

Information Technology and Quantitative Management (ITQM2014)
**Comparative analysis of ICT in public–private systems:
The OHIM case in the European Union and the Internal
Revenue System in Chile.**

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OVERVIEW

- A comparative analysis of Information and Computer Technology (ICT) integration in the Office for Harmonization in the Internal Market (OHIM) and the Internal Revenue System (IRS) in Chile.
- Identification of the critical aspects of the technological integration process through SWOT analysis.
- Comparisons of the organizations at the Corporative, Business, and Operational Levels, using outcomes in productivity, effectiveness and efficiency.
- Tendencies shared by both organizations where the development of ICT goes hand in hand with business models based on human capital, transparency, collaboration among agents and relations with citizens.

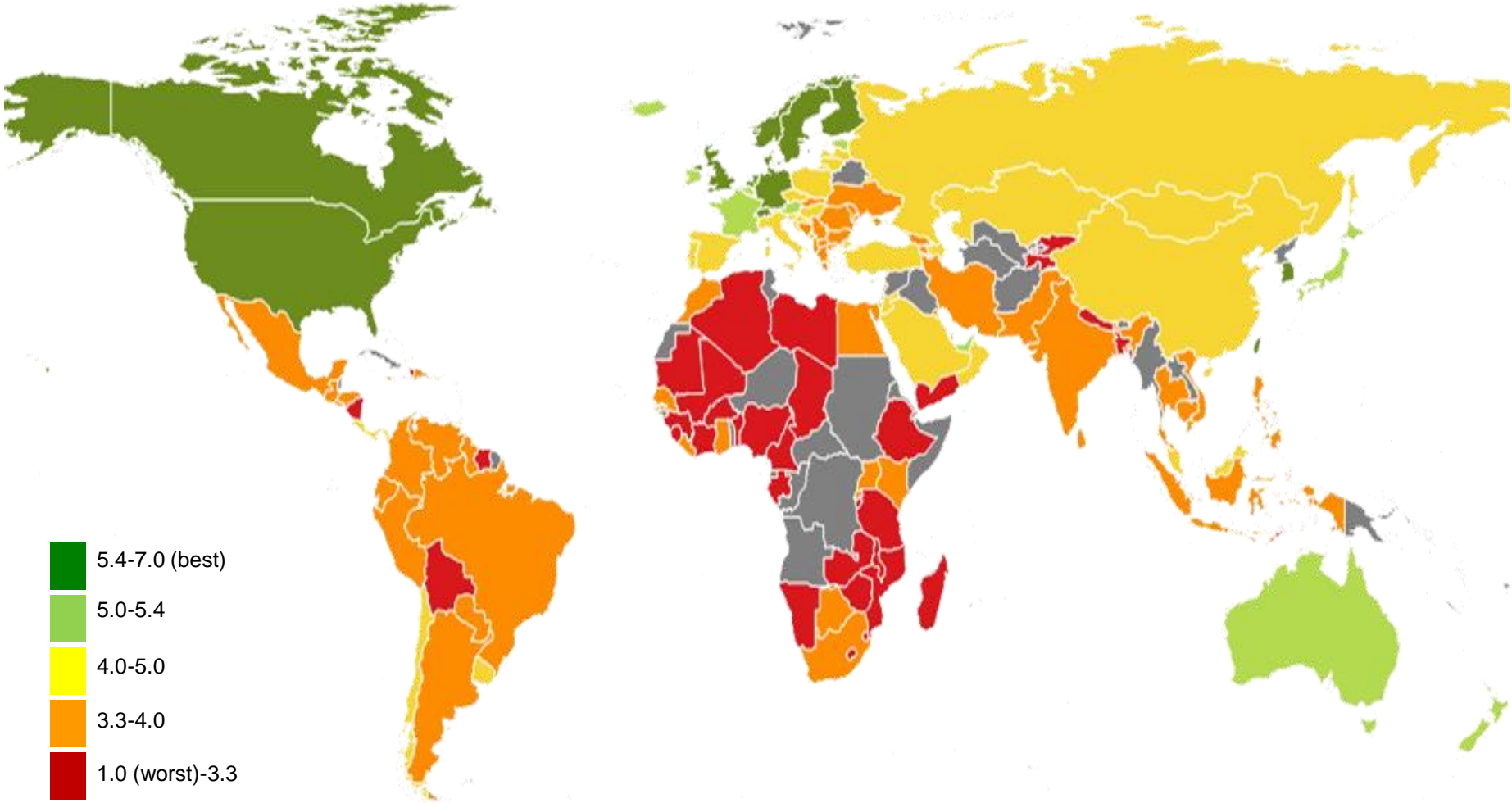
Implementation of an Information and Knowledge Management System

