



Sistema Económico
Latinoamericano y del Caribe

Latin American and Caribbean
Economic System

Sistema Econômico
Latino-Americano e do Caribe

Système Economique
Latinoaméricain et Caribéen

Presentation: SMEs Competitiveness Development: Structural problems and conditions

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Intra-Regional Relations

*Seminar on mechanisms to support innovation for SMEs in Suriname
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International Seminar on mechanisms to support innovation for SMEs

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April, 2013

**The responsibility to compete successfully,
resides in the organization**

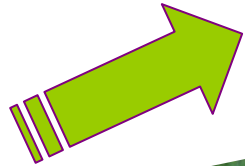
***When the consumers exercise
their purchasing power, with an
enormous diversity of mass
media, the principal factor for
the development, growth and
consolidation of the companies
depends on their satisfied
clients.***



CONTEXT: Traditional Economies

Tangible

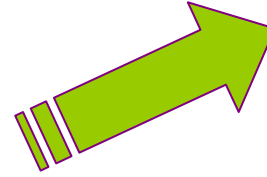
Transformation



AGRICULTURAL



MANUFACTURING



SERVICES

CONTEXT: Emerging Economies



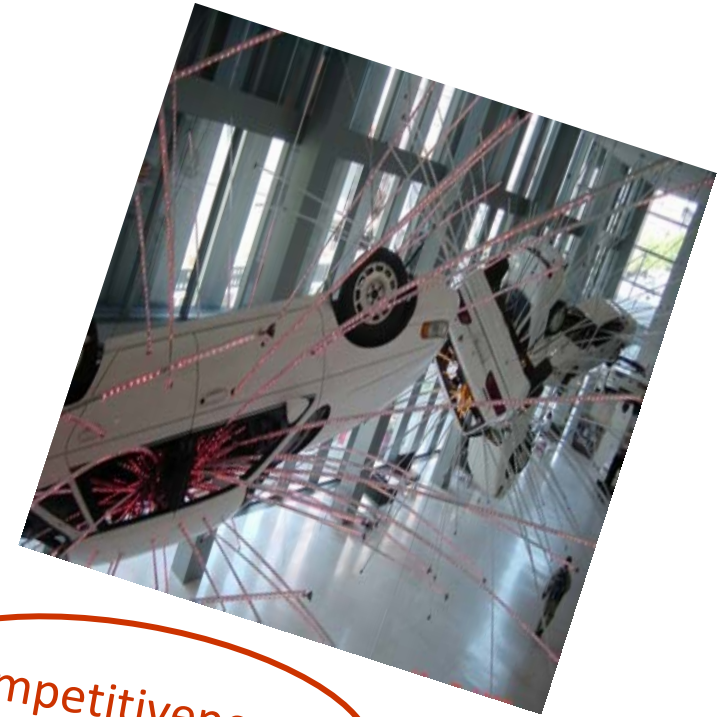
The Challenge: GIVE VALUE TO INTANGIBLES

MANAGING INTELLECTUAL PROPERTY AS A BUSINESS SMEs (and also BIG)














GROWTH

Competitiveness



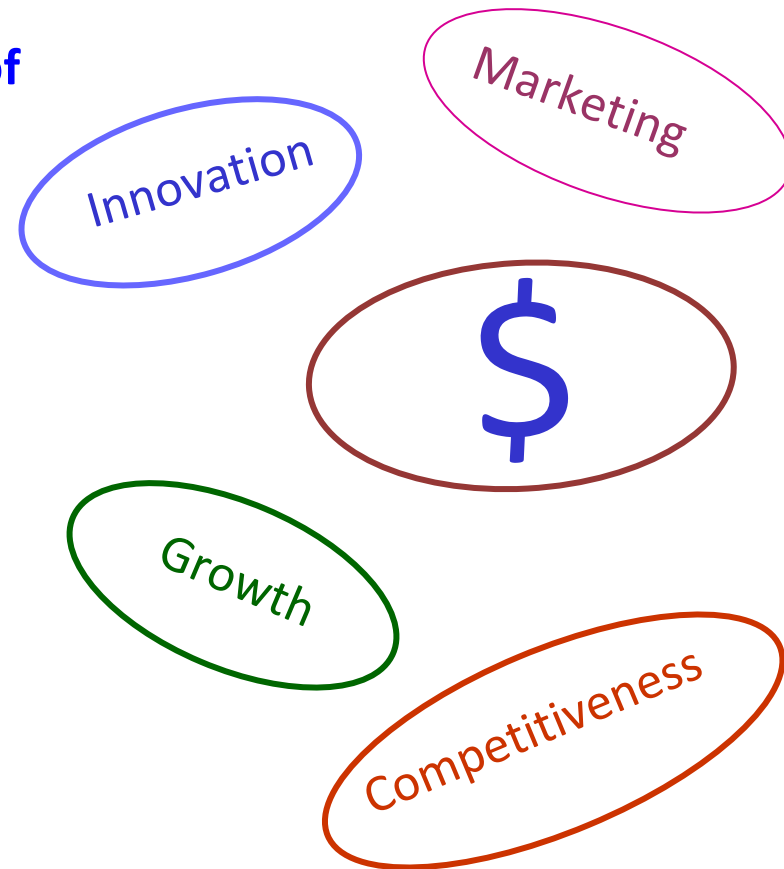
BEST GLOBAL BRANDS 2012

<p>1</p>  <p>+8% \$77,839 \$m</p>	<p>2</p>  <p>+129% \$76,568 \$m</p>	<p>3</p>  <p>+8% \$75,532 \$m</p>	<p>4</p>  <p>+26% \$69,726 \$m</p>
<p>5</p>  <p>-2% \$57,853 \$m</p>	<p>top riser</p>	<p>6</p>  <p>+2% \$43,682 \$m</p>	<p>7</p>  <p>+13% \$40,062 \$m</p>
<p>8</p>  <p>+12% \$39,385 \$m</p>	<p>9</p>  <p>+40% \$32,893 \$m</p>	<p>10</p>  <p>+9% \$30,280 \$m</p>	<p>11</p>  <p>Mercedes-Benz +10% \$30,097 \$m</p>

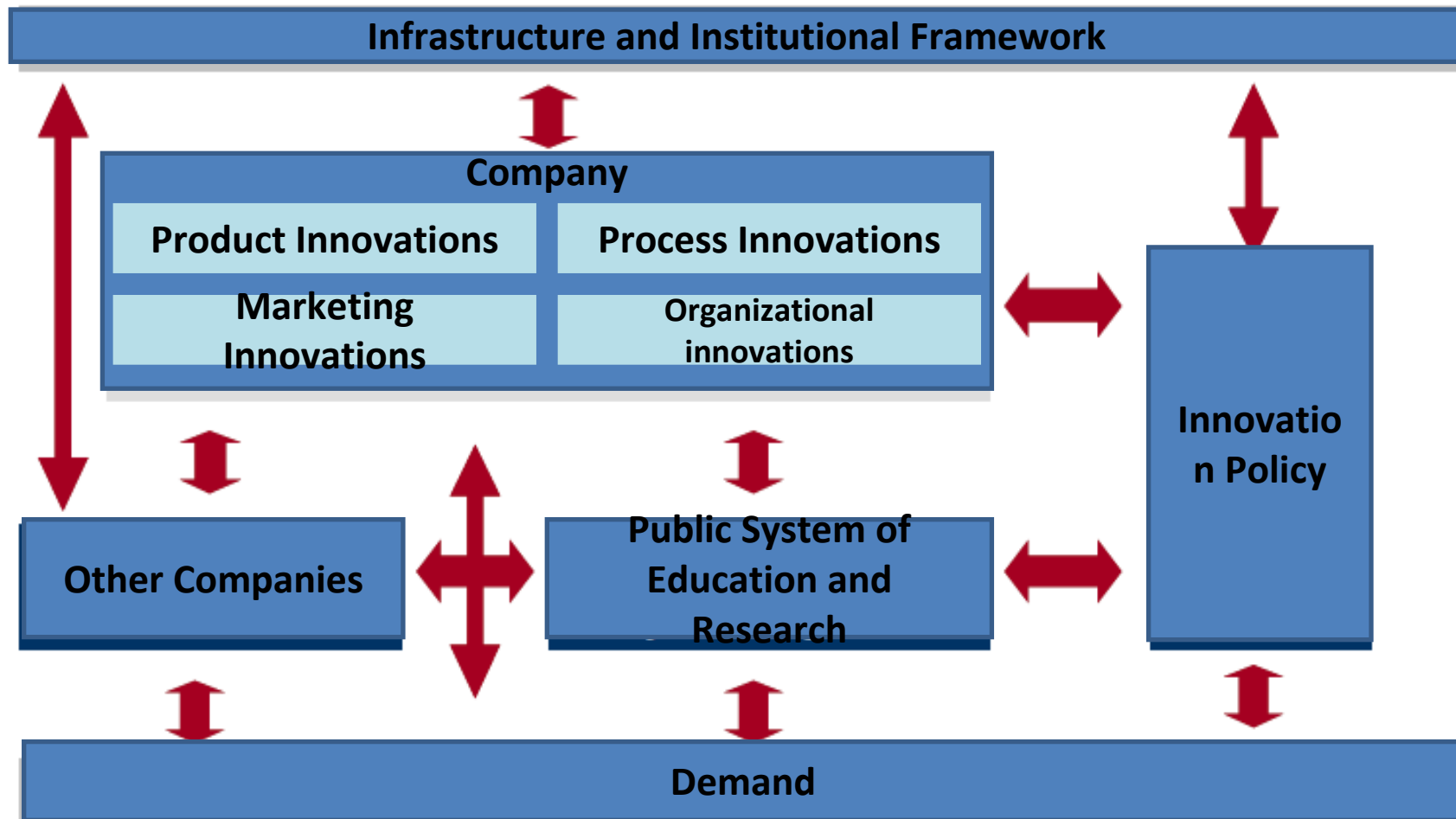
Companies Vision

THE MONEY SPINS THE WORLD

While profit is not the only reason or purpose of business, it is the first and most obvious motivation.



