

Water Senegal – Economic benefits of standards – Case study

July – December 2011

Content of this presentation

- Water Senegal – Basic company information
- Water management & Water Senegal's value chain
- Use of standards at Water Senegal
- Quantification of the impacts of standards
- Additional qualitative considerations

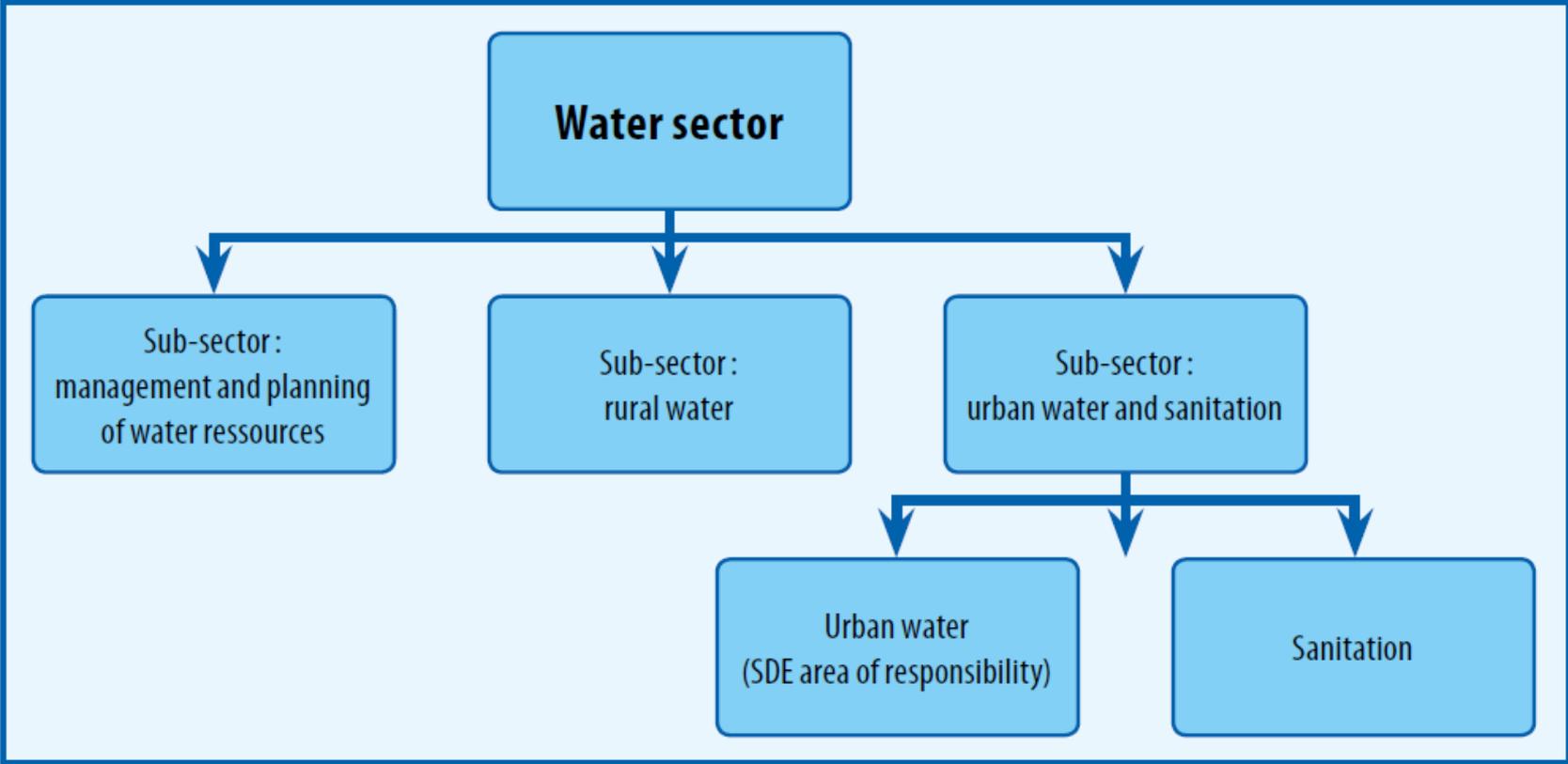
Water Senegal (SDE)– Company overview (1)