- Definition of technological support that enables the sustention of a coordinating network between public and private companies.
- Incorporate e-government policies that support information sharing between the public and the private sector.
- Transform implicit knowledge into explicit.

e-government

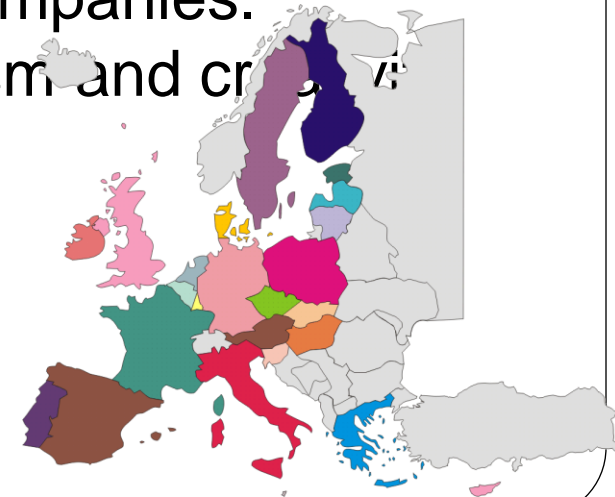
- The European Commission (EC) defines e-government in terms of the use of tools and systems that enable Information Technology and Telecommunications (ICT) to provide better public services to citizens and businesses.
- IT - KM → more personalized services to fit customer needs.
- New models must:
 - Protect confidential information.
 - Promote citizen participation.
 - Be flexible enough to regulate changes (legislation.)
 - Achieve technological maturity with platforms that suit the organization & are ready to track trends.
 - Promote interoperability & an information exchange model among organizations.

Technological Preparation Index



The Office for Harmonization in the Internal Market (OHIM): Function & Operation.

- Agency operates in every country in the European Commission (EC).
- Receives a state budget.
- Protects Intellectual Property (IP) rights in the EU market.
- Headed by President and VP with 5-year terms.
- Advised & managed by intermediary companies.
- High Quality design stimulates dynamism and cr