Concept of innovation



How to Innovate

- **The "idea of a billion dollars", or**
- **Small successive major innovations achieved by constant reflection and questioning**
- **What if ...? (What if ...?)**



Competitiveness

Competitiveness is what allows a company to be successful in the world in which it operates.
⇒ Develop **products and services** whose **costs and quality** are comparable or superior to those of its competitors in the rest of the world.

The competitiveness of the company depends critically on its performance



Competitive Companies

PRODUCTIVITY

(Production Process)



EFFICIENCY

**(Process Management and
Customer Service)**



QUALITY

(Product, Process and Service)

Productivity

Relationship between the amount of goods and services produced correctly and the amount of resources (factors of production).

Efficiency:

Relationship between the result achieved and the resources used.

Effectiveness:

Ability to produce a desired effect.



Effectiveness
(¿Qué tan bien?)

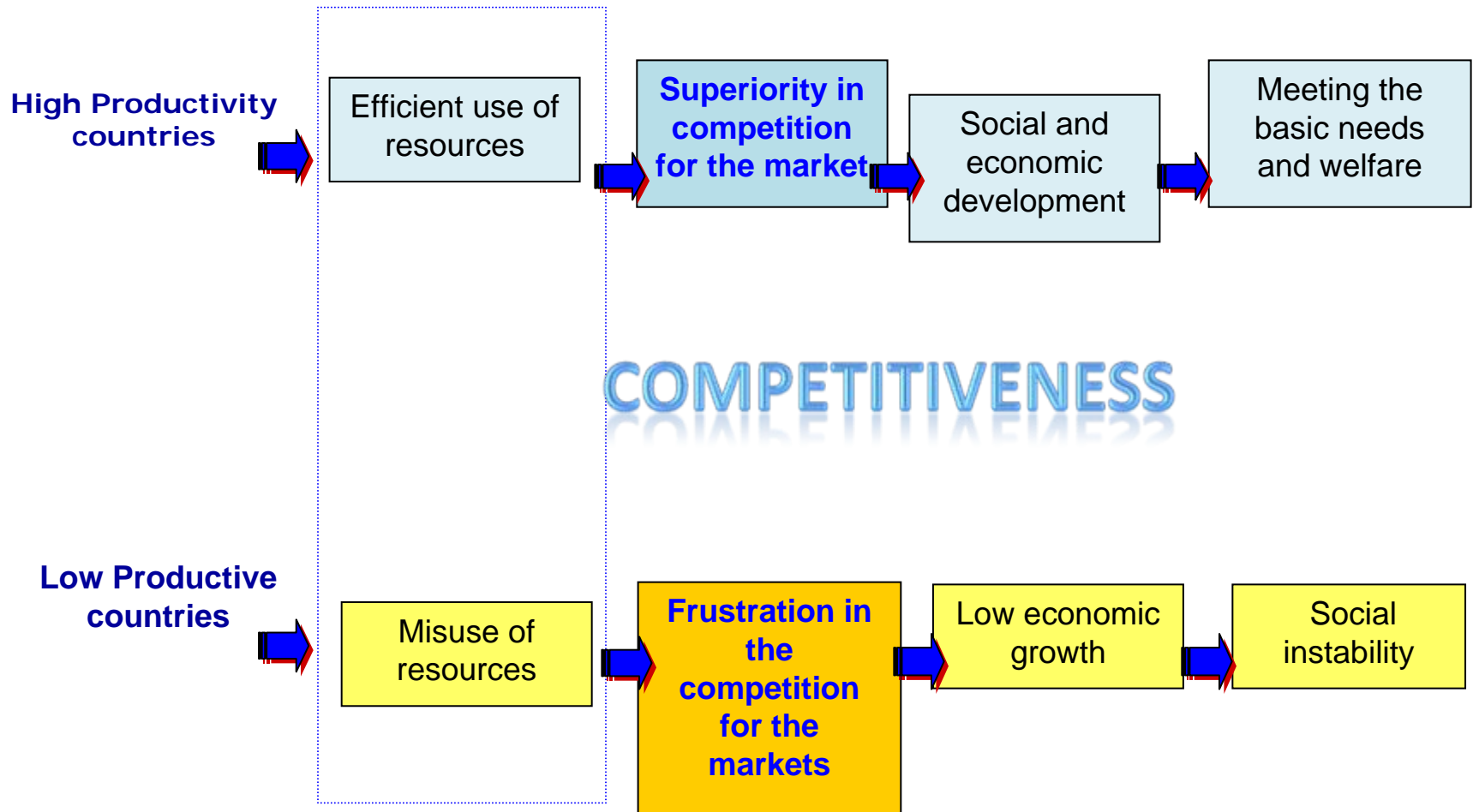
Input (Resources) + Activity = Output

Efficiency
(How?)

PRODUCTIVITY



Productivity - Competitiveness



The major source of productivity is business

An appropriate intervention in SMEs can significantly help improve their competitive position and facilitate its inclusion in value chains.



Innovation and Productivity

Innovation is the creation or improvement of new products, services or business models.

- Ability to bring knowledge to practice problem solving.
- Main factor for the improvement of productivity and competitiveness.
- Up to 50% of the business productivity is due to innovation.

Innovate to Compete

**The new economy is not based on the conventional factors of production : land, raw materials or capital.
The new foundations are:**

- Explotation of Intellectual Capital
- The ability to generate added value
- The development of new talents and abilities
- The degree of humanization of technology and
- Innovation



EXAMPLE: FRANCHISE DEVELOPMENT IN MEXICO CREATING A NEW MARKET

1985 FIRST FRANCHISES.



1994 IP LAWS LEGISLATION.

2004 FRANCHISE ANNUAL REVENUE: 4% OF GDP.



**2011 MARKET VALUE 7% of GDP,
850 thousand direct jobs
and more than 3 million indirect
Mexico 7th world place**

How to stimulate a Knowledge Economy

IP Owners
**MAKE THEM
SELL!**



Consulting and advisory
FACILITATE AND

SUPPORT

- Officials
- Professional
- Linking Centers
- UTT's**
- Legal Frame
- Financing
- Insurance
- Etc.



Companies and
Investors
**MAKE THEM
BUY!**



KNOWLEDGE

I+D+I

Intellectual Property

How to manage knowledge in a knowledge economy?

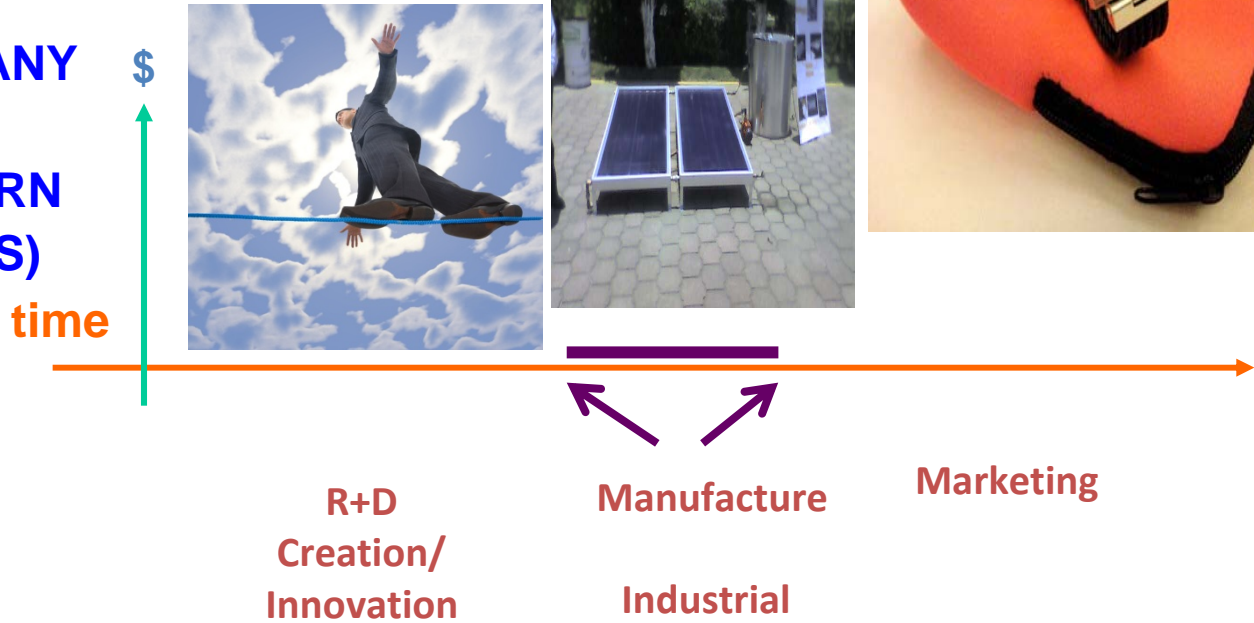


Chinese wagon : 1800 b.C.

