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**Macedonian ICT Cluster,
the Role of MASIT and
The ICT Quality Certification Program as
a Factor of Macedonian ICT SMEs
Competitiveness:
INet Inc. – Case Study**

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INet Inc., CEO

Presentation Content

- 1. Macedonian ICT Industry & Cluster**
2. MASIT – ICT Institution for Collaboration
3. Promotion of Innovation & New Technologies – IT Mark
4. INet Inc. – IT Mark Implementation Experience

Macedonian IT Market

(IDC Estimation, November 2006)

- **IT Y2006 - \$85,4M !**

- **IT Y2007 - >\$100M !**
 - MASIT's initiatives to get there:
 - Boosting Software & IT Services Exports
 - Retaining talented professionals

- **IT Y2010 - >\$200M ? (IDC - \$150M)**
 - **Fostering ICT cluster competitiveness factors**

ICT Industry Role in Macedonian Economy, 2005

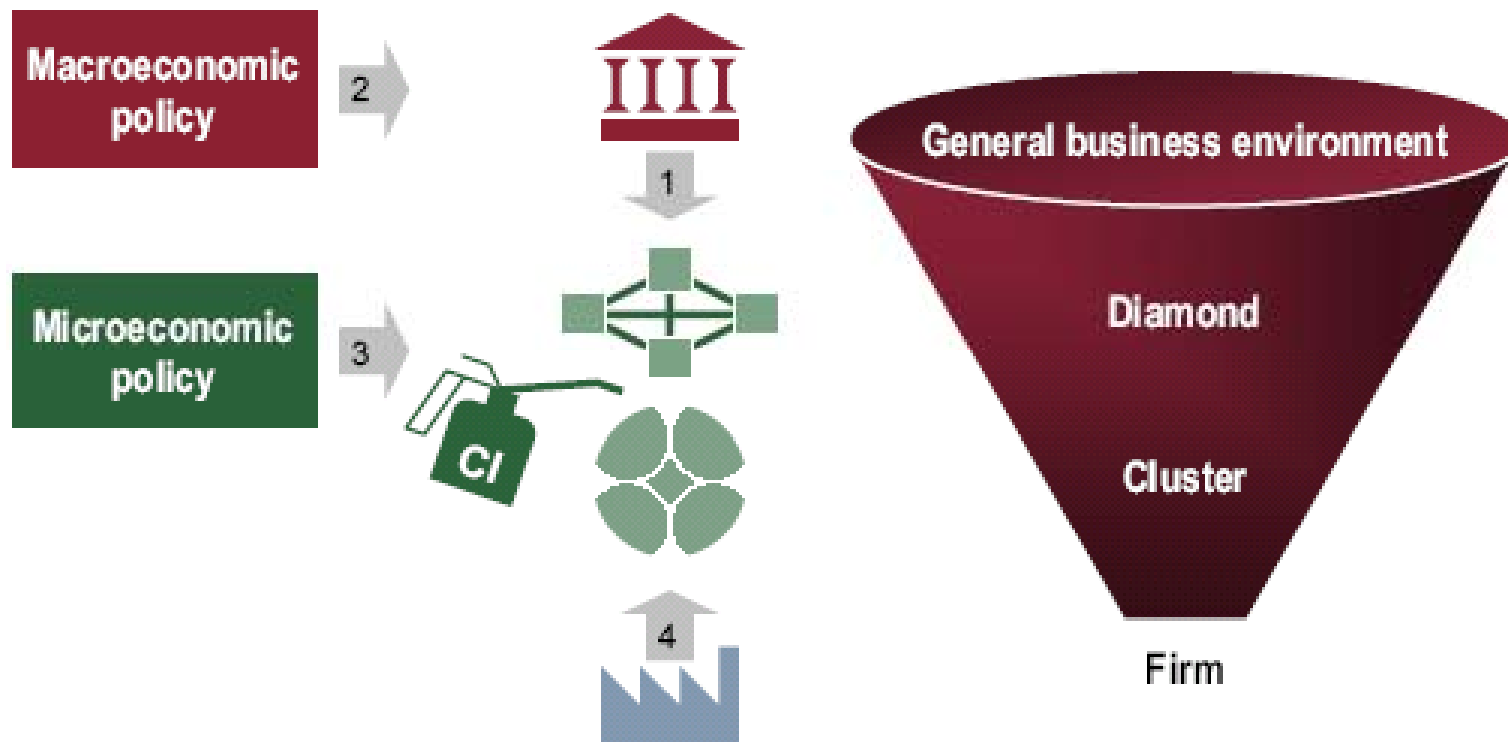
- Number of Enterprises (520) **1.2%** (IT 0.9%, Telco 0.3%)
- Number of Employed (<6.000) **2.1%** (IT 0.7%, Telco 1.4%)
- Revenues **5.3%** (IT 1.2%, Telco 4.1%)
- Value Added **10.5%** (IT 1.1%, Telco 9.4%)
- **Exports (Goods and Services) 2.9%** (IT 0.4%, Telco 2.5%)