IT setup at OHIM

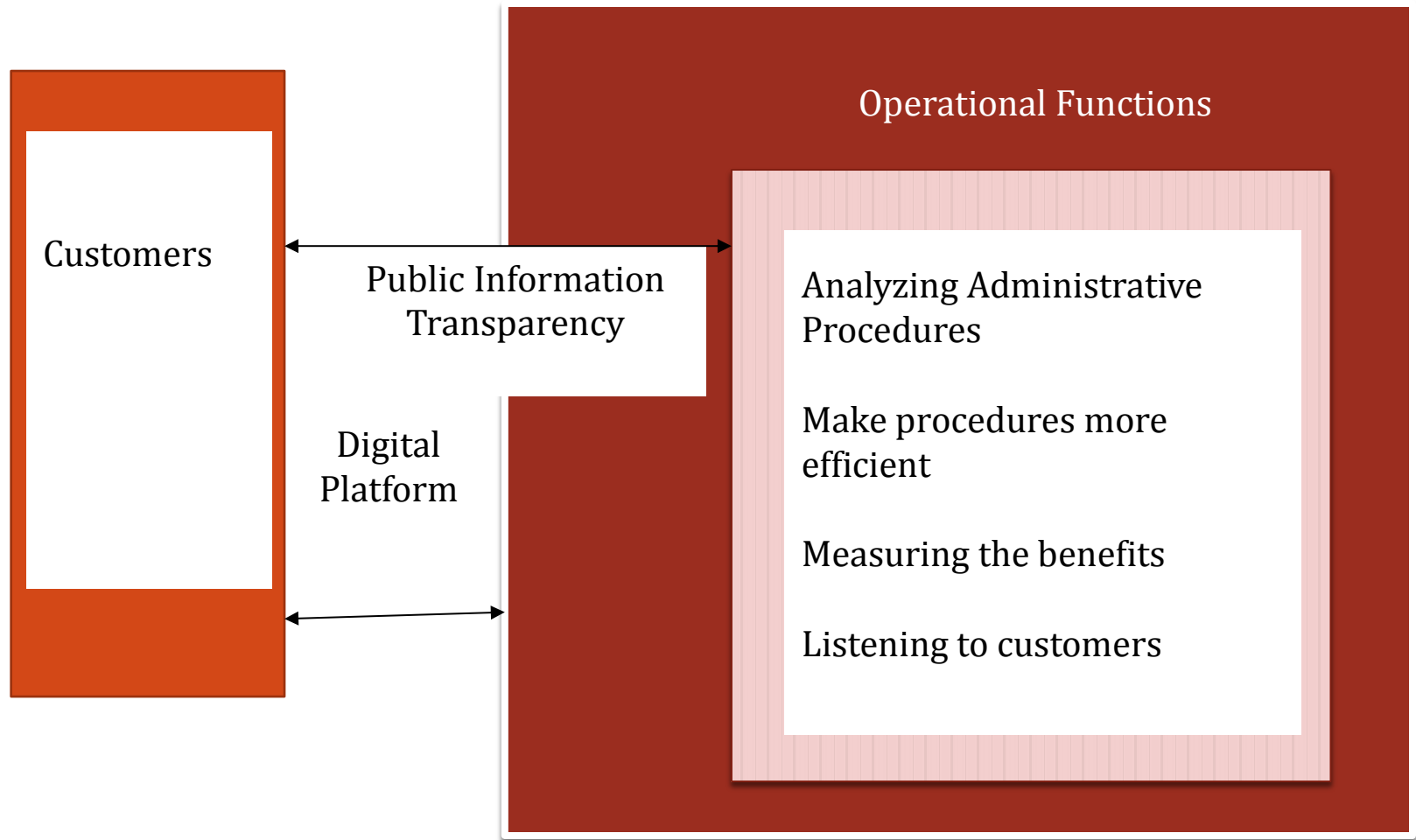
- 1996 – OHIM began registering its own trademarks.
- 1996 – 2009 – increased productivity, integration of e-business tools and web-based information.
 - Fees charged to companies for registering their trademarks and designs.
 - Changes of work methods into more flexible procedures (telework).
 - Opposition and lack of interest in some stakeholders.
- 2009 – Member States negotiated a cooperative fund to be shared between OHIM and the State offices.
 - Creation of an European network, providing favorable work systems for trademark, drawing and model users.

OHIM in 2012-2013

- 2012:
- 109,000 new applications for trademarks.
 - 3% growth from 2011.
- Over 82,000 community drawings and models approved.
 - 5% growth from 2011.
- 2013:
 - Time to process applications for trademarks: from 10 → 8 weeks.
 - Time to process registrations: from 25 → 23 weeks.