How to manage knowledge in a knowledge economy?

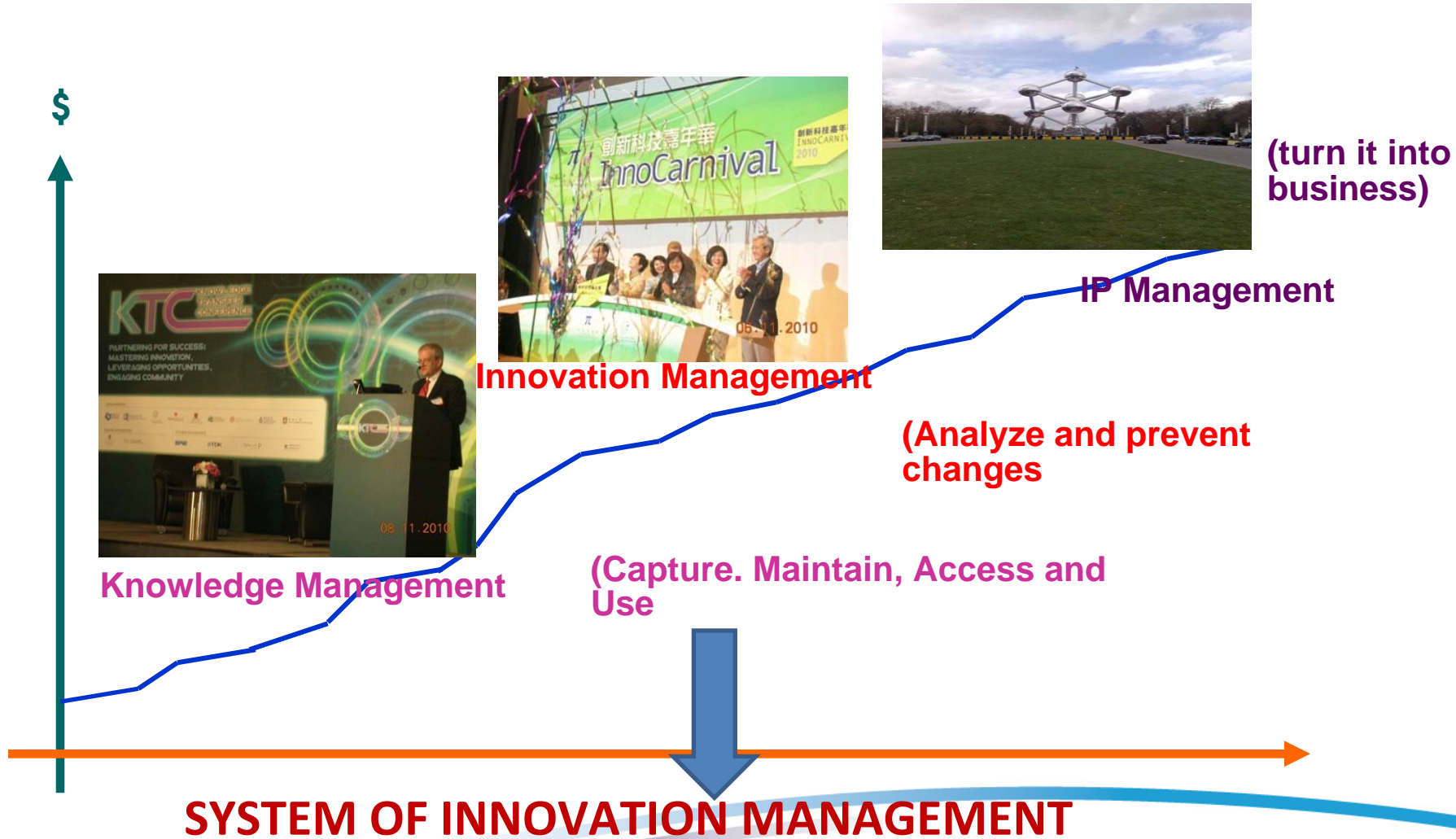
- **BECOME A STRATEGY**
- **INCORPORATE IT INTO THE COMPANY**
- **MONETIZE IT (TURN IT INTO BUSINESS)**