IT Market in Macedonia

- **IT Spending in Macedonia (1,4% GDP)**
 - Y2007 FORECAST – IT market >US\$ 100M
 - >420 active IT companies, <30 serious players
- **IT Industry potential - >15% growth/year:**
 - ❖ Technology Services & S/W exports > 50% value-added
 - ❖ Average IT job pays more than twice the national average
 - Firms operate in “clusters” of related industries – the Government of RM identified the ICT industry as one with the highest value-added – the ICT Cluster established in October 2003

Cluster Competitiveness

Business Environment & Forces of Change



Solvel et al. 2003

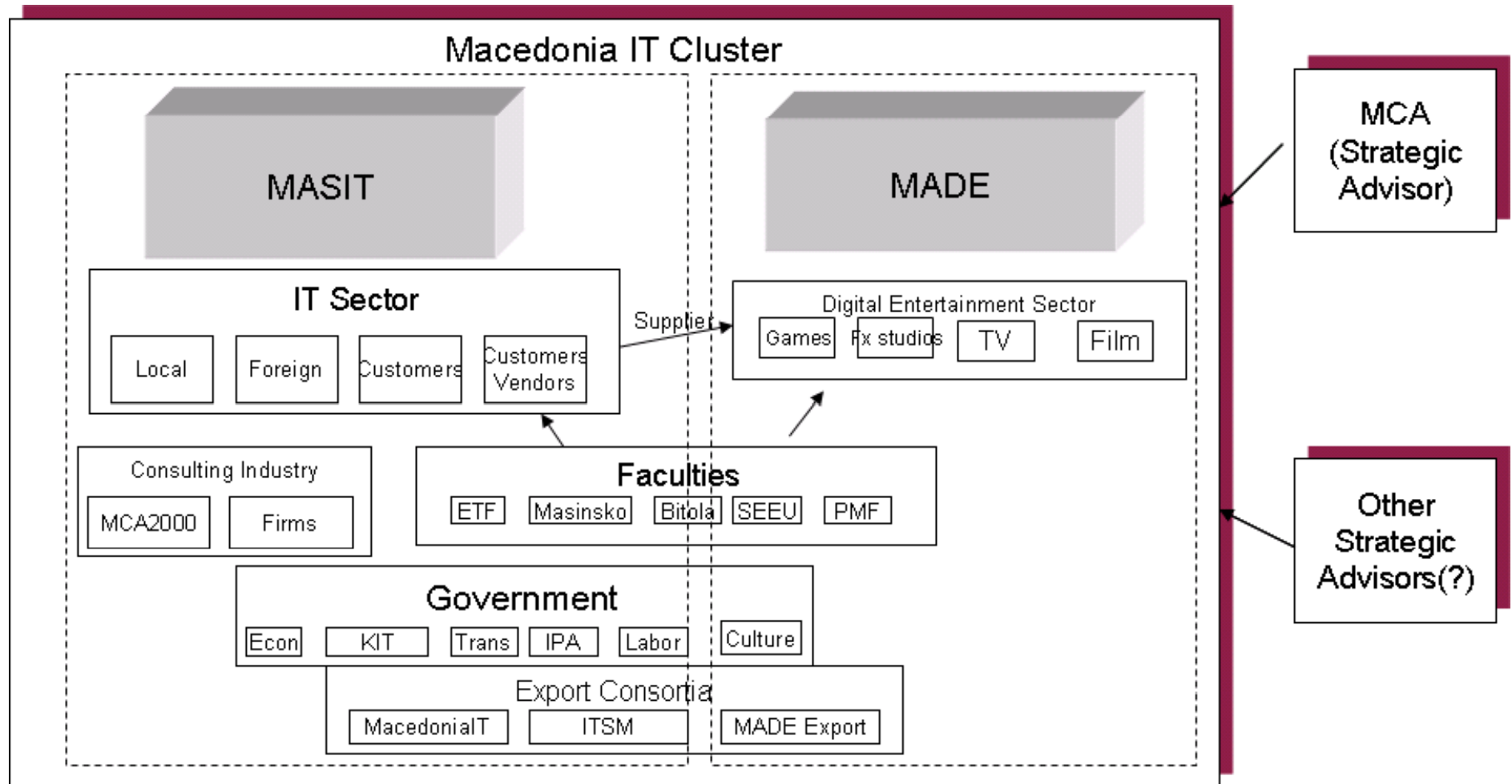
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Who is MASIT