- Water Senegal, known as the «SDE» (la Sénégalaise des Eaux) is a national company composed of regional offices across the country that report to the head office in Dakar.
- Founded in December 1995, SDE has been managing the production and distribution of drinking water for Senegal's 56 largest urban sites since April 1996.
- SDE operates in an institutional framework described below:
 - the State of Senegal defines the global policy
 - the National Water Company of Senegal (SONES) is responsible for asset management, for project management of renewal and extension works on the infrastructure, and for quality control operations
 - SDE is responsible for operations
 - the National Sanitation Office (ONAS) is responsible for sanitation operations

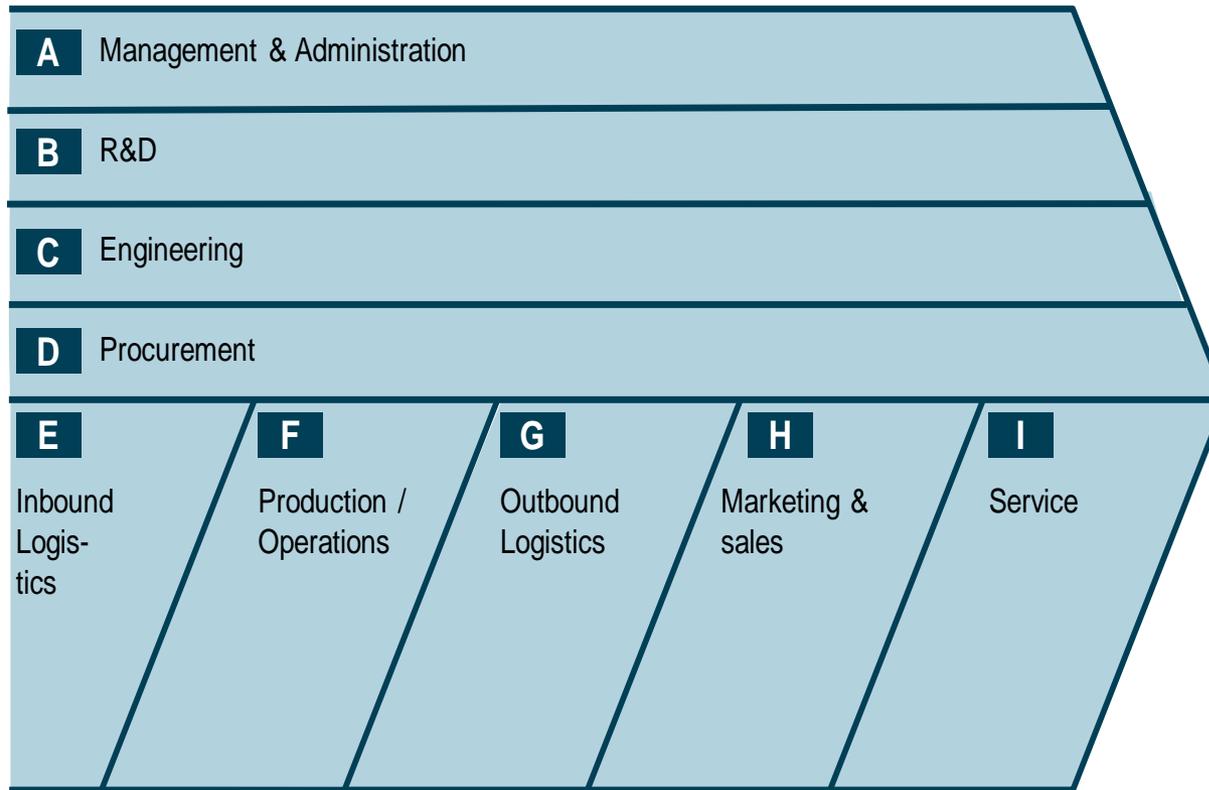
SDE – Company overview (2)