- Industrial Secrets
- Copyright
- Patents
- Designs



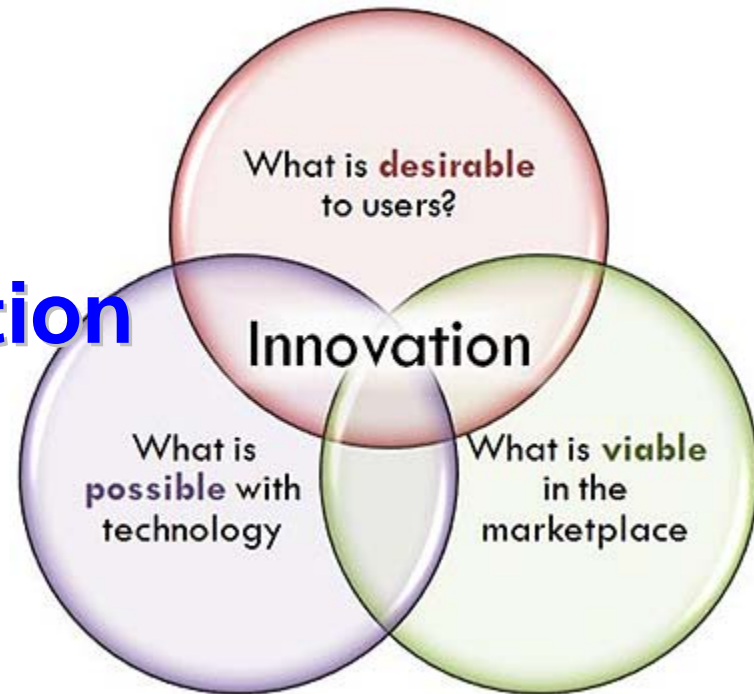
The challenge: Turn It into Business

Developing a business strategy for industrial property

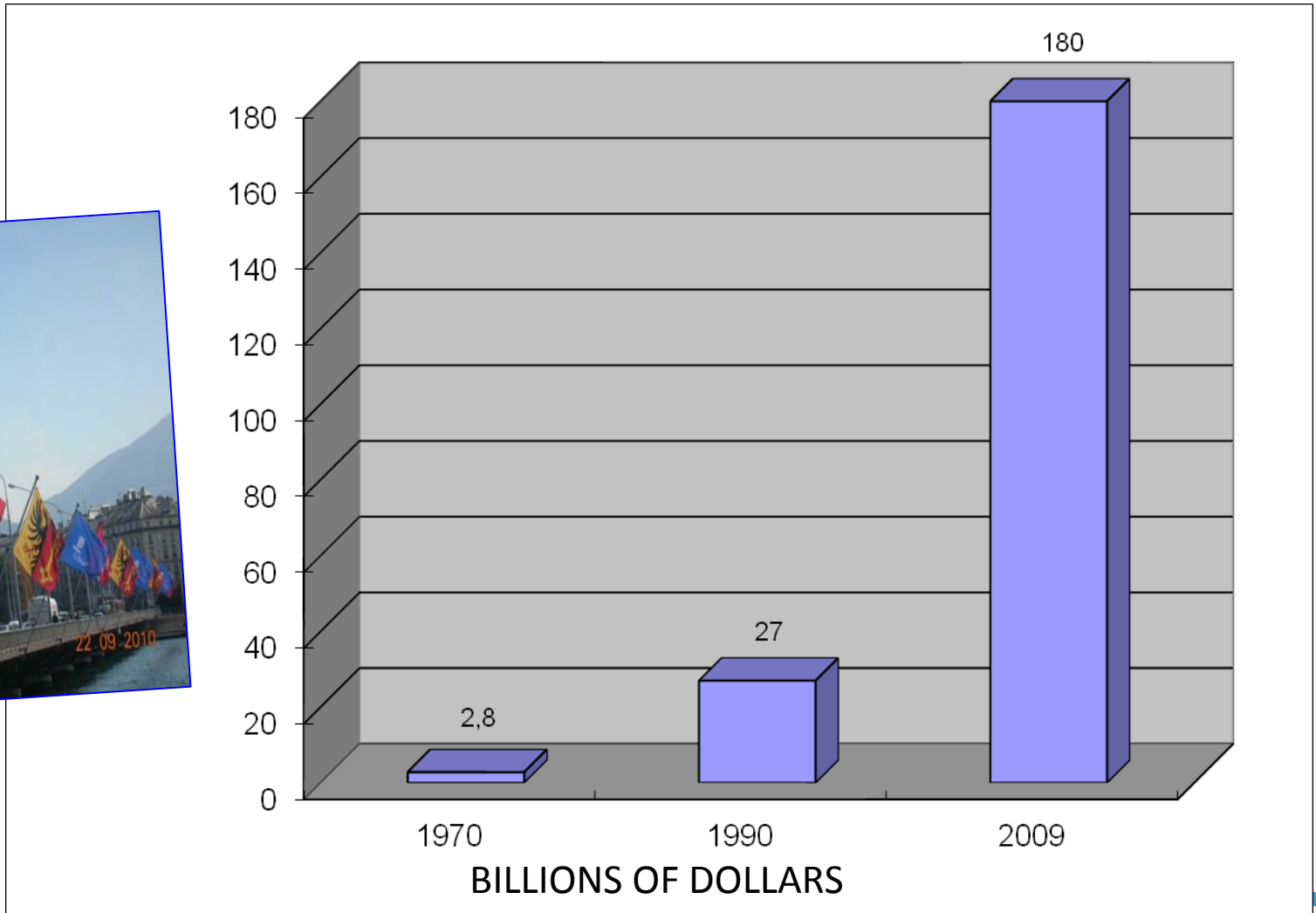


Provoke the Innovation

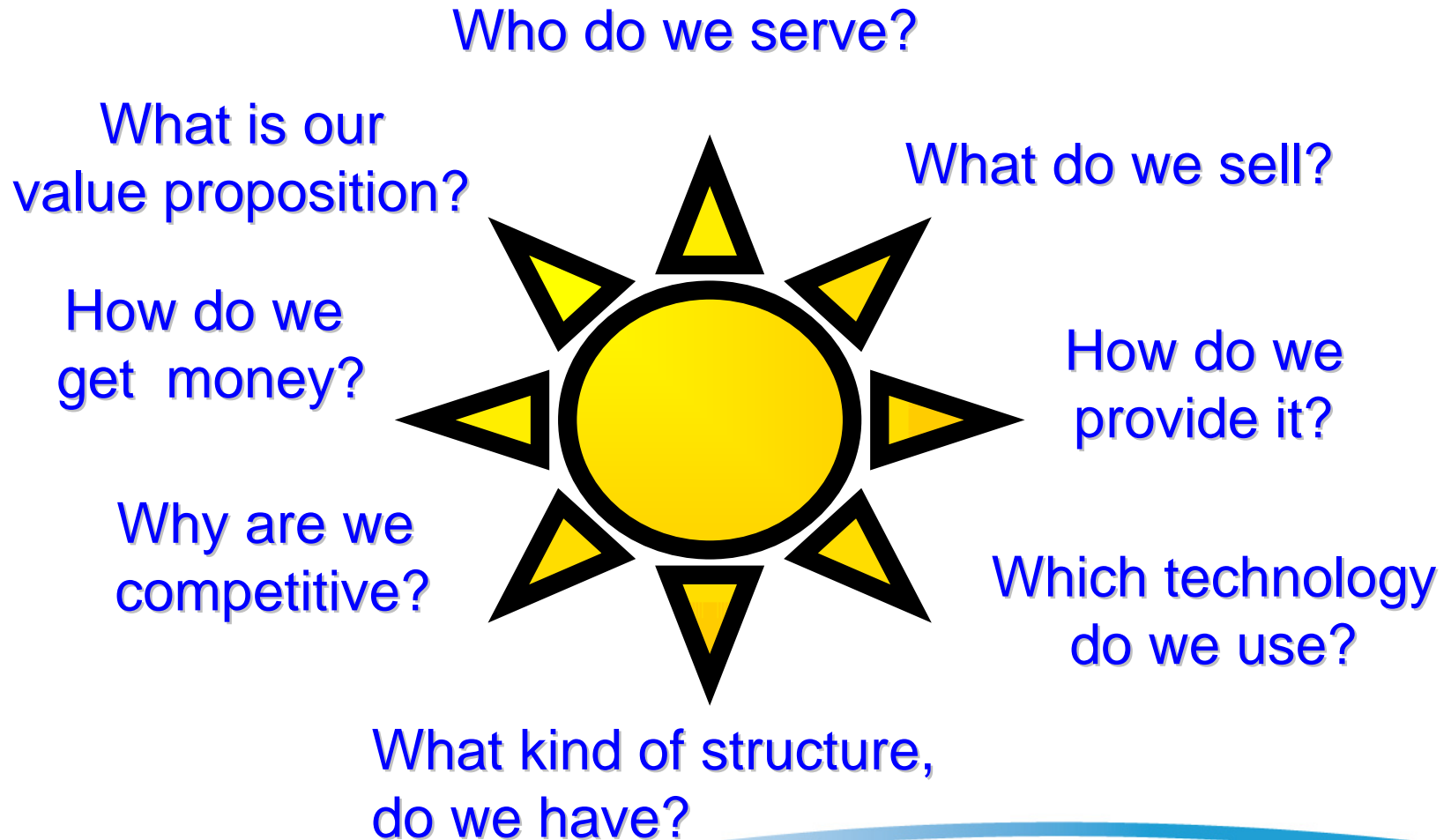
- Listen to your customer
- Play the role of your client: - *If I was your client "What would I get from the business?"*-
- Encourage ideas generation among staff
- What if ...?
- Dare to fail!



Royalties for Intellectual Property



Strategic Innovation Methodology



Proposal

- Innovation is a central issue for the development of the Mexican economy, both to improve competitiveness and to generate domestic added value.
- Multiple programs have been proposed and implemented, reporting in general poor results. Most of them have been raised by the innovation centers, and not from business demand.
- The aim is to propose actions for the **integration of an integibles market in Mexico**, attractive and profitable for companies investing in innovation.

Innovation

- 1. Innovation is "the ability to redefine products, processes or existing business models, so as to provide new value for customers, producing bitter surprises for competition and generate new wealth."**
- 2. Innovation goes hand in hand with the continuous improvement: While continuous improvement is process-oriented, innovation-oriented will result.**
- 3. Innovations may be changes in job practices, to exchange experience and combinations and in many other ways. The experience of the staff is a virtually inexhaustible source.**
- 4. Radical and revolutionary innovations use to come from R & D while incremental usually emerge from practice.**

Reasons for innovation

- **Improves customer relations introducing new benefits.**
- **Allows new sales pitch.**
- **Increase the level of sales pressure on the rate of product substitution.**
- **Improves company image presenting it as active and modern.**
- **Sets entry barriers to competition.**

Types of Innovation

Incremental innovation: Creating value on an existing product, adding some improvement.

Radical innovation: change or introduction of a new product, service or process that was not known before.

Open Innovation: Developments arise from the general public and is distinguished by the open participation of individuals and organizations from around the world.