- Macedonian non-profit ICT Institution for Collaboration (**IFC**), established in 2000 by the top 15 IT companies
- Today: 63 top national ICT industry companies, including Microsoft, Oracle, Cisco, HP... +58 ICT Experts Council professionals (individuals)
 - Macedonian NECC (National Entrepreneurship and Competitiveness Council) Managing Board member
 - WITSA (World Information Technology and Services Alliance) Steering Committee member
- **MASIT Mission – to foster the competitiveness of the domestic ICT companies !**

ICT Cluster IFCs, June 2005



MASIT & ICT Cluster (2004)

- **Cluster Dynamism** – too young, taking shape (difficult to assess):
 - Domestic focus
 - Weak horizontal relationships
 - “Copycat”, stand-alone not co-operative firms’ strategies
 - + Higher level of firms’ growth
- **Cluster Competitiveness** = MASIT’s objectives:
 - +/- Analyzing technical trends, establishing technical standards (CMMI, IT MARK, ITIL...)
- **Cluster Development**
 - vision & consensus on actions to perform with all stakeholders

MASIT & ICT Cluster Competitiveness

- **MASIT & ICT Cluster will:**

- Not attempt to position the country as the “Gateway to SE Europe” or “Silicon Valley of the East”

- **MASIT role is far from “trivial” – important player of shaping the potential for upgrading the ICT cluster:**

- MASIT to improve the ability to form alliances and partnerships (factor of competitiveness)
- MASIT to raise awareness of the ICT cluster on a world scale
- MASIT to help the ICT firms to develop critical mass for market niche export-oriented domestic ICT brand(s)

- **MASIT to manage perception as a “Particular Regional Center” for some ICT goods (recognized by Silicon Valley)**

- **IF NOT = ICT Cluster potential limited & locally focused**

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ICT Cluster Competitiveness Factors =

MASIT ACTION PLAN

1. PROMOTION OF INNOVATION & NEW TECHNOLOGIES –
SETTING TECHNICAL STANDARDS (CMMI, IT MARK...),
2. ICT HUMAN CAPITAL UPGRADE – ICT WORKFORCE DEMAND SURVEY - INCREASING IT FACULTIES QUOTAS, ICT QUALIFICATION PROGRAMS FOR UNEMPLOYED & ECDL INTRODUCTION
3. EXPAND THE ICT CLUSTER BY BRAND BUILDING –
IDC ICT INDUSTRY SURVEY - MASIT ICT ANNUAL AWARDS
4. EXPAND THE ICT CLUSTER BY EXPORT PROMOTION –
ICT INVESTMENT FUND, ESTABLISHING MACEDONIAN ICT CENTER OF EXCELLENCE - VARDAR SILICONE VALLEY
5. INTERNATIONAL TRADE AND INVESTMENT LINKAGES –
MASIT IN THE FOREIGN DELEGATIONS – WITSA STEERING COMMI.
6. IMPROVING INFRASTRUCTURE, REGULATIONS & POLICIES –
ICT PUBLIC PROCUREMENT PILOT PROJECT, LABOR BENCHMARK
7. FOSTERING NETWORKS AMONG ICT FIRMS AND PEOPLE –
SEEITA & MASIT OPEN DAYS CONFERENCE, EICTA MEMBERSHIP

MASIT Action Plan Implementing Bodies

- General Assembly elects Managing Board of 15 members – President, Vice-President, 4 Committee's Deputy Presidents
- Institutional Development Permanent Working Group
- Four Operating Committees:
 - Local Market Devel. & Events Planning
 - Competitiveness
 - Education & Workforce Development
 - **Software & IT Services**
- Advisory Board (5), Ethics Committee (5)
- IT Experts Council (58)
- Executive Office professionals

