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**EXPORT OF SERVICES: HYPE OF HIGH POTENTIAL?  
IMPLICATIONS FOR STRATEGY- MAKERS**

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**The Argentine Software and Computer Services Industry:  
Still an Opportunity?**

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## **THE ARGENTINA SOFTWARE AND COMPUTER SERVICES INDUSTRY: STILL AN OPPORTUNITY**

### **1. Current Scenario**

The S&CS (Software and Computer Services) sector is a segment within the so-called Information and Communication Technologies (ICTs).

The Argentine S&CS sector has developed only recently and it was recognized as an “industry” by Law 25856 enacted in January 2004. Therefore, data on the sector are often scattered, which renders their analysis more difficult.

One of the strategies designed by the Argentine Government to increase investments in and competitiveness of this sector has been the creation of National Industrial Competitiveness Forums. This programme was implemented by the Secretariat of Industry, Trade and Small and Medium Enterprises to generate active policies that will contribute to developing the dynamic competitive advantages of different industrial sectors - thus increasing the unit value added of goods and services involved- their export, the ensuing employment and local productive chain. This work is based on a private-public dialogue and cooperation effort involving companies and associations in this sector, as well as Universities and Civil Society Organizations.

Forums are not an end in themselves, but constitute a useful tool to provide companies with access to the instruments now available from the State, in addition to setting strategic and instrumental goals and proposed actions underpinned by a sound technical background.

Along these lines, these tasks are not intended to act as Government’s sole decision-making and action route, but to provide the positive synergy that results from the interaction between the public and private sectors, and their commitment. Moreover, these forums act as coordinators and facilitators of the joint task undertaken by the various government agencies and the private sector to render the actions to be implemented sufficiently consistent.

Software and Computer Services is one of the nine chains selected that offer potential comparative advantages and may, in due time, become sustainable and competitive productive blocks. Operating and executive limits have also been assessed to consistently implement this program.

According to information supplied by *Fundación Ariel* (Ariel Foundation) in the “*Guía Sectorial para Empresarios MIPyMES*” (“Sector Guide for Micro, Small and Medium Sized Businessmen”) sales from this sector are in the range of USD 1.1 billion and account for 0.7% of GDP. The sector grew by 20% in 2004 vis-à-vis 2003, and employed some 40,000 people. As regards their source of capital, 34% of these companies are domestic, while 66% are foreign-owned.

A survey conducted in 2000 shows that the vast majority of firms engaging in this industry have been doing business for a limited time (11 years on average). Sixty-five per cent of them were created after 1990, while there is a small number dating back to before the 1980s. This last group includes hardware and telecommunications companies.

As noted by the Software Industry Competitiveness Forum, companies in this sector share the following characteristics:

- A relatively small number of large firms, mostly foreign-owned, which engage mainly in marketing foreign products and providing computer services.
- A relatively small number of medium-sized domestic firms that develop software and computer services for the business management area.
- A large and heterogeneous set of small domestic firms (many of them very young) engaging both in local software development and in the supply of various computer services.

Local firms have taken advantage of their condition to develop market segments related to accounting and business management packages. They develop tailor-made applications that adapt to local requirements. There is another market niche, that of innovative products destined to both the domestic and foreign markets, that these firms, especially those owned by young entrepreneurs, have made the most of.

A SWOT analysis of the S&CS sector shows the following:

### **Strengths**

- Highly skilled labour: The Argentine S&CS sector has access to numerous highly skilled human resources that enjoy recognition both domestically and abroad.
- Technology Clusters: Their development allows innovation and knowledge to spread fast. The Argentine S&CS sector is divided into different clusters, by region.
- Sound knowledge infrastructure and universities.
- The sector generates a positive spill over to other industries, as its development is based on innovation capabilities and on the development of human capital.
- High-standard creativity and design.

### **Weaknesses**

- Insufficient financing.
- High volatility given the fast and constant technology changes typical of this sector.
- It calls for permanent investments to update knowledge and technologies.
- High telecommunications infrastructure costs.
- Not clear about industrial/intellectual property rights issues.
- Insufficient positioning in English-speaking markets –the key foreign market.
- Little promotion of vendors in this sector.