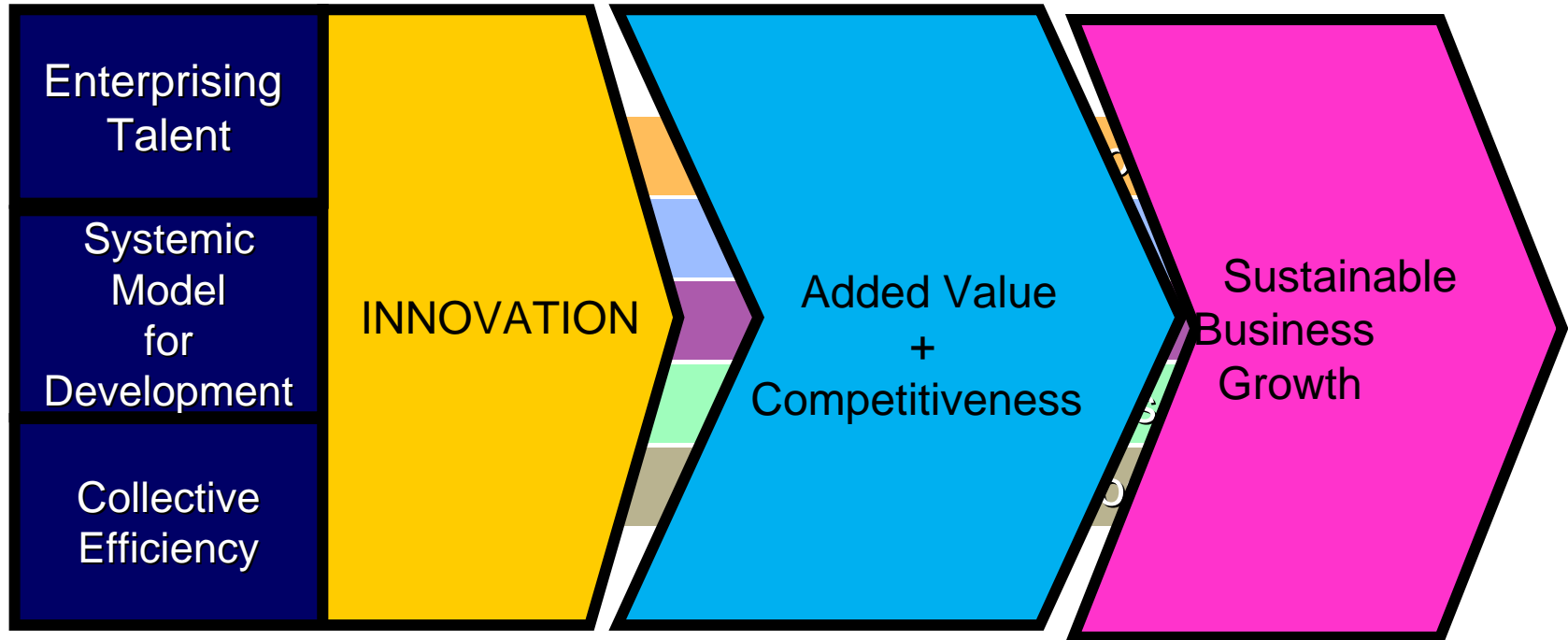
Innovation management: Substantially changes the mode of carrying out the task of management or significantly modifies customary organizational forms and therefore brings advances in organizational objectives.

Software innovation: To streamline and simplify the whole process of innovation management in the company.

Innovation can be done in ...

1. **Product:** significant changes of goods or services.
2. **Process:** significant changes in the methods of production and distribution.
3. **Organization:** implementation of new methods of workplace organization or external relations.
4. **Marketing:** new marketing methods, including design and product packaging, promotion, pricing and services.
5. **All of the above and more.**

Innovation and Development



How to Innovate

Markets Innovation

- New strategies and trade logistics
- Customer service and follow-up
- New forms of distribution
- New methods of promotion and sales
- Penetration into new niches
- Plans to attract new customers
- Actions for brand and products positioning

How to Innovate

Processes Innovation

- New or improved production systems
- Machinery, equipment and production lines
- Supply and inputs control
- Maintenance and upgrade programs
- Security and risk management
- Quality control and systems
- Energy Saving Programs
- Programs to reduce costs

How to Innovate?

Organizational Innovation

- ❑ New or improved management systems
- ❑ Purchasing, sales, accounting, finance
- ❑ Development of new skills
- ❑ Incentives to productivity
- ❑ Procedures assessment systems
- ❑ Productivity improvement plans
- ❑ In-house collaboration

How to Innovate

Products innovation

- New or better goods or services
- Increase added value
- New or better design (goods)
- New or better concepts (services)
- Improve offert to clients
- Improve adaptability, performance and quality

How to Innovate

Innovation in Business

- Business diversification
- Value chain integration
- Strategic alliances
- Create Franchises
- Create derivative companies (spin-offs)
- Buying and selling, licensing or obtaining patent royalties
- Co-investment projects and / or collaboration

However ...

- Despite all these benefits, companies in Mexico do not consider innovation as an investment or as a regular program.
- **The reasons for this behavior can be:**
 1. **There isn't a market for the purchase and sales of intangibles** (companies buy technology and machinery but no methods and production processes).
 2. **Accounting systems don't make explicit investments (costs) of innovation or additional income derived from them.**
 3. **There are not enough supports to ensure investments in intangibles** (insurance, industrial protection. Lawyers, etc.) **or confidence in the judiciary.**

Proposal

COMPITE is a specialist in the development of management systems in enterprises in order to improve quality, productivity and employment levels, while achieving a more profitable company.

•Our proposal is to develop a new service for the implementation of an innovation management system (IMS) in organizations with three objectives:

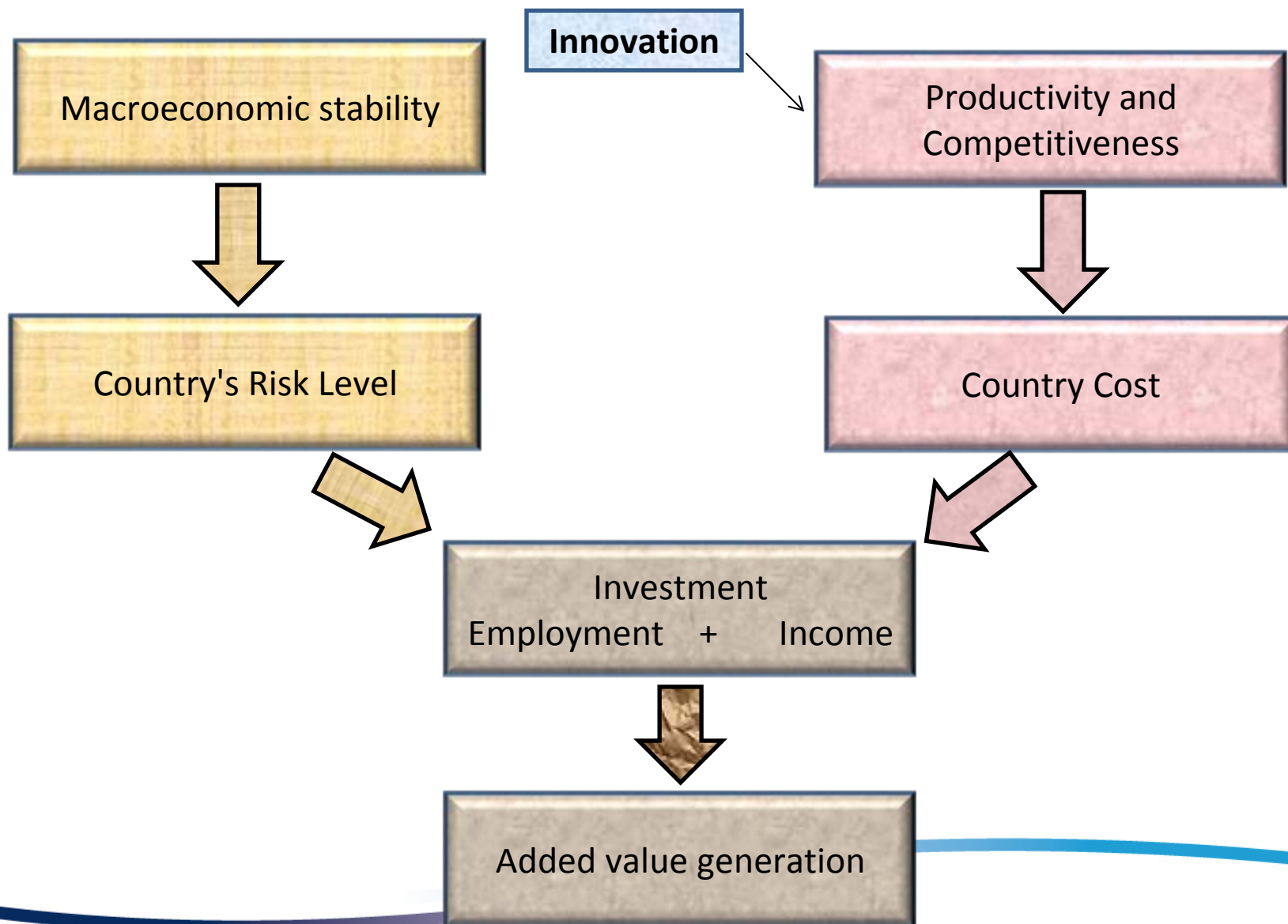
1. Identify improvements (innovations) existing in the company and generate a technical and accounting documentation.
2. Identify technological and operational problems that limit the development and competitiveness of the company, set a technical definition and locate potential developers of the solution.
3. Develop a business plan to integrate the purchasing and sales of intangibles for the business.

Proposal

Objectives of the Innovation Management System

1. Raise awareness in the businessman about the return on investment in innovation;
2. Promote the incorporation of all personnel in the innovation activities;
3. Support modern innovation schemes like open innovation, competitor collaboration and partnership with Research and Technological Development Centers;
4. Facilitate the incorporation of innovations in the financial statements as part of the assets of the company;
5. Promote the purchase / sale of knowledge as a strategic part of the business;
6. Systematize and document the innovation processes and their outcomes within the company.

