Using a tool inspired by Balanced Scorecard to assess Green IT: An implementation within a regional hospital in France

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Using a tool inspired by Balanced Scorecard to assess Green IT: An implementation within a regional hospital in France

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Introduction
ICT as part of the solution
- Substitution effects
- As a whole, ICT can replace printed books
- Optimization effects
- Less energy is used for burning in a smart town
- Dematerialized Economy
- ICT has the potential to support sustainable patterns of production and consumption

ICT as part of the problem
- Directs effects
- Accounts for approximately 2% of global CO₂ emissions, a figure equivalent to aviation (Kaplan et al., 2007)
- 11.3% of the French electric consumption
- Since 2005, more than 50 million tons of WEEE were produced in the world
- But also induction, obsolescence and rebound effects

Methods
8 steps:
1. To devise a tool to assess the sustainability of ICT.
2. To experiment the tool in various organizational contexts.
3. To discuss about the relevance of this tool.

Objectives
More and more organizations tend to develop Green IT policies.
But how to assess the sustainability of ICT and the impact of these policies?

Results
An assessment tool inspired by Balanced Scorecard to assess Green IT:

ICT regarding sustainability

ICT related to the problem

Step 1. The qualification of the project.

Step 2. The modelization and the design of the tool.

Step 3. The test of the result.

Step 4. The first presentation of the result.

Step 5. The collective discussion of the results.

Step 6. The review of the CIO.

Step 7. The development of version 2 of the tool.

Step 8. Improving axes of improvement.

To devise a tool to assess the sustainability of ICT.
To experiment the tool in various organizational contexts.
To discuss about the relevance of this tool.

The choice of the organization (a regional hospital) was made by the consulting firm, partner in the elaboration of this tool, during answers to calls for tender or operations of commercial conquest.

Characteristics of the case study made within a regional hospital in France:

Sustainable Development policy
- Certification HAS² in progress with a part dedicated to SD.
- Commitment HQEB².

Organization of the CIO department
- 30 collaborators for 487 employees.
- 5 services (Hardware, Software, Customer, Projects & Coordination of medical secretaries).

Main stakes of the CIO department
- To draw up and implement the master plan.
- To be certified as ISO 20000 compliant.

Green IT policy
- Not formalized.

Green IT initiatives
- Virtualization and mutualization of the servers.
- Rationnalization of printings and mutualization of printers.

Green IT projects
- Project of telemedecine.

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But how to assess the sustainability of ICT and the impact of these policies?

Conclusions
To assess the sustainability of ICT we designed a tool inspired by BSC.
The experimentation of the tool within a regional hospital associated to a previous step of a regional council, in order to face the complexity of ICT in order to take into account the relevance of the framework of the BSC as a way of instrumenting the Green IT to which it brings a legitimacy due to its strategic dimension and as it meets managers’ approval.

The results of the case study show that the sustainability of ICT is little taken into account except the statutory obligations (compliance and non-proactivity).

The major interest of this tool is not to provide an exact measure of the sustainability of ICT but to make employees aware of it and to lead them to reflect on this subject in order to change their practices in a conscious way.

Perspectives:
- To pursue the improvement and the test of the tool. The tests being limited to cases stemming from the public management, it would be interesting to validate this tool to cases stemming from the public management, it would be interesting to validate it.
- To deepen the analysis of the performative capacity of this tool and to study in particular the "fabric of organizing visions" (de Vaujany et al., 2013)

References
Butler, 2009)


Erek, 2011

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