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FROM THE AMERICAN PEOPLE | COMPETITIVE ARMENIAN PRIVATE SECTOR

Armenia's IT Sector and Opportunities for Regional Cooperation

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SARAJEVO, MAY 2010

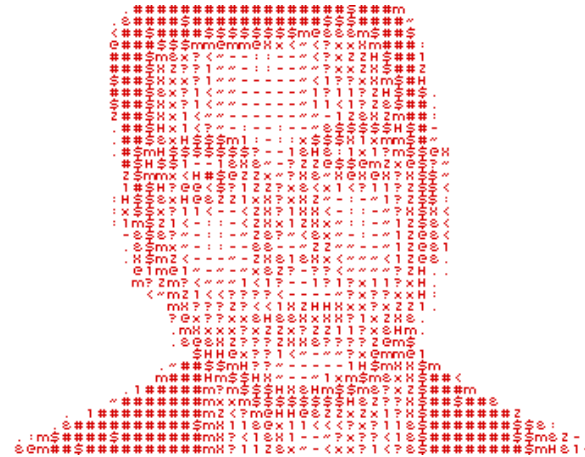


USAID CAPS Project Works with Four Clusters

Tourism



Information Technologies



Pharmaceuticals



Engineering Services



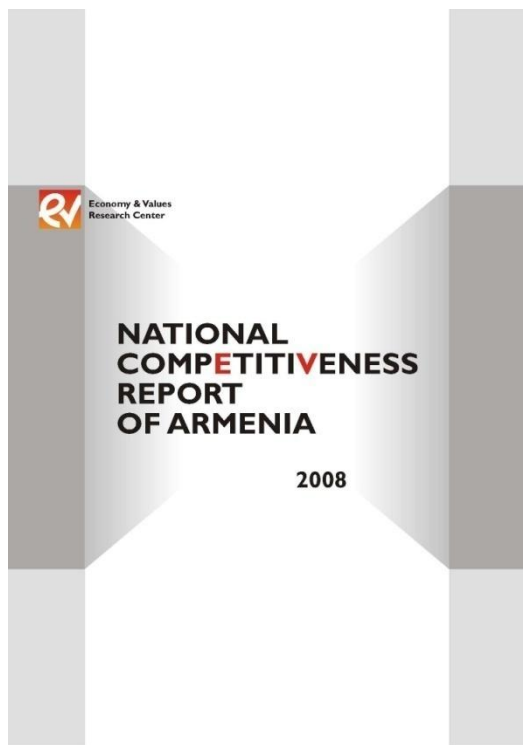


Why These Clusters? Selection Factors

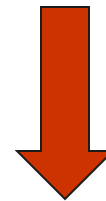
- **Impact on economic development – employment, revenue growth, productivity, exports**
- **Fit with CAPS TA abilities (& actionable) – regulatory changes, marketing & management techniques, outdated university curricula**
- **Industry leadership we can work with – motivated to be helped, state of supporting institutions**