Competitiveness Foundations

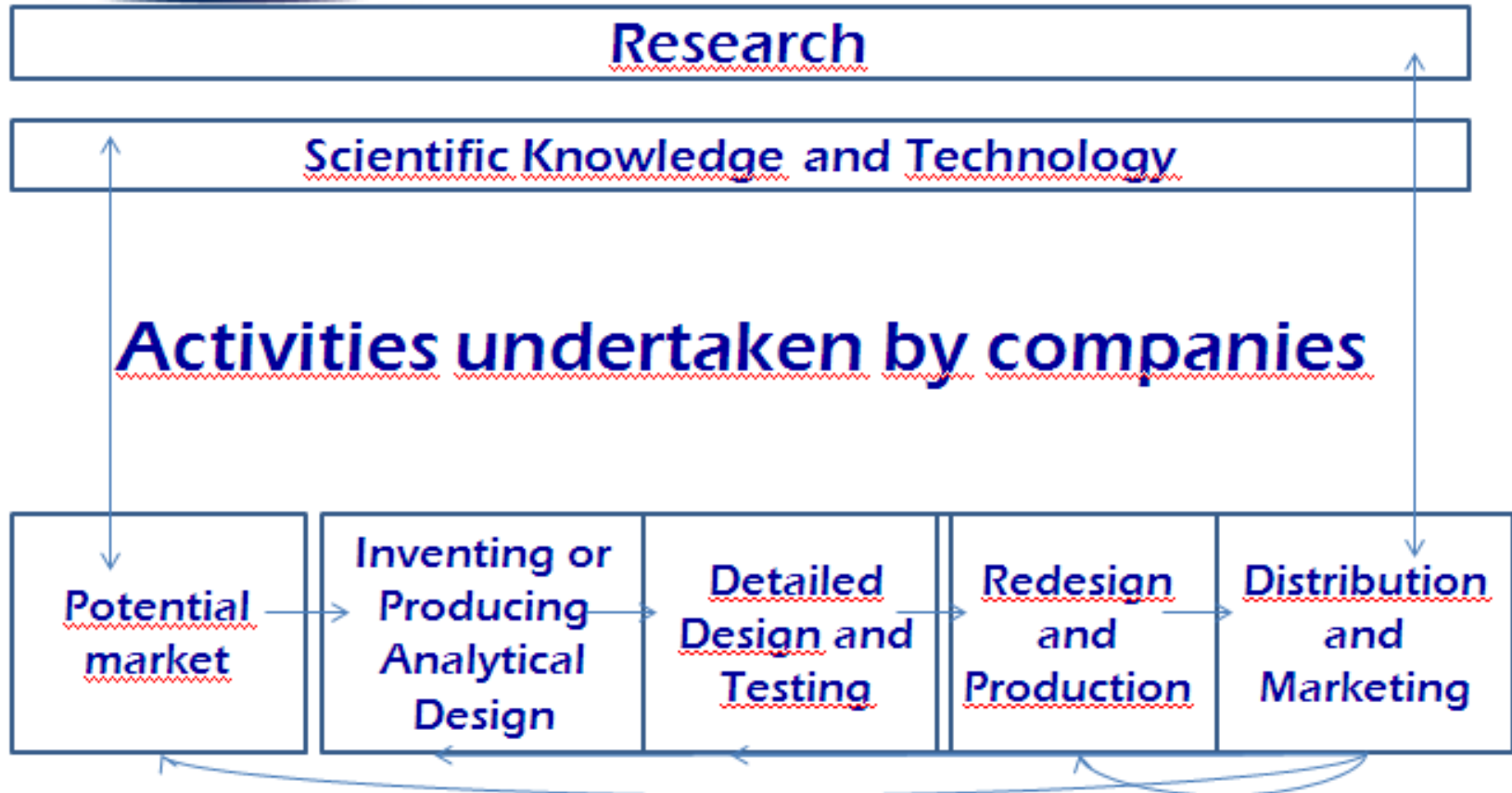


New technologies for New challenges

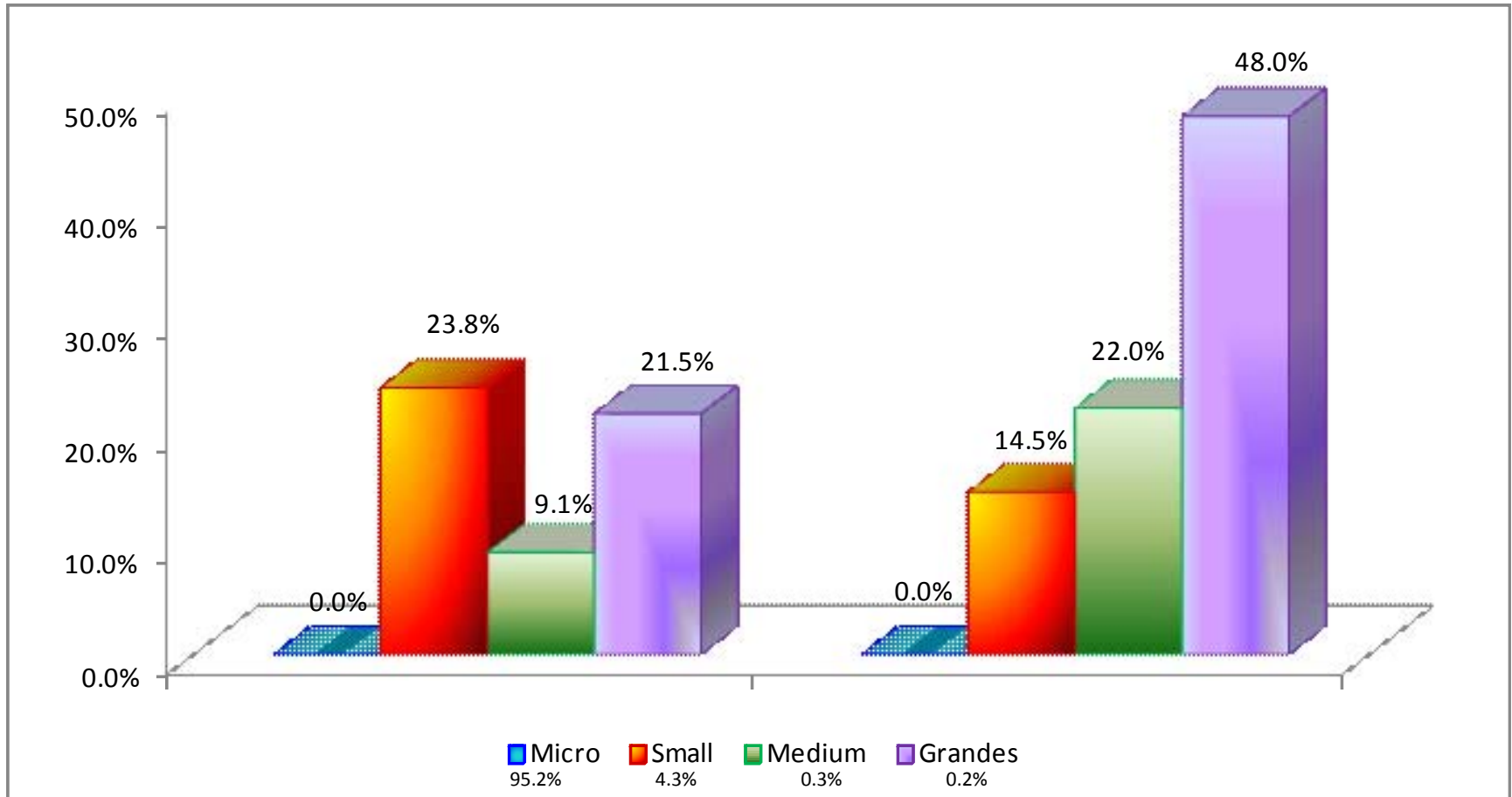
In decades to come as global population and material demands on the environment continue to grow rapidly, new technologies will help to deliver sustainable growth

- **On Line electric vehicles**
- **3-D printing and remote manufacturing**
- **Energy-efficient water purification**
- **Self-healing materials**
- **Precise drug delivery through nanoscale engineering**
- **Carbon dioxide (CO₂) conversion and use**
- **Enhanced nutrition to drive health at the molecular level**
- **Organic electronics and photovoltaics**

