

A 3D rendered scene featuring several stylized human figures in business attire (suits, dresses, and blouses) in a cityscape. The figures are rendered in shades of gray and red. In the foreground, a large figure on the left is reaching out towards a smaller figure in the center. Other figures are scattered throughout the scene, some holding briefcases. The background shows tall, modern buildings under a cloudy sky.

**Means of collaboration
between HE institutions
and the rapidly growing
IT industry in Serbia**

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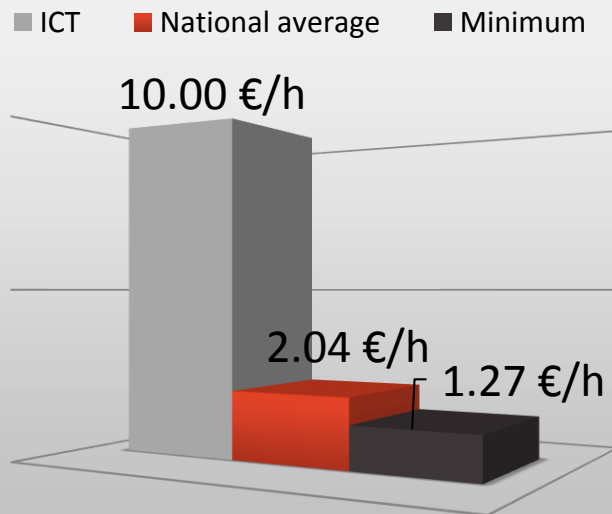
- From 1% GDP to 5% GDP in 10 years
- Annual growth rate per capita of 10 % (150 € → 1000 €)
- 80 % online gaming software produced by companies from Novi Sad
- Support to the local economy
- New job opportunities



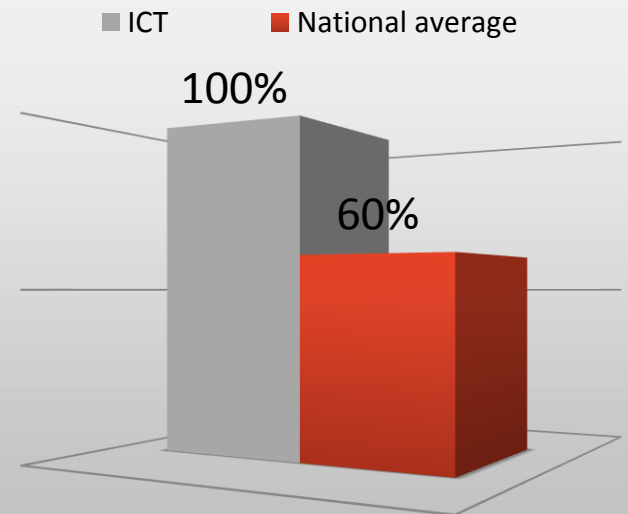


- 2,500 BSc experts hired annually
- Appealing working benefits
- Salaries above the national average
- 100 % employability

