971
  - Center of Mathematical Calculus
    - University of Tirana, Fac. of Natural Sciences, Mathematics
  - Applications in some important fields
    - Geology & geophysics
    - Energetics
    - Constructions
    - Statistics
  - Training in Chair of Mathematics – programming
    - & minor programming courses for involved specialists

# First Metropolitan Network

- UNDP project in 1985
  - Institute of Informatics and Applied Mathematics
  - Metropolitan Network in Tirana, with mainframes connected to ministries, institutes and faculties
  - First Chair of Informatics and university diplomas
  - Intensified applications
    - Engineering and research, Statistics, etc.
    - Training for other involved specialists
  - Accepted in paper, technically available, not used
    - Management & accounting, Data bases

# The Dawn of New Era - 1990

- Beginning of recovery for the economy
- Old network gradually abandoned
- Market open for micro-computers
- Elementary training courses for public
- Tentatives for re-creation of network and Internet
- University education extension
  - Department of Electronics in Polytechnic University
  - Faculty of Economy in University of Tirana etc.

# Introduction of New Ideas

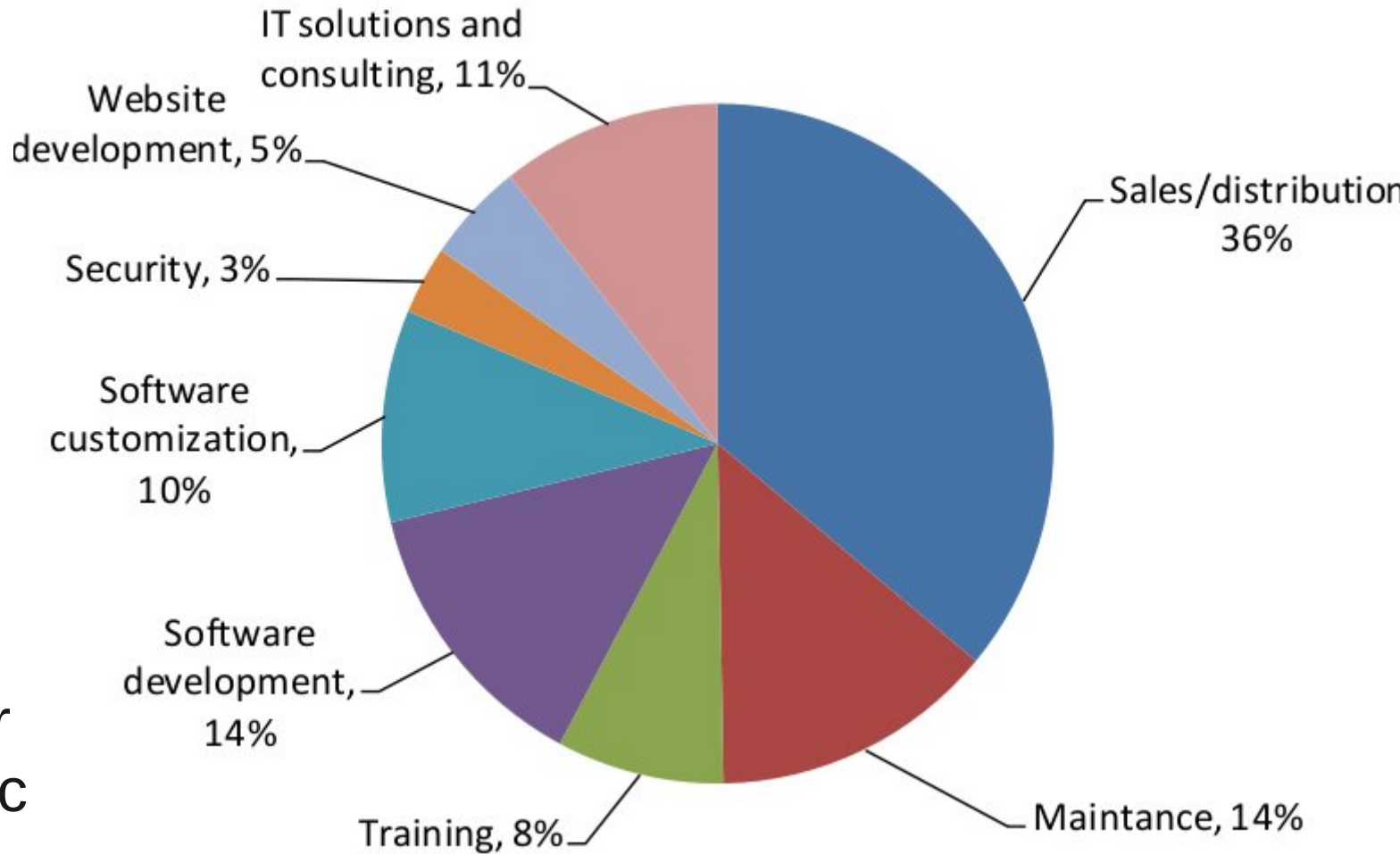
- Importation of new ideas
  - Internet
  - e-Business
  - e-Government
  - First email service – UNDP in 1996
  - First Internet connection – Soros Foundation in 1997
- First Internet providers in 1998
- Telecommunication operators followed later on