Model: Chained links of the innovative process

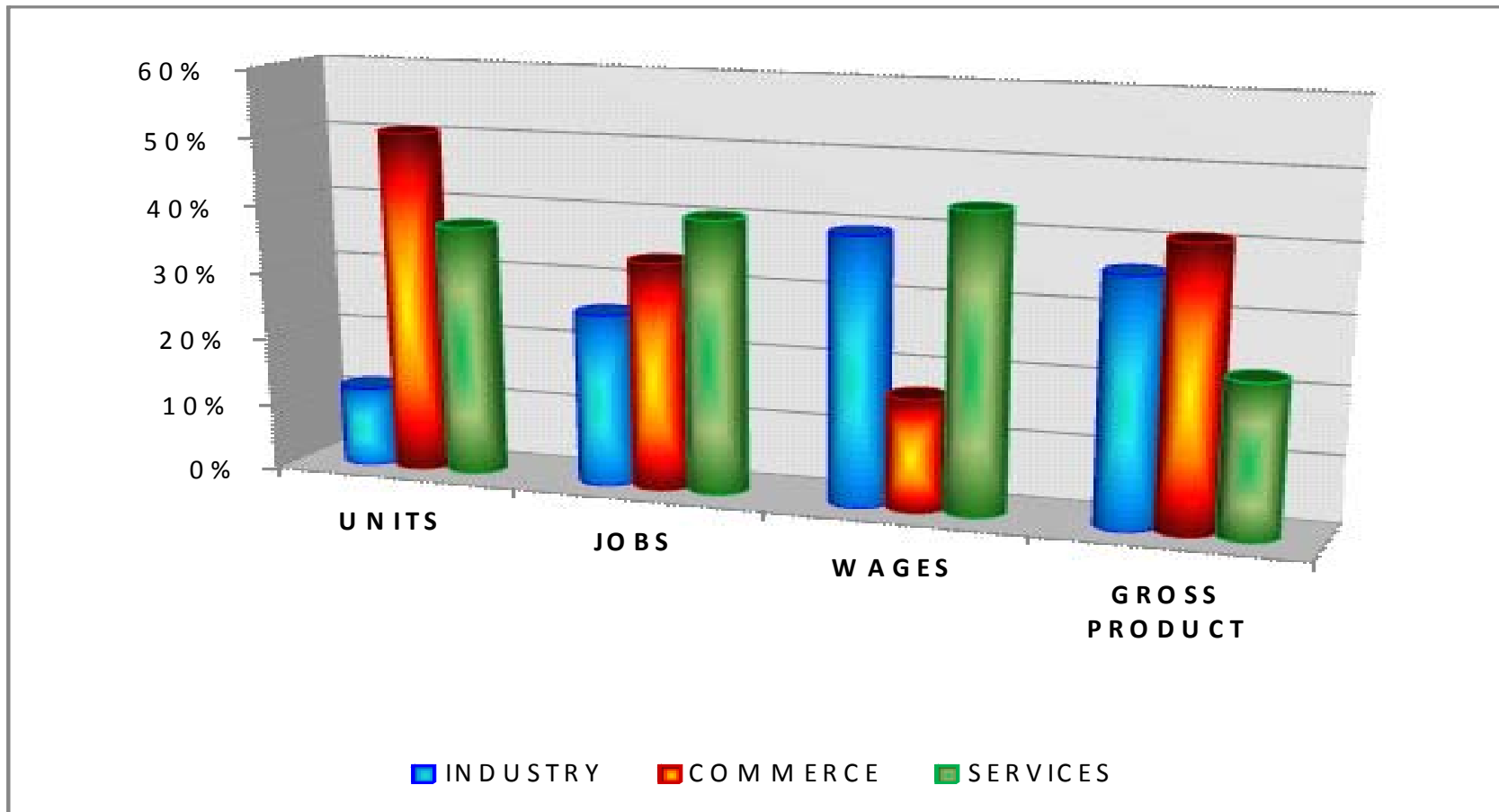


MSMEs in the Mexican Economy



Source: Censos Económicos 2009 (Inegi 2010)

Sectors Distribution



Source: Censos Económicos 2009 (Inegi 2010)

Total economic units, including activities conducted in 2008.

Presence of Mexico within the international context

- 8th largest exporter
- High technology content in manufacturing exports
- National value added between 20 and 30%
- Value chains are not sufficient to provide inputs

Mexican MSMEs are not reaching the levels of innovation, productivity and quality required

According to OECD statistics, Mexico ranks 30th among its members in terms of patents, scientific, technology-based businesses, research, sources of employment for scientists and percentage of gross domestic product (GDP) spent on Research & Development (R & D), showing a large lag in this regard even in relation to other developing countries like Brazil and China.

Development of Value Chains

Goal: To generate greater added value in manufactured goods, more jobs, better wages levels.

The suppliers have opportunities to improve equipment management and innovation.

The public sector must take actions and policies to promote the integration of production chains.

● **Enterprises and value chains in the electronics industry in Mexico**

The current development of the electronics industry in Mexico includes the following manufacturing processes:

- a) the new industrial division of labor and business;
- b) industrial upgrading;
- c) differentiation of production and exports, and
- d) formation of value chains.

“Examples: Value Chains”

Comparison between traditional business relationships and value chains		
	Traditional	Value Chains
Shared Information	Scarce or None	Wide
Goal	Cost / Price	Cost / Quality
Orientation	Commodities	Differentiated product
Power	From supply	From demand
Organizational Structure	Independent	Interdependent
Philosophy	Auto- optimization	Chain Optimization

Average results obtained in COMPITE Workshops

Reengineering Workshop			
Productivity (Piece H/H)	Response time (Minutes)	Stocks (Piece / Prod)	Facilities (m ²)
80.33	-49.73	-50.60	-27.88

Management Workshop				
Process time	Efficiency (+)	Service Capacity	Quality Index	Cost/Benefit
-31.08	53.48	49.73	24.50	-36.73

Logistics Workshop			
Cycle time (minutes)	Stocks	Service Level	% Cost Reduction
19.39	8.21	3.60	-1.59

Assessing the impact in the medium term consulting services in SMEs

In all its services, COMPITE makes a service satisfaction survey and calculates 'hard' indicators. In the search of understanding the permanence and variation of the results in the long term (1-3 years), in 2012 the Institute of Engineering, of the UNAM was appointed to present an independent survey among the MSMEs, customers of COMPITE.

Assessing the impact of a program to support MSMEs means to answer these critical questions:

1. What are the direct and indirect impacts associated with the results achieved by the intervention / business support?
2. At what extent the company improved in direct and indirect impacts as a result of the intervention / support?
3. If the company had not received the intervention / support, what would have been its behavior in the same effects?

Impact Assessment

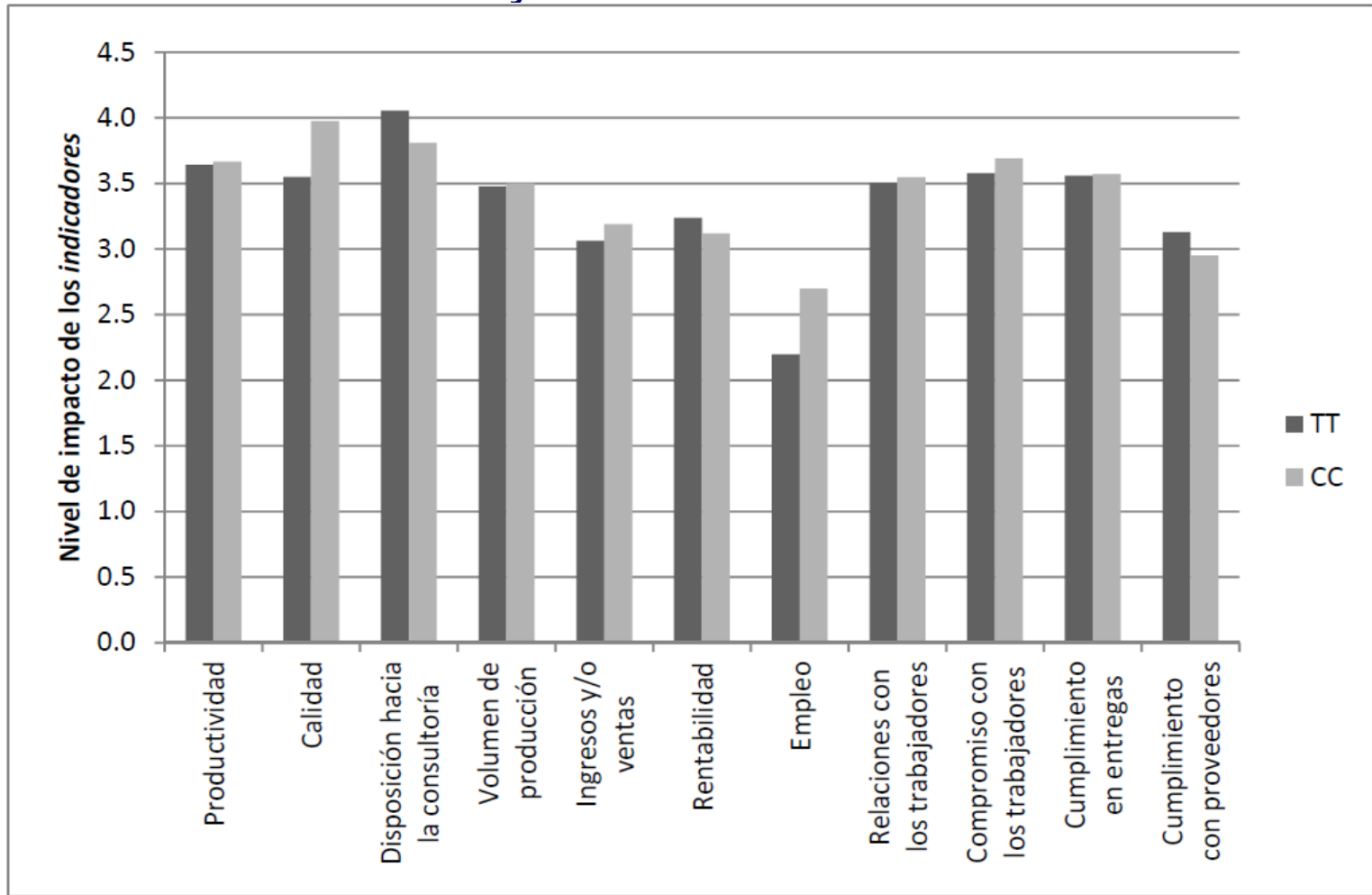
Indirect impact: unintended effects of the program, the impacts associated with direct and / or service features.