Salaries



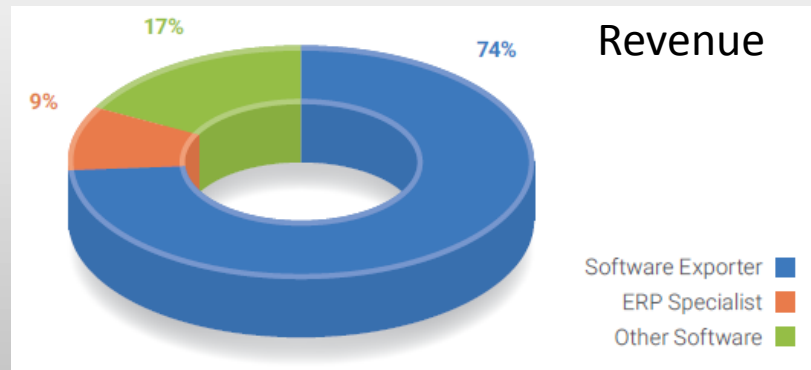
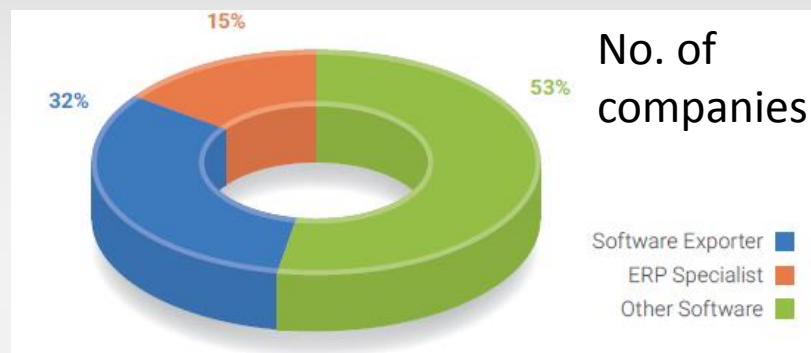
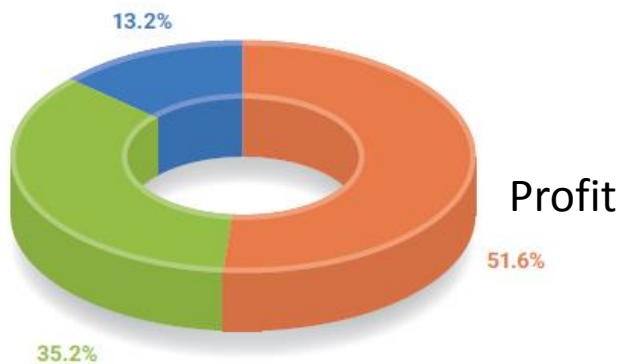
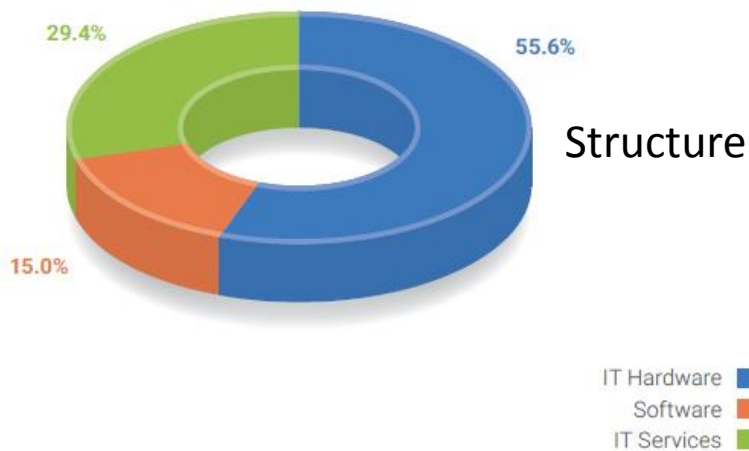
Employment rates

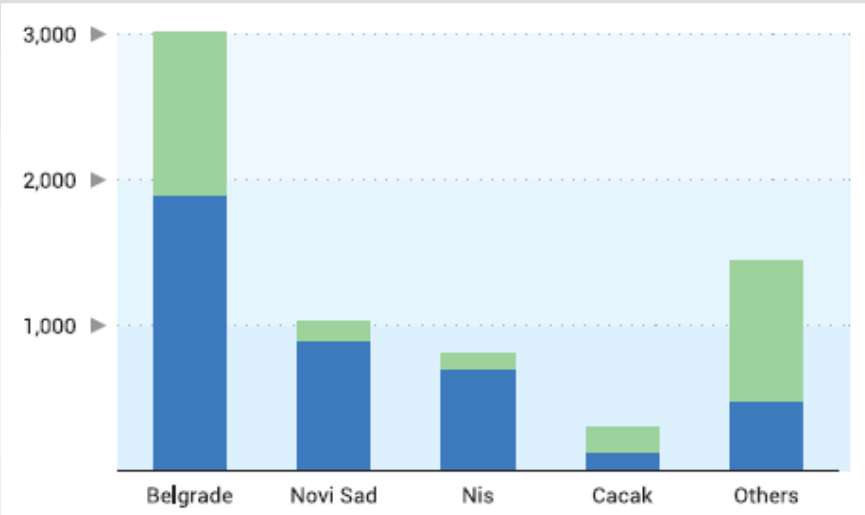


Major Companies Overview



Company	Domestic ownership	Workforce 2009	Workforce 2013	Increase
Schneider Electric DMS NS	No	142	686	+48%
RT-RK	Yes	51	342	+61%
PSTECH	Yes	70	239	+36%
GTECH	No	129	183	+9%
LEVI 9	No	102	172	+14%
NORDEUS	Yes	-	88	-
TOTAL	-	494	1710	+38%