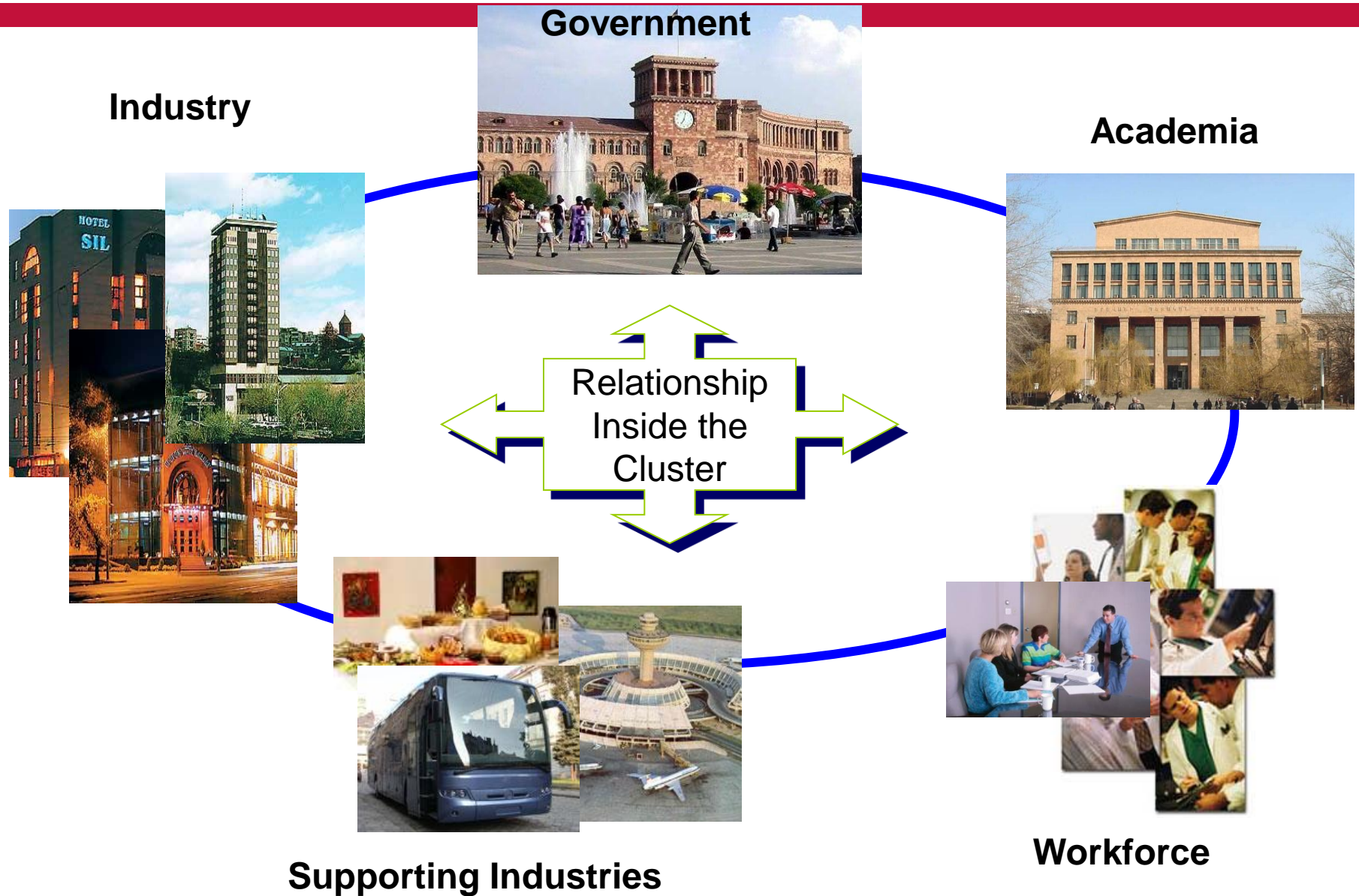
Emphasizing Key Drivers of the Competitive Economy



National Competitiveness Report of Armenia



- **Wider awareness of competitiveness & Armenia's challenges**
- **Public private dialogue on competitiveness topics**
- **Policy recommendations included in the Government Program for 2008-2012**
- **Recommendations on investment attraction, export promotion, innovation, education etc.**





Telecom

Industry Background



Telecom Industry Background

- **Share in GDP - 5% (est.)**
- **Telecommunication industry is stimulating development of services' sector, representing approx. 50% of GDP, and opening new opportunities (outsourcing, offshoring, service centers...)**
- **85% mobile penetration**
- **Operating companies in mobile market – BeeLine (Russia), MTS (VivaCell – MTS, Russia), France Telecom (Orange, France)**



Recent Changes in Telecom Market

- **Dramatic decrease in mobile broadband retail, prices slashed – by almost 70%**
- **Reduced price or fully subsidized devices**
- **More flexible tariffs for customers**
- **Almost 70% decrease in interconnection prices**
- **Dramatic increase in internet penetration**
- **Current interconnection prices are impacting tariffs for all market players**



IT Services and Software

Industry Background



IT Industry Background

- **Number of companies: 200**
- **Foreign ownership: USA/Canada (56%), Russia/CIS (18%), Europe (22%)**
- **Major specializations: customized software and outsourcing (19% of firms), web design and development (16%), IT services and consulting (12%).**
- **Major export destinations: USA/Canada (50% of exports), Europe (24%), and Russia (22%).**

Competitive Advantages

- World class R&D capabilities in computer science, physics and mathematics
- Well-educated and talented workforce with a high degree of technical skills and English language proficiency
- Strong university programs with specializations in IT and Science
- Highly competitive labor cost



