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Topic (ii): Issues and opportunities for statistical offices working in a network environment

OPPORTUNITIES GENERATED BY THE EXTRANET TECHNOLOGIES FOR THE INSEE AND ESPECIALLY FOR THE COMPANY STATISTICS INFORMATION SYSTEM; HOW DO EXTRANET TECHNOLOGIES HELP ORGANIZE THE WORK OF A CLOSED USER GROUP ON AN OPEN NETWORK

Submitted by INSEE, France [1]

INVITED PAPER

SUMMARY

1.   The article describes the way Extranet technologies provide opportunities for national statistics institutes to allow collaborative work for a group of statistics system users through the open network.

2.   In the early 80s, information systems architectures made possible the collaborative work with

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        [1] Prepared by Daniel Depardieu.

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organisms affiliated to the National Institute, such as the Ministry Statistics Services (MSS) or the Central Bank.

3.   During the second half of the 90s, first generation client-server applications did not help improve group oriented work and even participated in its slow down.

4.   For a few years, technology progress has led to the development of Extranet solutions covering different needs of closed user groups or closed organisms groups. This was the way to beneficiate from the interesting prices and facilities offered by the open networks.

5.   The main goal of the article is to propose a typology of the different situations where the Extranet can be an opportunity. Each will be illustrated with a real life example, already implemented or being implemented, and the list of particular technologies used.

Typology for the extranet technologies case studies

6.   The proposed typology is based on 2 independent dimensions of the Extranet notion:

♦   The type of activity for which the Extranet notion seems interesting; as an example, directly contribute to the statistics production process, coordinate the statistics system, provide information to the main statistics system users

♦   The different groups of the Extranets users. It can be a simple work group, but also a more structured group where relationships can be compared to the provider-customer relationship

The non material way to get statistics studies answers

7.   Examples get more popular in the field of businesses. As a first step, first contact showed that some companies made the proposal to send the statistics studies answers through email with an attached file, for periodic studies with high frequency questioning. This way to proceed was quickly identified as not to be pushed and that multimode collect through web forms had to be implemented. Many projects of using the electronic data reporting tools are on track.

8.   In the early 90s, similar features systems were used through the French Minitel, and finally stopped.

Professional documentation sharing

9.   The French statistics system is distributed which means that INSEE hired and trained people can work during a few minutes or the whole year long in the different ministries statistics departments. To deal with the negative aspects of this Diaspora, to better inform people on the statistics operations progress managed by one and another, to better share information such as nomenclatures, transverse operations documentation, a «document extranet» has been implemented where the National Institute and each ministry statistics department manage and share the useful professional information.

Group work

10.   In year 1999, the active participation of France in the European Laws preparation on short term indicators was made easier by the use of a «Groupware» gathering heavy work folders on this subject. The representative could very fastly get the different French partners mind and had the all the needed information easily available. He was totally able to present the topics and participate in the different workshops around the subject.

"Statistics production" type of Extranet

11.   The need is to access the statistics production application from the outside. That's the case met with the national accounts production renew implemented with «Datawarehouse» tools. These tools can be accessed using a «web browser». The project of implementing an Extranet with the Bank of France and the Prevision Direction will allow both organisms to play their roles more efficiently.

"XML Exchanges" type of Extranet

12.   Exchange services solutions or real time messages delivery with administrative partners are being implemented using the XML format. Access are secured by certificate authorisation servers. These experiences are the example of the most promising and the most touchy aspects of the Extranet, in which computer systems from 2 autonomous entities that need to collaborate are interoperable.

Knowledge Management

13.   Many examples of knowledge management between professionals exist in the fields of events involving economic unities fields like companies. They need to systematically share their data, even if it is non structured.

List of technologies used, prerequisites and issues

14.   The implementation of an internal to the National Institute email system, open to the INTERNET, as well as the implementation of an LDAP directory are prerequisites.

15.   The same LDAP directory will manage the different types of certificates used, and the certificate authority servers as an example.

16.   These advanced technologies lead to a huge investment in study of the way to address each type of Extranet and decide what the needed level of security is.

17.   Many issues exist when implementing these solutions on the field. Very often, the Extranet project is a new opportunity to think again about the implicit or explicit choices already made about information flooding across usual partners. It is obvious that clarifying document flooding will lead to debates. Because there are a number of technologies, and because the security technologies are new, it is easy to reach a situation of misunderstanding. As an example, at the INSEE, such issues are raised because of the different ways of managing IP addresses provided by the Internet Service Providers.