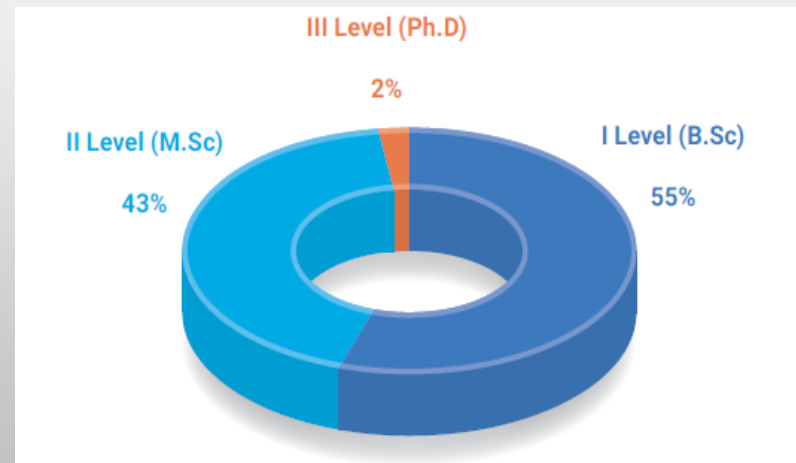




More and more students interested in IT studies (+1500 annually)



Less and less students interested in PhD studies





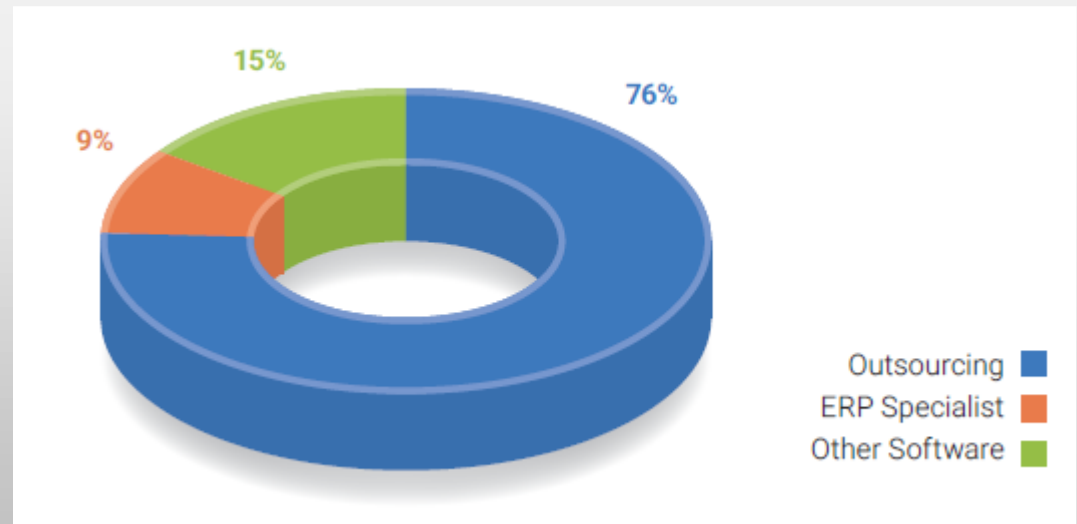
From 5,000 new jobs in Novi Sad in 2016
to
20,000 jobs annually in 2020



**All universities in Serbia
combined enroll only 5000
students for IT studies
annually**



- Outsourcing dominates
- Poor resource management
- 40 % of employees can't answer precisely what their job description is (survey 2015)



- Relocation of human resource into the IT sector
- New hybrid undergraduate curricula!? (monster curricula)
- IT sector is currently not relying on any domestic research findings
- National funding for PhD is reduced
- Funding from the EU is more difficult to obtain

- **Who will teach new students in 15 years?**





- To help the IT sector gain more sustainable market position
- To promote university-industry cooperation
- To secure funding for early stage researchers



How to identify topics of applied research that would satisfy the needs of public and private sector and conduct research relevant for the industry?



The Centre for Collaborative Research Faculty of Technical Sciences – Novi Sad

- Established in 2016
- Avoid the traps of PPP
- Better control over the science-industry cooperation
- Evolve its understanding of technological needs of the IT industry
- Direct contacts with professionals and companies
- Participatory approach



- Participate in research financing on voluntary basis
- Directing the research proportionally to the amount of money invested
- Not necessarily only proposing new topics of research





- Concept approved by the National Science Foundation (NSF) of the USA
- Established cooperation with American network of collaboration centers
- Raised 1.5 mil. € for the Centre (0.5 mil. € from companies and projects)





- Support to advanced higher education and research
- ITN Marie Curie Sclodowska Action
- Industrial doctoral degree
- Joint ventures with Board of the Industry/University Cooperative Research Center for Advanced Knowledge Enablement at the Florida Atlantic University and at the Florida International University
- International exposure to local IT companies



Questions?

More Information?

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