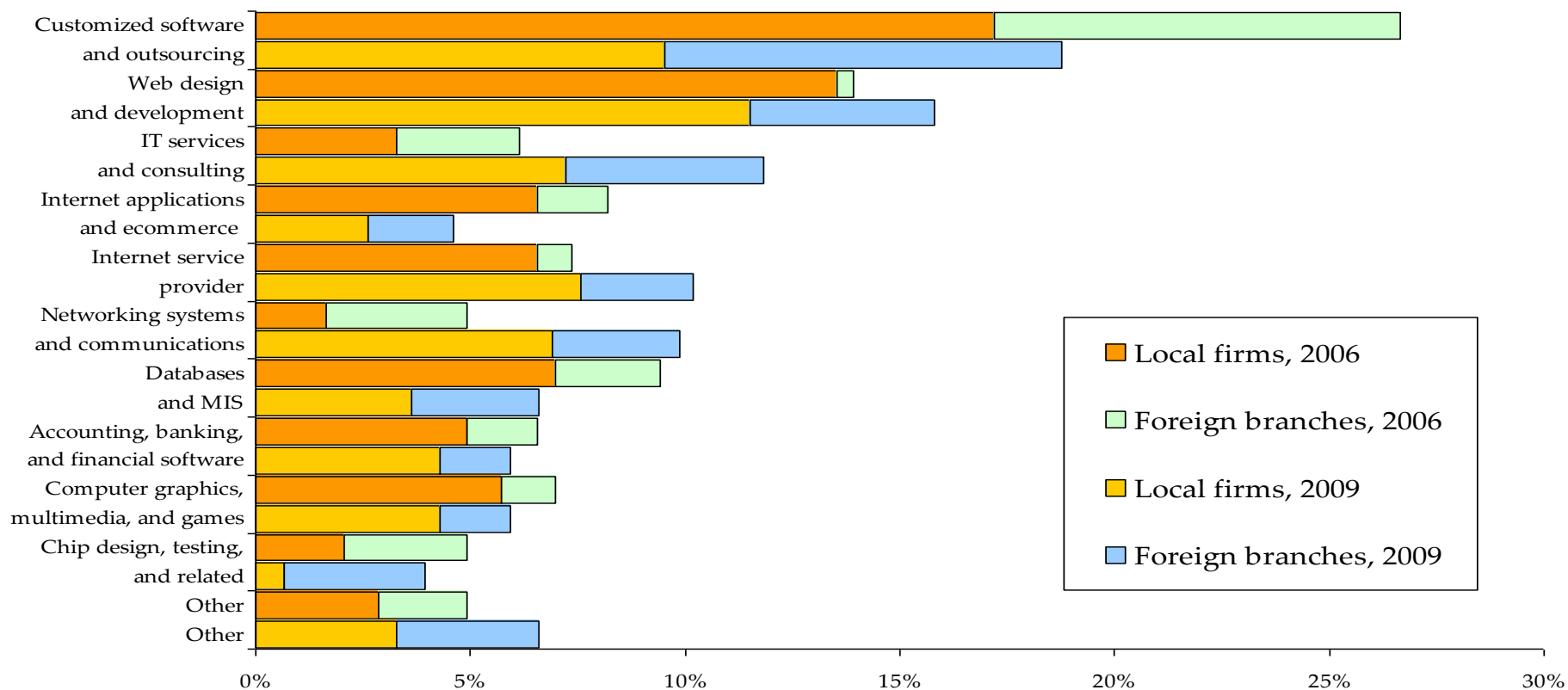
Competitive Advantages

- **Solid Government support to the sector and commitment to improve the investment climate**
- **Strong and successful Diaspora in Europe and North America**
- **Extensive experience with multinationals**
- **Sound laws and regulations for IP protection**



Specializations

Company Specializations: Distribution
overall industry = 100%





Turnover

- Total revenue: \$130 mln - 27% compound annual growth (CAGR) from 1998
- 1.2% of GDP; India (1.4%), Germany (1.3%)
- Local firms: \$50 mln; foreign: \$80 mln
- Average revenue per local firm increased by 30% from 2003
- Exports: \$71 mln (55% of revenues)