In 2010	Description
Capital	XOF 3 billion distributed as follows: <ul style="list-style-type: none">• 58% for the company Finagestion, a subsidiary of the French group Bouygues• 32% for private Senegalese investors• 5% for the State of Senegal• 5% for company staff
Production	146 million cubic meters of drinking water
Network yield in %	79.05%
No. of employees	1139
No. of customers	520 000 representing 5 million people
Turnover	XOF 73.1 billion

Senegal's water industry value chain



Model of a company value chain (M. Porter)



The “value chain” is used as a tool in the assessments to structure and analyze the activities of companies

Key value drivers at SDE

- SDE's key value drivers concern the improvement of Senegal's water sector, and are directly linked to binding elements in the performance contract with the National Water Company of Senegal (SONES):
 - Quality and quantity of water
 - Maintenance – electromechanical and network
 - Efficient billing, recovery and customer relations management
 - Performance of engineering projects (re: the network's expansion)

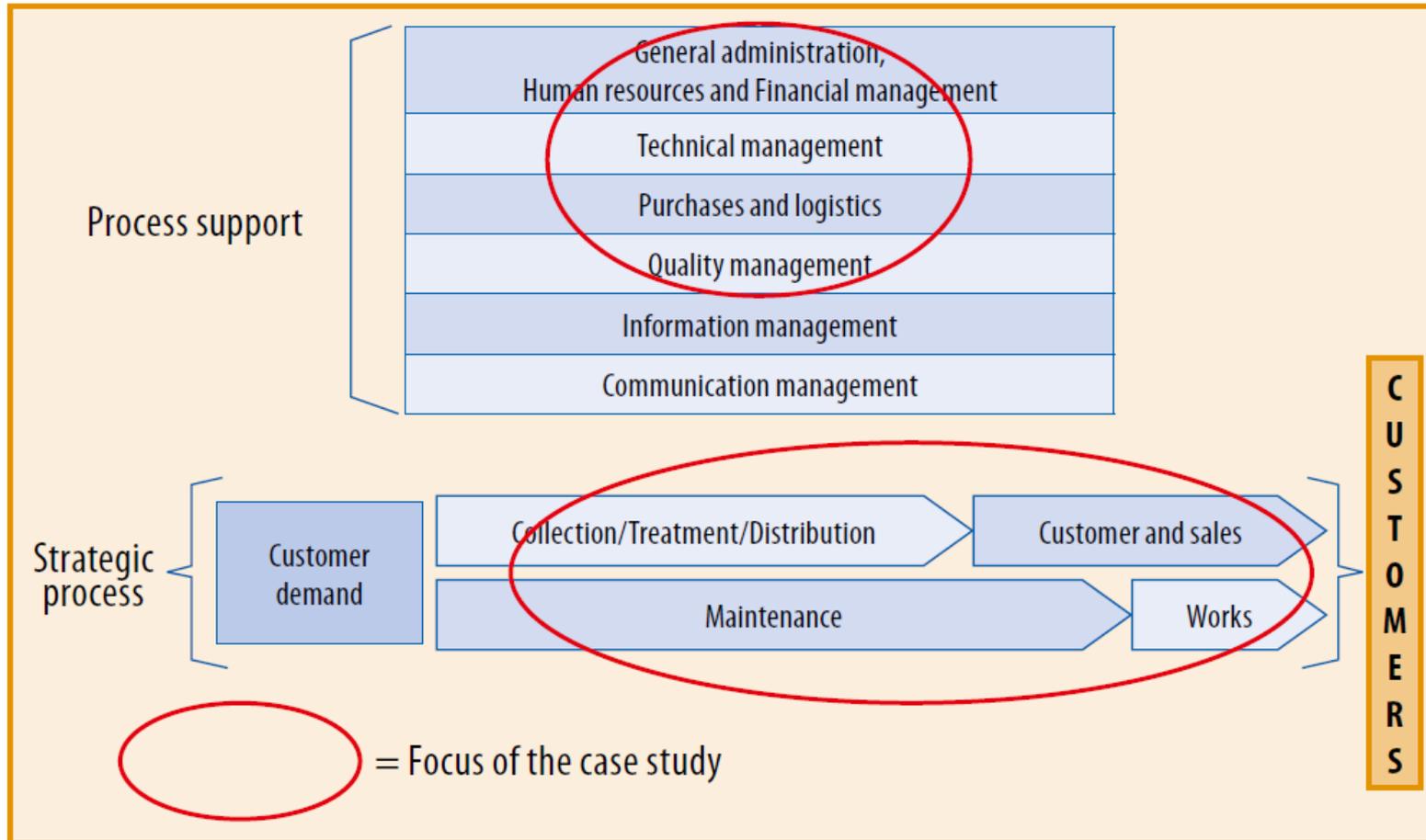
Attitude of the SDE towards standards

- SDE has become a driver for standardization by helping the Standards Association of Senegal (ASN) to popularize the use of standards and to educate people through increased training
- Its attitude towards standardization is illustrated by its certifications:
 - ISO 9001:2008 *Quality management systems*
 - ISO 14001:2004 *Environmental management systems*
 - OHSAS 18001:2007 *Occupational health and safety management systems*
- SDE encourages its sub-contractors to comply with standards for the occupational safety of their employees (compliance with PPE equipment, vehicles, prevention plans, certification to OHSAS 18 001)

Preliminary analysis of the standards impact

- The scope of the assessment is limited to those functions where the use of standards is particularly visible, and to those activities more closely related to the company value drivers
 - General administration
 - Purchasing & logistics