IT at OHIM

Model of interaction of the digital platform with the customers:



OHIM: CRITICAL ASPECTS OF INTEGRATING TECHNOLOGY

- New contractual policies under EU labor conditions (high salaries & flexibility).
- Work assigned to fit interests of young hires.
- Trademarks, innovations, and research are registered.
- Tele-work, work functions re-designed with security to protect files and data transmission.
- Work performance assessment and tracking surveys.
- Improved OHIM States website - high quality, productive, user-friendly, and profit-oriented, framed in an Integral Quality Management System.
- E-business integration, new formats and forms, automation of information and web-based processes, and sharing of standards → increased productivity → interoperability.
- Recruitment of highly experienced managers.
- Interoperability – more resources invested in outsourcing projects to strengthen the trademark
- Design of the new European network → part of the Trademark Trilateral Offices.
- Coordination among countries, governments, public-private sector, and private companies
- European Intellectual property regulation systems are created.

The Internal Revenue System of Chile (IRS): Function & Operation.

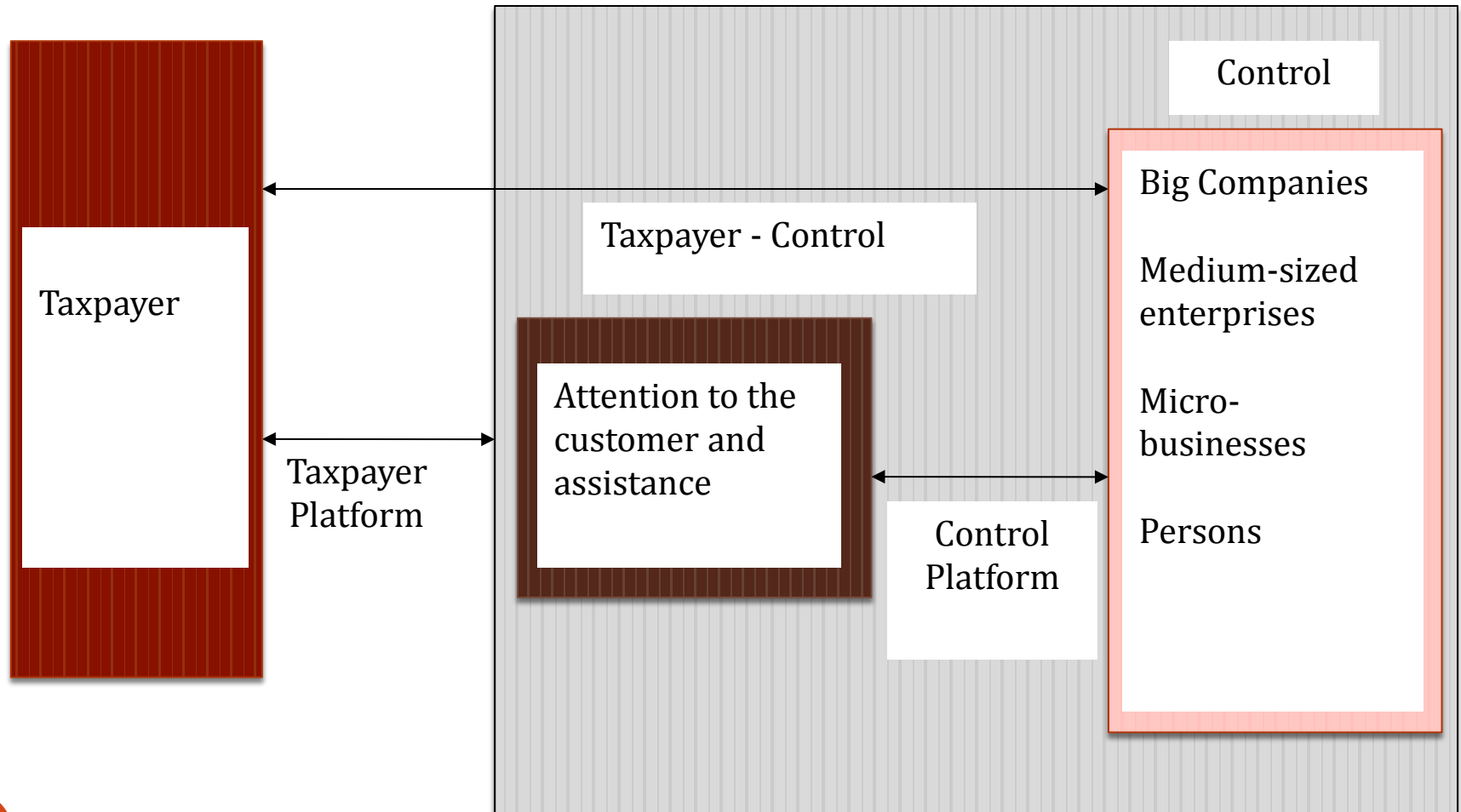
- The IRS is the State Audit Institution of Chile.
- 2003 – Winner of the United Nations Public Service Award (UNPSA) for ‘Innovations in the Public Service’.
- Led by a Director (appointed by the President of Chile).
 - 9 National Sub-Agencies.
- Creates tax awareness among users, providing them with information about the destinations of taxes and the penalties for not fulfilling tax duties.
- 2 types of IRS employee contract: permanent plant employees & temporary contract employees.
- The Human Resources management model includes:
 - Auditing actions that require State Intelligence for detecting potential risk of fraud.
 - Service delivery to help taxpayers comply with their tax duties.
 - Fostering support lines inside the Service by developing human and technological resources.