# Overview of Today Business

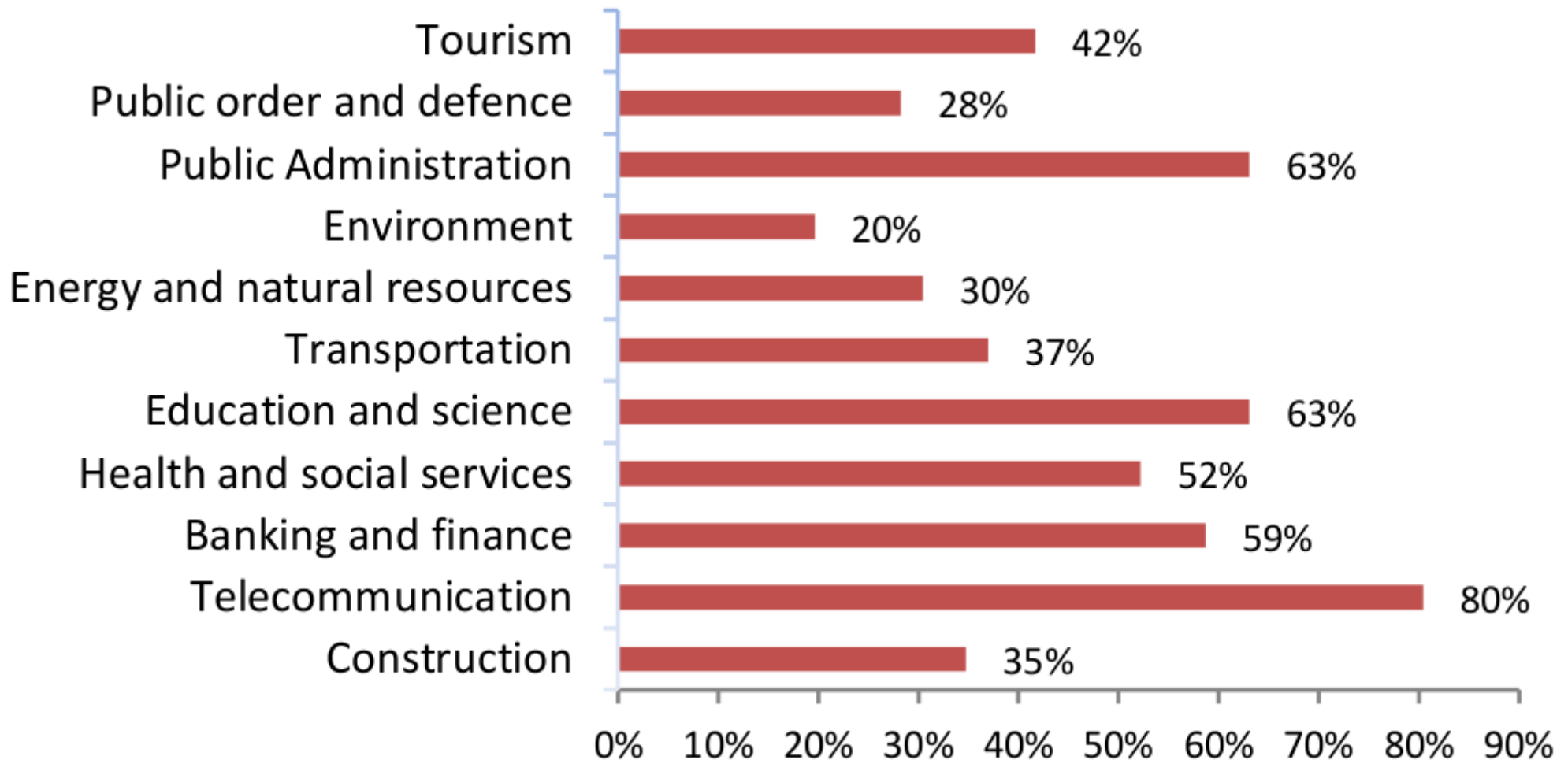
- General information (2011, source AITA)
  - Population 2.9 million
  - GDP 13 billion USD increasing rate 3%
  - IT market 190 million USD increasing rate 1.4%
- IT companies
  - 37% have 5 or less employers
  - Turnover average 7,200 USD/employer
  - Slow increase of activity and size