 - Production
 - Technical supervision (Research & Development)
 - Maintenance
 - Engineering
 - Customer service, Marketing & Sales
 - Quality management

SDE's value chain – Business functions selected for the assessment of the impacts of standards are highlighted



Purchasing & logistics

- Use of ISO 9001 has enabled a better control of processes and while the volume of work has increased, it has been possible to:
 - cut down on managerial staff by 19% which, spread over a period of 5 years, gives a **yearly cost savings average of 3.8%**

General administration

- Staff costs represent 70% of the function's expenditure. Through consistent application of ISO 9001, this function has been able to improve productivity leading to:
 - an approximate **10% reduction in staff in 2010**

Customer and sales

- Application of ISO 14001 has enabled paper consumption to be reduced and is mainly due to two-sided printing. Spreading this reduction over a six-year period (2005 to 2011) gives a:
 - Total annual cost saving of **1.33% (as the contribution from the use of standards)**
- Sales increased by 4.8% in 2010 over 2009. Around 3.5% was due to a rise in the number of customers (increased demand) and 1.3% to increased consumption. Use of standards (primarily ISO 9001) significantly contributed to the performance by ensuring permanent water quality through the modernization of tools for technical surveillance, and customer relations management using a mapping software and commitment to a water quality monitoring plan.
 - Total annual cost saving of **1.3% (as the contribution from the use of standards)**
- A monitoring process for billing (remote meters) enabled the recovery of over 200 000m³ of water at end 2010 of which the impact is estimated at 0.17%

Technical supervision (R&D)

- Actions have been undertaken in the framework of the quality management implementation (including the set-up of an energy savings committee in charge of reviewing the use of energy)
 - Total annual cost savings of **1.54%** (as the contribution from the use of standards)