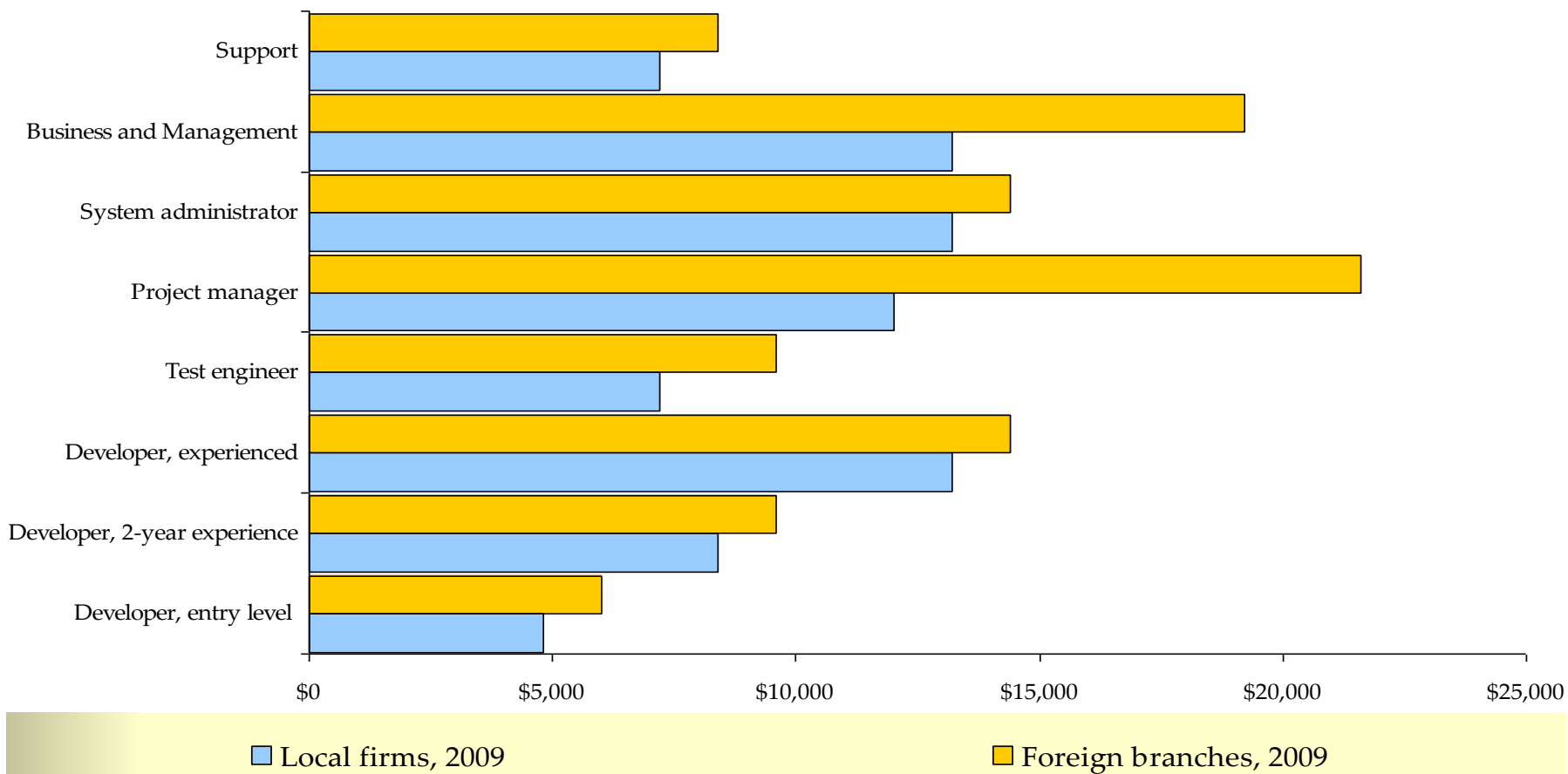
Workforce

- **Workforce (technical and business) reached around 5,200**
- **17% annual growth from 1998**
- **Around 85% are technical specialists**
- **Work for local / foreign – 50/50**
- **Male / female – 65-70% / 30-35% (female in US 27%, UK 15%)**