### **Opportunities**

- Innovative promotion legislation and sector-specific facilities.
- Inclusion of this sector in the political agenda.
- FX Exchange rate and labour costs: After the peso devaluation, manpower in this sector became highly competitive when compared to global markets, thus leaving it at an advantageous position to compete on a cost basis.
- Significant demand for new technologies at a domestic level, which fosters local development. A further advantage is the closeness to the national character and the ability to better respond to domestic market needs.
- Developing market: The software industry developed only recently in Argentina, so there are manifold market segments and niches yet to be developed.
- Positive attitude towards new technologies: In Argentina, the extent of market penetration of new technologies closely resembles the situation in developed countries such as the USA, the largest world manufacturer, and some EU nations.
- University-business cooperation initiatives.
- Significant development of SME vendors serving large multinational firms doing business in Argentina.
- Extended use of Spanish in other key markets, such as the USA.

### **Threats**

- Need to adapt software developed for local firms to other markets' requirements, especially non-Spanish speaking ones.
- A narrow-sighted investment in education that widens the gap with developed countries.
- The cost of certifying under quality standards, a must to enter certain foreign markets.
- Language barriers.
- High cost of telecommunications infrastructure.

## **2. Export Strategy**

The huge export potential of the existing S&CS sector should also be developed.

Argentine S&CS exports totalled USD 170 million in 2003, as indicated by the industry association, with a 41.6% growth in one year. Exports accounted for 17.43% of the sector's total sales, which were USD 975 million, compared to only 2% of total sales in 2000, i.e. USD 35 million of such total.

Businesses in this sector have geared their export efforts mainly to Latin America and, to a lesser extent, to Spain. Argentina enjoys several advantages in these markets, namely sharing the same language and a similar culture, but also the recognition of its professionals' capabilities and expertise.

Given the comparative advantages offered by the relative prices and human resources available in the country, initiatives have been developed in different areas to attain the sector's adequate penetration into the international marketplace. Under these initiatives, the State assists in guiding sector-specific policies that should be a part of a more comprehensive strategy at a national level.

The plan necessarily calls for consensus among the sector and the players involved, namely the State, business organizations, companies and Universities. It is essential that the private sector be a part of this dialogue, so both the Competitive Forums developed by the Secretariat of Industry and the International Relations and Foreign Trade Secretariat of the Argentine Foreign Office are working towards that objective.

The Export Plan for the Software Industry being developed considers actions in two fronts, one being improving competitiveness and quality within Argentina, with the second being the search for markets and niches abroad.

Several laws and regulations have been passed with a view to generating an environment that fosters investments in this sector and increased competitiveness. These include, among others, the following elements:

- Ensuring a 10-year tax and assessment stability for companies doing business in this sector.
- A 60% income tax relief. The Benefit is available to those who evidence expenses related to R&D and/or quality certification and/or software exports.
- Up to 70% of employers' contributions may become a non-transferable tax credit bond that may be allocated to paying domestic taxes levied on the software industry, namely VAT and other tax withholdings, but excluding Income Tax. Creation of the *Fondo Fiduciario de Promoción de la Industria del Software (FONSOFT) (Software Industry Promotion Trust Fund)*.

The Undersecretariat of SMEs is working through Proargentina and the Foreign Trade Division along the lines provided by the Forums, and the S&CS sector has been selected as the target of export chain-specific efforts. Education and training activities, special surveys and actions intended to foster and develop exports from this sector are therefore under way.

The so-called First Export Development program is an example. It is based on companies' recruitment of outside professionals to develop business plans and market studies. Further examples include the Image & Quality Programs, intended to underpin certain strategic marketing and competitiveness issues by providing specific advice; the creation and promotion of export groups or consortiums that receive financial assistance through the provision, free of charge, of specially recruited coordinators, and an effort to establish ties with Large Enterprises, thus allowing SMEs in this sector to articulate their export potential with larger export chains.