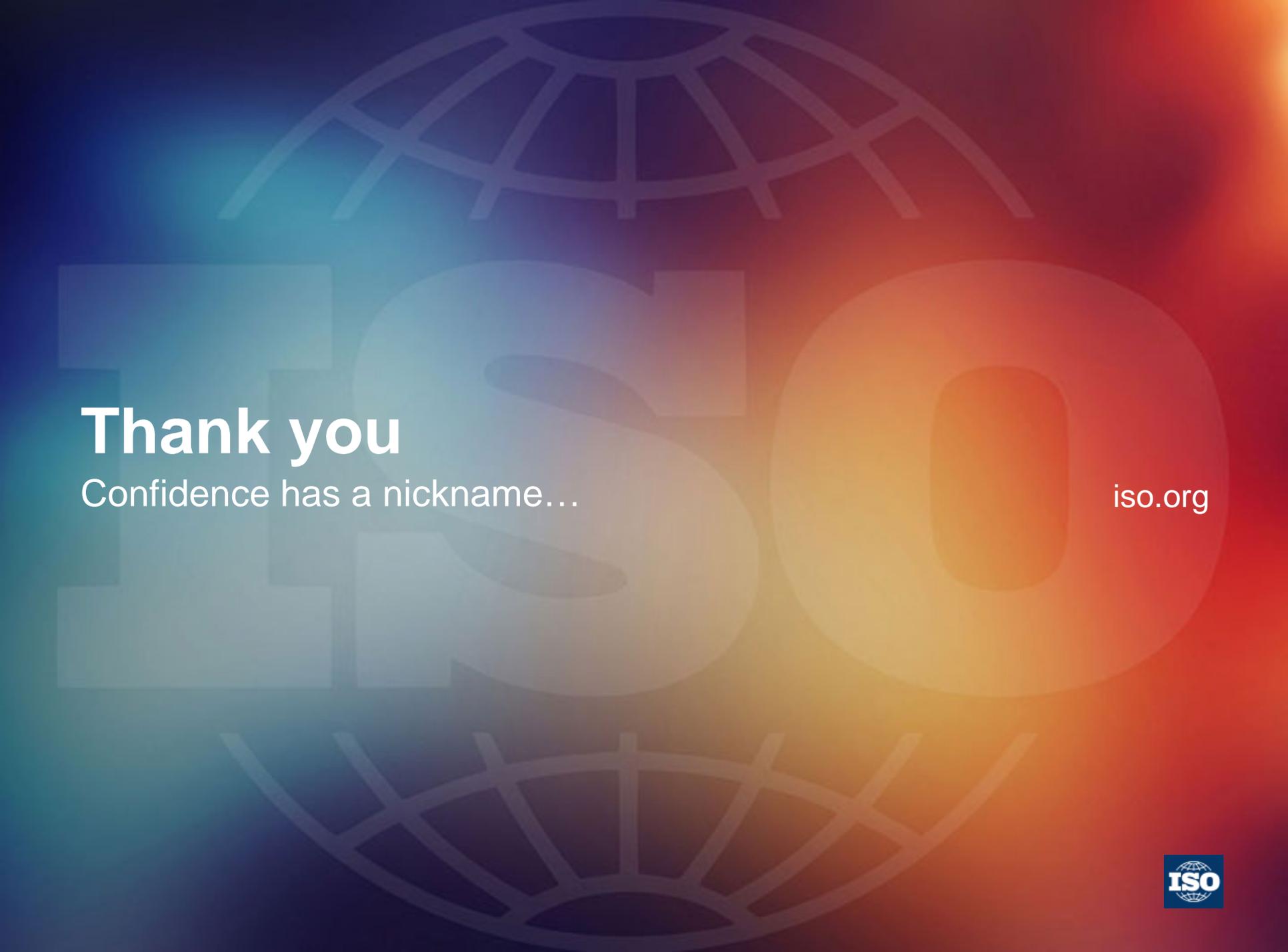
Conclusion: Impact of standards on the company EBIT

Assessed Business Functions	Savings as a % of the costs of the 4 assessed business functions
Purchasing and logistics	3.8%
General administration	10%
Customer and sales	2.80%
Technical supervision	1.54%

The total contribution of savings to the EBIT represents a percentage of total sales amounting to **1.91%**

Some additional qualitative considerations

- Rigorous implementation of ISO 9001 and other management system standards has contributed to improving the monitoring and control of all the SDE departments analyzed throughout the study.
- The number of accidents has steadily declined owing to commitment to OHSAS 18001
- The quality management system has also enabled SDE to analyze and monitor key productivity rates. Results show that productivity has steadily increased between 2006 and 2010



Thank you

Confidence has a nickname...

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