Salaries

Employee Average Gross Annual Salaries
U.S. dollars

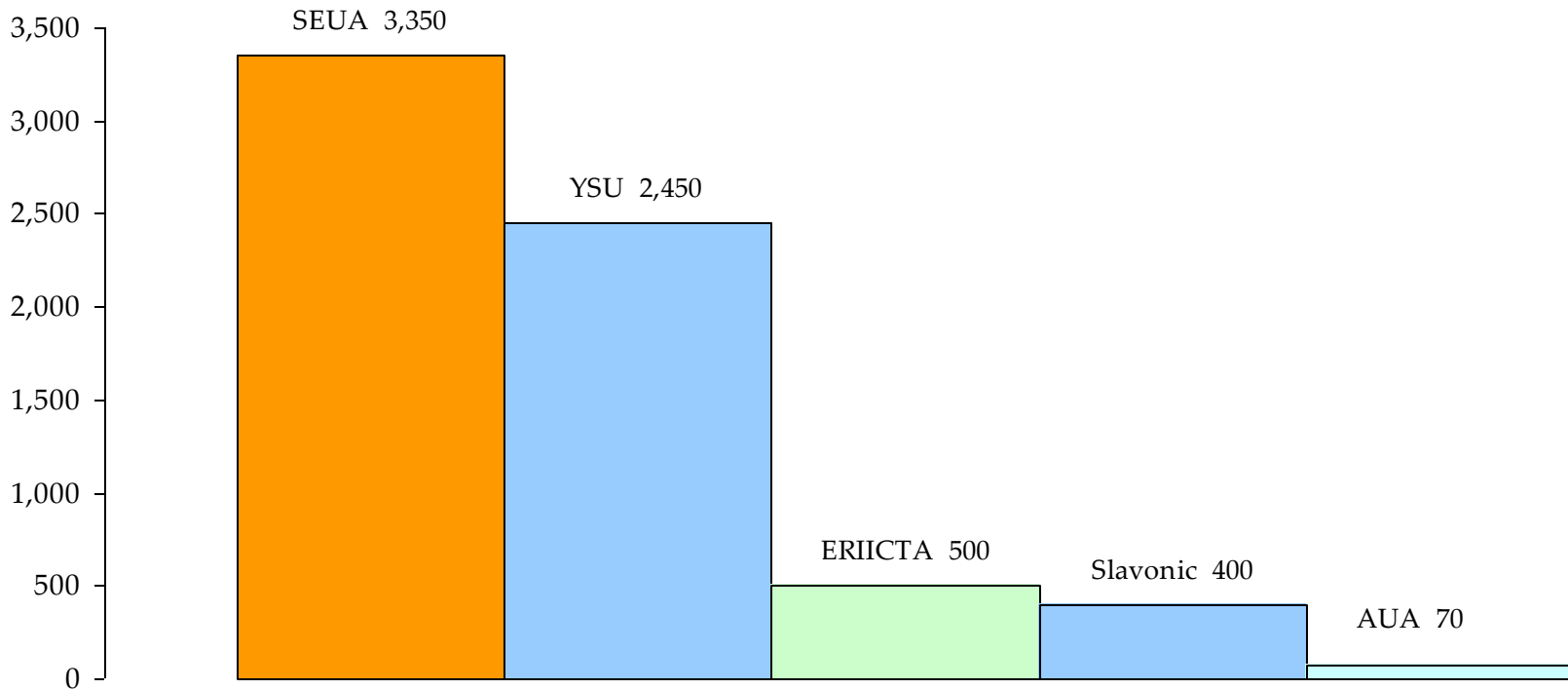




Key Universities: Students

Student Distribution across 5 Universities

IT related majors





Supporting Organizations

- Ministry of Economy, Ministry of Communications and Transport
- Enterprise Incubator Foundation
- Union of IT Enterprises
- 3D Modeling Association
- ELBA (Electronic Content Association)
- World Bank Innovation and IT Development Project
- Public Services Regulatory Commission



Successful Projects and Partnerships Assisted

- “Computer for All” Project,
- Partnerships with Silicon Valley organisations
- Synopsys, National Instruments, Intel, Cisco, etc
- Silicon Valley representation
- Regional ICT training center
- International Standards localization

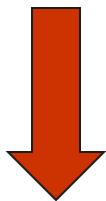


Successful Partnerships

- Microsoft Innovation Center
- Sun Microsystems Testing and Development, Web Technology Training Labs
- Synopsys, National Instruments, Intel, Cisco, etc
- Partnerships with Silicon Valley Companies

Partnerships with Silicon Valley Organisations

**Preparation of IT companies for the
Silicon Valley Road Shows
Partnering with US firms**



- Improved international sales and investment capacity (e.g. Armenian firms were contracted by Apple and Google and Armenia will have its office in SV)**



E-Governance and Broadband Armenia Project

- Enhance the telecommunication sector's enabling environment
- Support the deployment of a national broadband backbone network
- Promote broadband access nationwide, including in rural areas
- Create Government intranet
- Mobilize private sector investments for the enhancement of Armenia's broadband infrastructure through PPP model
- Increase demand for online services and reduce corruption



“Computer for All” Project

- Social Project supported by National Idea
- E-society development
- Three “A”s principle
 - Addressable – selected product for specific requirements
 - Available – easy to find , easy to buy, easy to support
 - Affordable – affordable payments with zero bank interest rates
- Increase computer penetration by at least 30% from the current level
- Improve education level for young generation
- Create Government-to-People communication platform



Regional Cooperation

- Yerevan IT Park
- Gyumri Techno city
- Replication of the Armenian model in other countries
- University partnerships
- DigiTec Business Forum
- B2B partnerships

Regional Cooperation

- Regional IT Training and Certification Center in partnership with India
- Armenian-Russian Innovation Center
- Educational and Research Center of Advance technologies
- Sales Force (Increased number of Rep. Offices, Internships, joint incubation projects)



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Thank You

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