IRS IT Setup

- 1995-6 – IRS began to include IT in its Strategic Plan for updating the State.
- 1996 – provided general information to users.
- 1997 – increased use of IT to lower tax evasion for income tax (39.2%) and VAT (19.7%) and meet the international transparency and social inclusion standards.
- 1998-2000 – increase of website use → website re-design.
- 2001 – integration of website security so that users feel secure entering password and identity registration #.
- 2002 – Public-private alliances emerged to develop e-tools:
 - The IRS devises strategic projects to consistently decrease income tax evasion.
 - Focus on taxpayer segmentation, continuous updates of the current rules, and improvements in the human resources management policies.

IT at IRS

Model of interaction of the digital platform with the taxpayer.



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* Este ranking se actualiza diariamente y se basa exclusivamente en el recuento de los sitios web más visitados desde Estadodechile.cl

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Jubilación, Se Legislación...



IRS: CRITICAL ASPECTS OF INTEGRATING TECHNOLOGY

- Integration of codes into the IRS database to segment taxpayers by type of tax.
- The Government decentralized its tax collections.
- Work groups were structured and assigned in the auditing process.
- Expert support and collaborative work (legal, network experts).
- Identification of knowledge in the formal & informal mechanics, procedures used, experience-technical knowledge relationship, and a diagnosis of best practices carried out.
- Implementation of best-practices in the auditing processes.
- Improvements in processes and documentation.
- Structuring e-mail discussion groups to enrich tax topics and detect experts.
- Establishment of plenary sessions for case analysis.

Comparison: OHIM & IRS

- OHIM – focuses on coordination, governance, and best practices dealing with not only productive aspects but also working conditions.
- IRS – follows an improvement-based productive process model.

Comparative analysis on ICT implementation at Corporative Level

OHIM

Establishment of new contractual policies recruiting experts and staff of EU officials under specific contracts.
Recruitment of highly experienced EU executive officers.

Investing resources with partners in outsourcing projects, strengthening the European network of trademarks and designs.

Profits are re-invested, not shared among the different countries.

Coordination among countries, governments, public-private sector, and private enterprises.

Organizational Management strongly depends on its executive officers' leadership

IRS

Contractual policies present no changes.
The experts are long term recruited.

Tax Collections are decentralized from the State.

A suitable coordination with other public institutions is needed.

Power is centralized in the Director, who depends on the President of the Republic.

The Director exerts leadership and has the power to do so.

Comparative analysis on ICT implementation at Business Level

OHIM

IP registry for trademarks, patents and drawings in the European Community.

Website state services are performed to improve quality, productivity, user-friendly aspects and profits. Establishes an Integral Quality Management System.

Implementation of e-business.

Database (data of every single trademark, patent, and drawing with Spacenet external database support).