# Revenues of IT Sector

- Market 50% dominated by sales and maintenance followed by 30% software development
- Training 8% represents basic computer usage for public

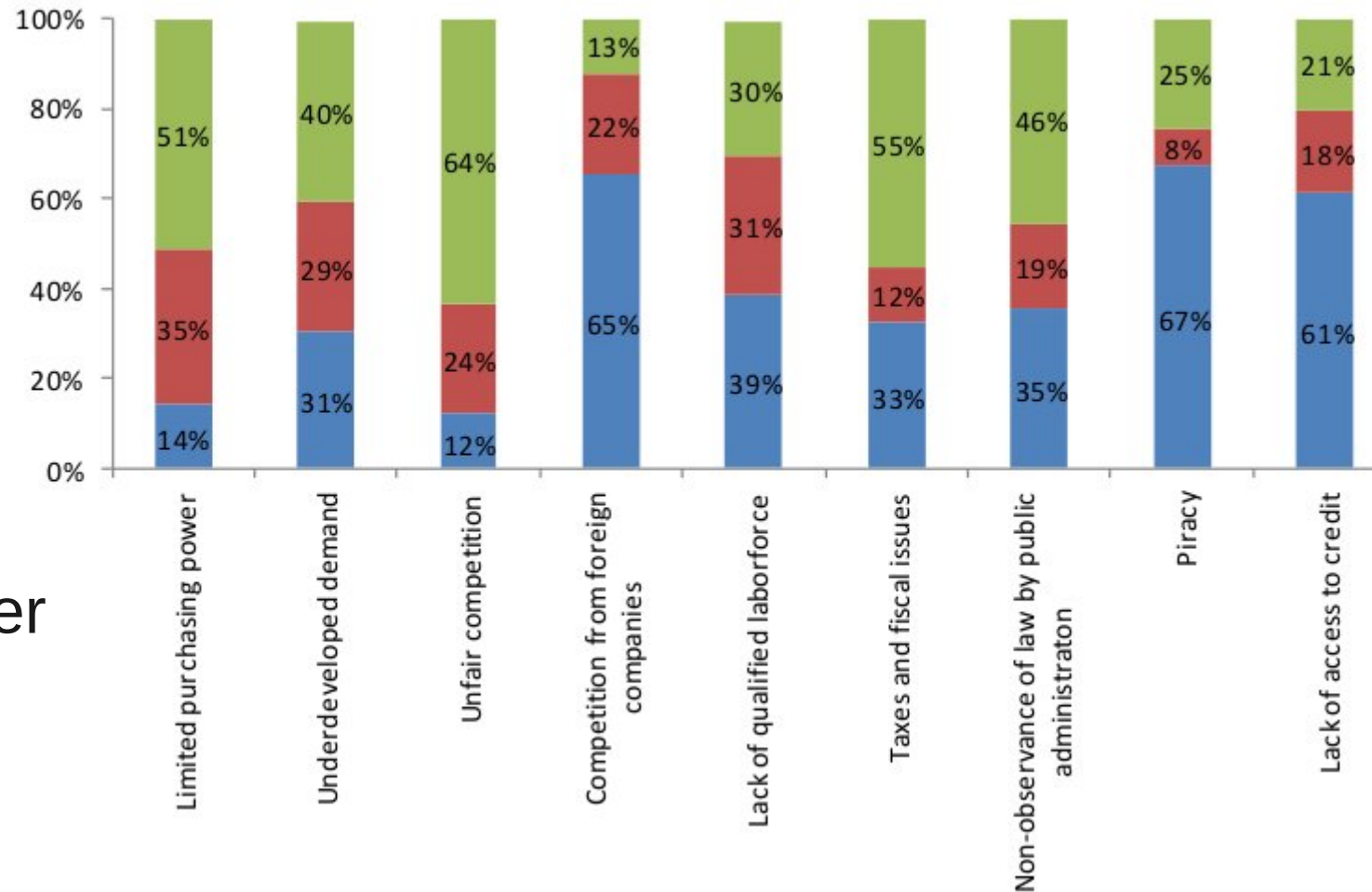


# Client Communities of IT Market





# Difficulties for IT Market



- Unfairness
- Purchasing power
- Taxes
- Undevelopment
- etc.

■ Serious to very serious  
■ Serious to some extent  
■ Not serious to a little serious

# A Basis for eBusiness ?

- Formally YES:
  - Banks & finances represent 57% of IT market
  - Debit cards widely used (government decision)
  - Credit cards usage is slowly increasing
  - Some banks offer limited transactions online
  - Legislation for Information Society in preparation
- Nevertheless there are difficulties for eBusiness
  - Only in early 2013 one foreign bank promised elements of e-Commerce

# Teaching for eBusiness ?

- Teaching follows the development of the country
- e-Business issues still an imported theory
- Three levels of teaching
  - Basic computer use for the broad public
  - Teaching of informatics in all schools country-wide
  - Specialized teaching in informatics in universities
    - Computer sciences
    - Computer engineering
    - Informatics for economics

# What Teaching in Informatics ?

- University curricula in Albania include
  - Traditional disciplines
    - basic mathematics, physics, chemistry
    - introduction in informatics
    - computer architecture
    - algorithmic and programming
    - computer networks & operating systems
  - Specific disciplines
    - artificial intelligence, distributed systems, web design, computer graphics, some economics etc.

# Teaching Computer Engineering

- Polytechnic University of Tirana
  - Faculty of Information Technology
    - Departments of Computer Engineering, Electronics and telecommunications
  - Curricula balanced between hardware and software
  - Levels Bsc, Msc, PhD and Professional Master