In turn, pursuant to the S&CS Strategic Export Program, the Ministry of Foreign Affairs is working on several aspects related to the promotion of software and computer services. These include the following:

**I. A program to position Argentina as an “Innovation Venue”.**

In furtherance of this objective, work will be focused on:

- 5 Key Markets (Mexico, Chile, USA, Spain, Brazil)
- 5 Target Markets (Canada, UK, Italy, Japan and China)
- 5 Vertical Sectors
- Strengthening the trade mission programme by participating in the major international technical and industry-specific events

Agencies coordinating this task are the International Relations and Foreign Trade Secretariat of the Argentine Foreign Office and Regional Promotion Agencies. The objective is organizing 10 international exhibitions in 2006 (there were 5 in 2004 and 8 in 2005) and several Inbound Trade Missions by Importers and Businessmen from this sector.

**II. Strengthening and focusing the Negotiation Strategy related to the S&CS sector.**

Work will be focused on:

- Developing S&CS expert negotiators.
- Acting at the level of WTO, MERCOSUR, FTAA and bilateral agreements.
- Developing a mixed public/private sector specialists’ team for this sector.
- Focusing efforts on objectives related to selected markets.

The Secretariat of International Relations and Foreign Trade of the Argentine Foreign Office plays a key role in including the S&CS sector in the discussion agenda and providing two expert negotiators.

Moreover, the development of an international negotiations control panel is expected. This will allow supervising the Government’s role in the negotiations with different sectors. The Proposal submitted by the private sector includes the following actions:

- Opening discussions with MERCOSUR – Computer Services
- Free Trade Agreement with Mexico
- Working on the WTO Agenda
- Initiating discussions on double taxation arrangements with China and submitting to Congress a proposal to execute a Double Taxation Treaty with the USA.
- Residence and Visa Agreements in the USA

**III. Conducting an on-going and dynamic survey of supply likely to be exported and of demand in target markets.**

This survey serves the following purposes:

- Surveying, classifying and segmenting export-eligible supply, channelling opportunities and working on any deficiencies.
- Doing research on demand in target and strategic markets.
- Developing business intelligence in target markets.

The Secretariat of International Economic Relations and Foreign Trade, and Secretariat of Industry, ProArgentina and the *Fundación Exportar* (Exportar Foundation) are part of this effort. Their goals are mainly the following:

- Surveying the export-eligible products from 100 companies and conducting a study of the US and Mexican markets; and
- Conducting 3 studies on strategic target markets.

#### **IV. Develop partnerships and supply clusters to gain improved scale and competitiveness**

In this connection, actions are under way to:

- Develop multi-company value chains for export-eligible products and focus on defined vertical sectors-
- Promote the joint settlement of companies, as well as the complementarities among them.

These actions are undertaken by the Secretariat of International Economic Relations and Foreign Trade, the Industry Secretariat, Proargentina, the Exporting SMEs Portal, the *Fundación Exportar* and provincial export agencies. Their goals were set based on the Niche Development, Clustering or Partnering Survey (4 for 2005 and 8 for 2006).

Also, a survey program will be conducted to detect complementarities and identify Partnering and Clustering possibilities. The schedule will include seminars to support this action.

As per Proargentina's mission, in the domestic front work will be geared towards developing multi-company value chains for export-eligible products, focusing on defined vertical sectors, and promoting the joint settlement of companies, as well as the principle of complementarity.

Another expectation is a more widespread use of technology across Argentine products likely to be exported. The most competitive ones will therefore be provided with technology, and applications will be developed for low-value added, little competitive sectors. As part of these efforts, there are plans to hold seminars and promote value chains.

### **3. Conclusions**

The Argentine Software and Computer Services Sector undoubtedly offers a huge potential within the domestic as well as, and perhaps more so, the foreign markets. Its comparative advantages and a favourable scenario, coupled with the availability of skilled human resources, allows Argentina to position itself in the international marketplace. The strategy – consisting in rendering companies eligible at a domestic level and detecting markets and niches without our borders – serves that very purpose.