For example, the increase in productivity leads to greater production capacity, if this ability is not accompanied by an expansion of the market, it could cause a drop of employment.

Conversely, if the increase in productivity is accompanied by an expansion of the market, the revenues grow and there is a positive effect on the wages and salaries.



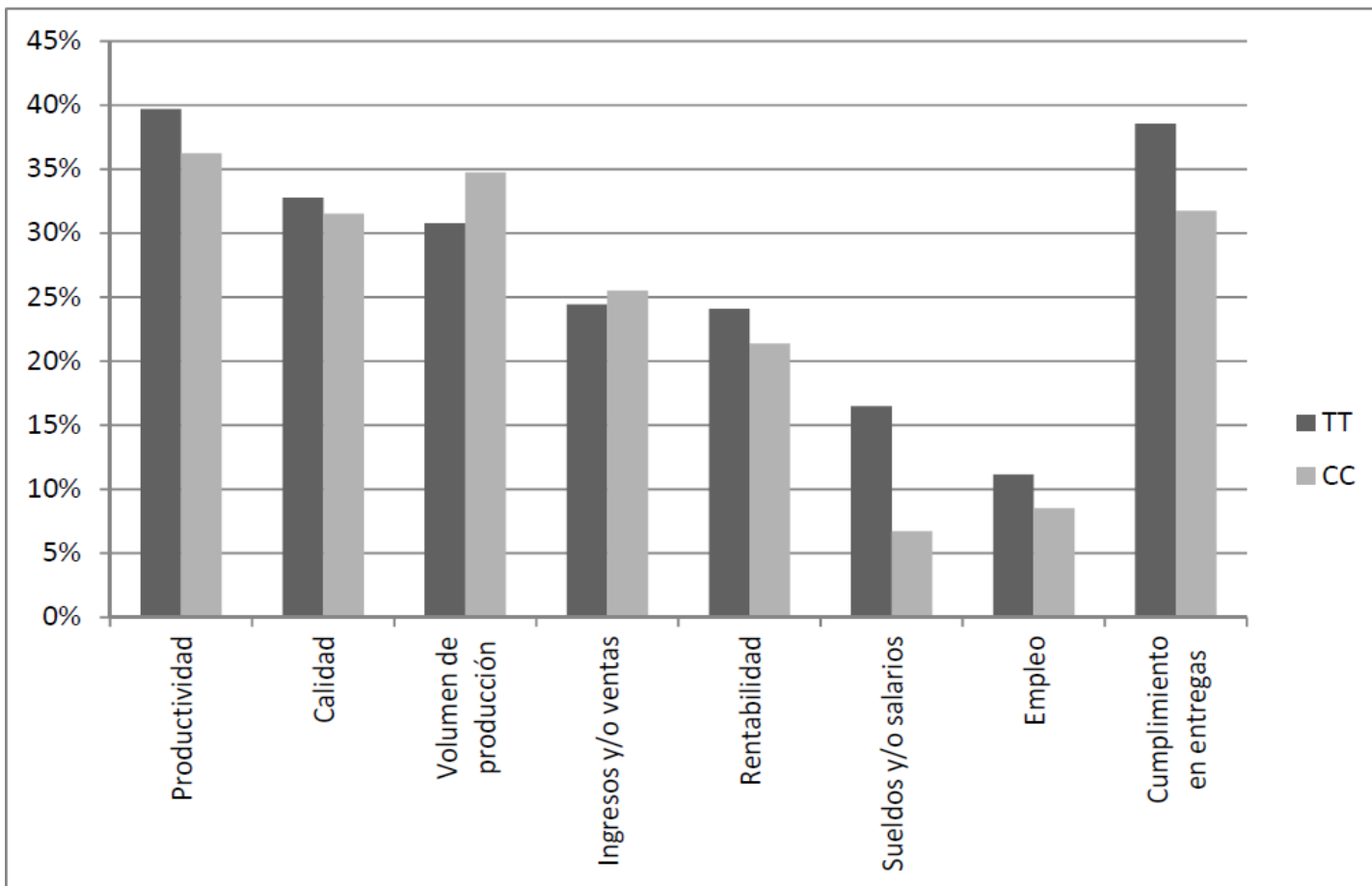
Relevance of the impact of consultancy services provided by COMPITE



For the evaluation of the impact indicators used the following scale:

1 = no impact, 2 = low impact, 3 = Average 4 = impact high impact, 5 = very high impact

Percentage changes associated with specialized consulting services



The interviews also identified the percentage change in the companies registered during the period between the start and end of the services offered by COMPITE

Comparison with national statistics indices

- Workshops s(**WS**) services generated in a short period, almost 13 times the annual percentage increase recorded in the average productivity of national manufacturing activity. As for salaries / wages, companies register with growth intervened 10.3 times higher than the annual average of all manufacturing firms in the country.
- The consultancy service (**CS**) (it is delivered during a period between 6 and 12 months), companies succeeded intervened multiply by 11.8 times increase in productivity recorded annually on average national manufacturing activity. In salaries / wages, helped to record an increase 4.2 times higher than the annual average of the manufacturing companies.

Num.	Indicator	Changesby W S	Changesby CS	National Change 2010-2011 *	National Change annual average**
1	Increased productivity	39.70%	36.20%	6.20%	3.06%
2	Increase of salaries	16.50%	6.70%	3.20%	1.59%

* Corresponds to the cumulative change over the period 2010-2011

Corresponds ** average annual change over the period 2010-2011

Source: Interviews and INEGI, Monthly Industrial Survey.

COMPITE experience shows that productivity is essential for MSMEs to improve significantly.

The excellent results of the evaluation if they could be generalized, could significantly help to solve the old problem of lack of employment, among others.

Development Effectiveness Overview

The IDB's Development Effectiveness Framework is yielding positive results.

- Infrastructure Projects: transport, water, sanitation, solid waste, energy
- Modernization of the State: management of public expenditure, citizen security, strengthening state institutions
- Productivity: agricultural development, financial services
- Social Services: education, social protection

Mexican Entrepreneurship Prize 2012

- To award the competitiveness, vision and potential of entrepreneurs
- Drive en entrepreneurship culture
- Foster feasible projects for the creation of more and better business, more and better employments

Formation and strengthening of organizations specializing in business development

- It is recommended to strengthen the support instruments like the National Institute of Entrepreneurship and SME Fund, and to establish a national development policy and support organizations that provide high efficiency and quality to MSMEs in México.

Certification Policy and Professionalization of Consultancy

- Having adequate certified personnel to ensure the quality of work offered
- Services for MSME development and production chains, must ensure strict quality control and certification record of those organizations with experience, technical ability and integrity is necessary to guarantee the success of interventions.

Public Sector Opportunities

Local content in tenders for the development of domestic suppliers

- public procurement is important to support the development of national industry
- it is recommended to incorporate a percentage of domestic suppliers in government procurement, such as equipment, machinery, engineering, and construction projects.

Orient public tenders to domestic suppliers

1. Fractionating large tenders

- Facilitate the participation of SMEs
- Make explicit the total costs of the consumed goods

2. Clear-up purchasing criteria

- Selection criteria for quality, service and innovation rather than price

3. Establish equivalent financing terms

- Rate separately the financing of goods, products or services purchased.

Formation of an intangibles market: Knowledge and Intellectual Property

The marketing of intangible assets (intellectual property, production methods and organization, business models, etc..) Is the most value-added business on the planet.

In Mexico we confront some difficulties:

- Insufficient experience and knowledge of financial accountants to make explicit the actual cost of intangible assets
- Problems to assess and commercialize intellectual property, due to lack of evidence to value, protect, and document it
- The improvements are not recorded, due to lack of confidence in companies and agencies to document, process and protect intellectual property

Innovation is the task of companies

We need effective policies of innovation seeking to increase productivity in all economic sectors, with emphasis in the areas of greatest potential for growth

- To strengthen research, technological development and innovation in order to reach 1% of GDP.
- Separate I & DT of innovation, as the latter relates to improvements in processes, materials, products, business models and management companies that can be perceived by the user or buyer as a real improvement.

Thank You

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