  - Objective – specialists for development and maintenance of ICT platforms
    - Representing a support for future eBusiness

# Teaching Computer Science

- Many universities offer Bsc, Msc and few PhD
- University of Tirana
  - Faculty of Natural Sciences
    - Department of Informatics (the first one from 1985)
  - Curricula balanced towards software
  - Levels Bsc, Msc, PhD and Professional Master
    - Parallel curricula for blended mathematics & informatics
  - Objective – specialists for software development
    - Representing a support for future eBusiness

# Teaching Informatics for Economics

- University of Tirana
  - Faculty of Economy
    - Department of Mathematics, Statistics and Informatics
  - Curricula balanced between informatics & economics
  - e-Business components “fueled” from imported theory
  - Levels Bsc, Msc, PhD
  - Objective – specialists for IT in business
    - Representing the key support for future eBusiness

# Is All this Sufficient ?

- Problems with university teaching
  - Strong orientation towards research
    - Strictly limited resources, but
    - Requested for the academic career
- Companies not very content with universities
  - Lack of professional teaching
  - Professional training is done in
    - Within few big IT companies
    - In academies of main IT producers



# Conclusions

- Education system in Albania is capable for preparing
  - a core of good IT specialists, and
  - a mass of lower level techniciansnecessary for setup and maintenance of eBusiness platforms
- Part of involved banks are international and import some of the technology for online transactions and eBusiness
- The education dedicated for eBusiness is organized in only one faculty of Economy
  - Due to the lack of critical mass of end-users and pressure from companies, the curricula is based in theoretical assumptions
  - There is feedback from companies but eBusiness is in its first steps

# *Thank You*