Makes knowledge explicit by automating information retrieving systems and processes with expert collaboration for the user.

Systematizes work procedures to identify product features to be automated.

Cost reduction through the rational use of experts and direct access to database.

Fee charged for the use of platform and services .

IRS

Taxpayers are identified and segmented according to tax category.

Free use of platform and services.

Integrated services count on a Quality Management System.

Implements the electronic invoice/bill.

Database of statements from enterprises and people.

Automated knowledge from processes is made explicit with auditors' expert collaboration.

Procedures automation is developing.

Cost reduction by having free access to data base.

Use of platform and services are free of charge

Comparative analysis on ICT implementation at Operational Level

OHIM

- Tele-work is set up.
- Automate and standardize web and information-based processes.
- Innovation and research for development.
- Experts' collaborative work at operational level.
- Diagnosis and best practices implementation.
- Establishment of the Academy's intellectual property and knowledge reservoir.
- The concept of the Electronic Office, involving on-line operations and the use of Internet tools (OHIM site, e-Search Plus) and the use of opposition and electronic register instruments (e-opposition, e-

IRS

- Tele-work is a concept absent in Chilean legislation.
- Implementation of intelligent codes and improvements in documentation and processes.
- Creation of case narratives from auditors' experience.
- Assign and structure work groups in the auditing process.
- Diagnosis and implementation of best practices.
- Establishment of on-line discussion groups and integration of plenary sessions for case analysis.

Comparative analysis on ICT implementation in Cultural, Social, Environmental, and Security setting.

OHIM

- English becomes the official language in use.
- Some experts resist having to commute from one country to another.
- Launch of the European Observatory on Counterfeiting and Piracy which will consist of data base and Counterfeiting Support Tool.

IRS

- Spanish language is used.
- Commute inside regions throughout the country.
- On-line document verification.
- Implementation of intelligent codes

General Trends

- E-government will include new models with redesigns of sustainable services oriented towards implementing processes of public innovation.
- Importance of human capital, transparency, collaboration, and participation.
- Large import placed on the form in which State relates to citizens.

Future of ICT at OHIM

- IP tool that incorporates international registers and applications in the available platform for the registry of trademarks, along with the functionality of repeal.
- Redesign of website as a new set of tools, including:
 - the new e-filing or electronic presentation function for the taxonomy.
 - harmonization of products and services in the database.
- It is expected that the process of mutual understanding and interest-sharing will result in a comprehensive set of services of comparable quality levels through the convergence of tools, procedures and practices to meet users' needs.

Future of ICT at the IRS

- The use of New Electronic Tax Document (ETD).
- Gradual acceptance is expected; first by large companies, and then by their suppliers.
- Lower operational costs.
- Improved transactions among companies.
- Faster accounting and taxation procedures entailed in their automated processes.
- Service outsourcing to boost e-business development.
- An educational commitment is expected from the government and those enterprises that first start issuing invoices through the system to familiarize public and the business community.
- Financial institutions should develop appropriate payment methods to suit the e-business transaction cycle performed on the Internet network.

CONCLUSIONS

- Implementation of the ITCs has established that both institutions use expert knowledge as an active part of the organization.
 - OHIM through experts.
 - IRS through auditors.
- Both continue to incorporate in a systematic manner the ITC tools of e-government and collaborative work which are expressed through networks and strategic alliances.
- The main critical factors for both organizations are:
 - The governance and coordination problems.
 - The budget assignment.
 - The decision making process between public and private sector and the leadership of its directives.
 - The business models used.
 - The quality of the processes.
 - The knowledge management.

CONCLUSIONS

- As technologies improve and knowledge deepens, ICT will continue to develop and evolve.
 - → more universal approach to e-tools and collaboration between all participating bodies, from government organizations to private companies to individuals.
- Organizations and individuals alike will become more familiar with the available technologies.
 - → easier integration of these tools into daily operations
- Innovative technologies will be developed.
 - → application of ICT to areas before unconsidered.

Acknowledgements

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Thanks you for your attention



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