MASIT Software & IT Services Committee

- **Quality Certification Programs: CMMI / IT Mark Implementation in 10 domestic ICT companies by the end of 2008 – 5 already IT Mark certified by February 2007**
- **Training Programs:**, PMI Certification, Product Management & Marketing, Sales...
- **ICT Awards:** introduction of the “MASIT Annual Awards” based on WITSA Annual Awards – “Macedonia – First Wireless Nation” WITSA 2006 Winner

MASIT & IT Mark – Case Study (1/2)

- **July 2005:** First IT Mark Workshop with ECI Center Bulgaria
- **August 2005:** MASIT, ESI Center Bulgaria & USAID/RCI decided to initiate the “IT Mark Certification” project
- **November 2005:** Second IT Mark Workshop with ESI Center Bulgaria
- **December 2005** – 3-day seminar “Introduction to CMMI” with ESI trainer from Bilbao, Spain – 11 Macedonian & 3 Bulgarian companies participated

MASIT & IT Mark – Case Study (2/2)

- **June 2006:** 5 Macedonian SMEs have submitted completed forms to ESI Center Bulgaria
- **August –September 2006:** The 5 SMEs have passed through the IT Mark consulting service conducted by ESI Center Bulgaria – 1 SME Certified
- **December-January 2006:** Re-assessment of the rest 4 SMEs, certified

- **Financials:** the whole process cost 700 EUR/company

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Who is INet Inc. Skopje

- **Macedonian ICT SME since 1991**
- **Value-Added Technology Distributor & Channel Innovation Company**
- **Serves its ICT Business Partners (ISVs, SIs, VARs...)**
- **15 Employees**
- **Annual revenue: 2,2 million USD**

INet Inc. & IT Mark – Case Study

Why not only Software Intensive Organizations, but also a Valued-Added ICT Distributor as INet Inc. is, implemented the IT Mark?

- To improve the management & technical performance
- To gain market recognition for the capability assessed by means of world class models & standards
- Attain a market differentiator

TO BE MORE COMPETITIVE !

The Main Goal

- **To foster the Competitiveness through 3 key internal improvements:**
 - **Understanding our customers**
 - **Positioning the company against our competitors correctly**
 - **Knowing and improving our own capability**

INet IT Mark Certification Process

- **First Appraisal - September 2006:** ESI Center Bulgaria has carried out the first assessment
- **Improvement program – September-December 2006**
- **Re-appraisal - January 2007:** ESI Center Bulgaria has carried out the successful re-assessment

Achieved objectives/Benefits

- **Raised qualification of the core staff through participation in seminars and appraisals**
- **Improved management and technical performance as an outcome of the tutorial provided by ESI Center Bulgaria consultants**
- **Gained Market recognition for the capability, assessed by means of world class models and standards**

Lessons Learned

- Processes are planned, documented, performed, monitored, and controlled **at the project management level**
- Objectives established for the process (cost, schedule, quality objectives) are achieved
- Requirements, standards, and process objectives for the process and work products are defined and documented
- The work products and services satisfy the specified requirements, standards, and objectives...

INet Inc. Quality Methodology Strategy

Intended activities in the next 18-24 months:

- **CMMI level 2 & ITIL v3 (IT Infrastructure Library) – a new certification model for services (starting September 2007)**
- **ESI Center Bulgaria & Donor's support needed**

Recommendation to the Regional ICT Community:

- **CMMI & ITMark - from 'nice to have' to 'must have' for any IT professional organization**
- **To identify IT SMEs from Macedonia, Serbia & BiH (+Montenegro, Albania...) ready for IT Mark – at least 5 from each country, and to attract regional donor community**

ICT Industry & Government of RM 2007

Vardar Silicone Valley – focus on PRIVATE investments in Macedonian ICT Center of Excellence (supported by USAID & Israeli consultants), by partnering with leading Macedonian ICT IT Mark certified SMEs, the international financial institutions who already voiced the readiness to participate in the initiative & the Government of Macedonia

- IT Industry to become an important part in the Macedonian economy – 3% of the GDP by 2010 by
- Supporting one home base industry/cluster that needs ICT capabilities to provide agility, modernization and profitability, and in the same time enabling the export (ex. Agriculture or Tourism or...)

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