



BACKGROUND

The emergence of the phenomenon commonly known as cloud computing represents a fundamental change in the way enterprises manage their businesses and technology assets. Cloud computing could be defined as the delivery of on-demand computing resources - everything from applications to datacenters - over the Internet on a pay-for-use basis.

Nowadays, Enterprises are starting to notice a paradox in the allocation of their computer services. On one hand, computers are becoming increasingly more powerful and the computing costs are dropping, but, on the other hand, the usage of computer services in business activities is rising, as well as the complexity of managing the IT infrastructures, information and applications, which are making computing more expensive. A recently survey conducted by Gartner Research indicated that about two-thirds of the average corporate IT staffing budget goes towards routine support and maintenance activities.

Cloud computing can reduce infrastructure costs and energy savings as well reduced upgrades and maintenance costs.

OBJECTIVES

The objective of this Thesis is to create a case study about the adoption of Cloud Computing Technologies by the Portuguese Enterprises. This study will attempt to:

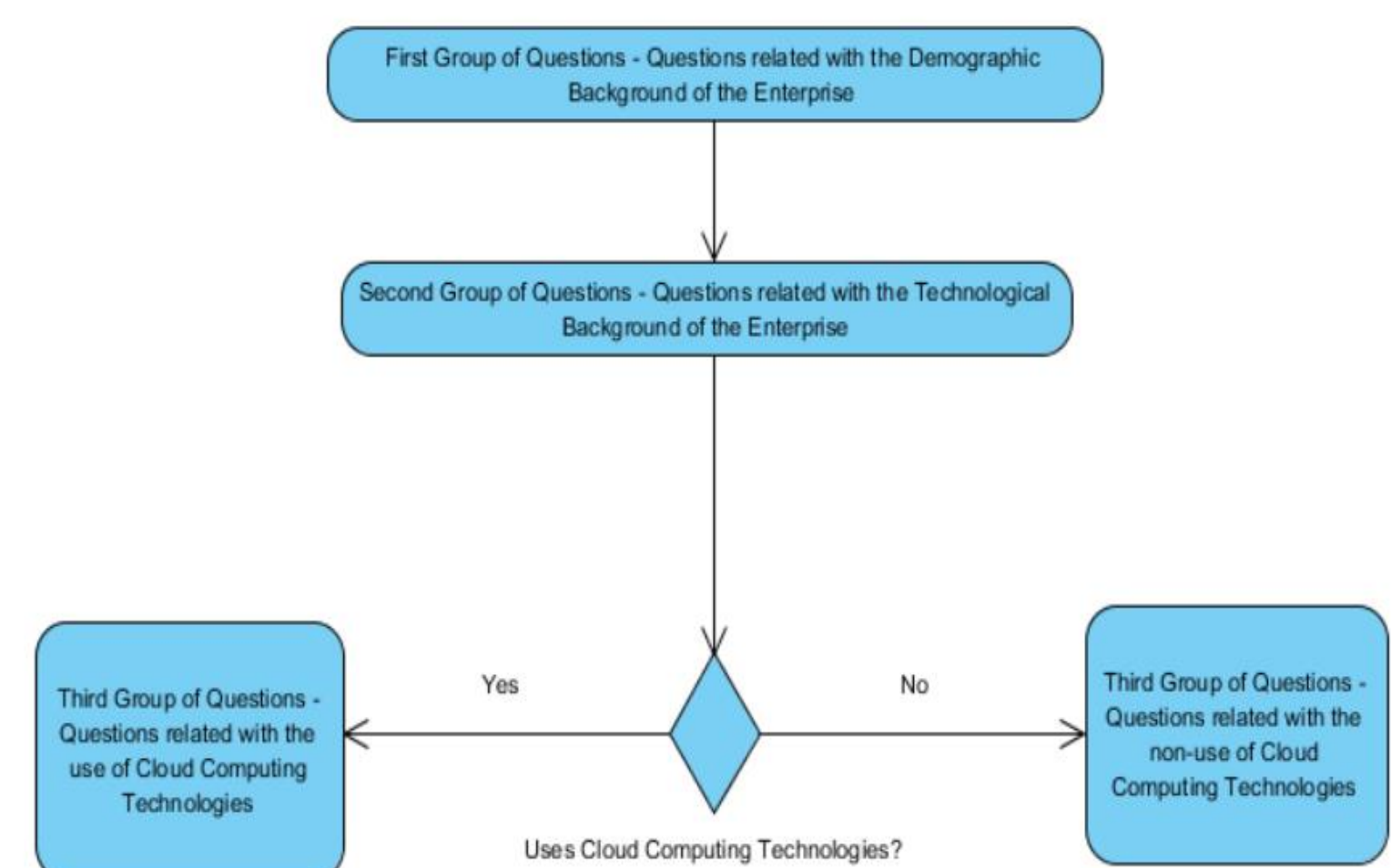
- Determine if the Portuguese Enterprises are adopting Cloud Computing Technologies and what are the determinants that lead to that adoption;
- Detect the reasons why some Enterprises does not adopt Cloud Computing Technologies;
- Determine the Portuguese industry sectors and types of enterprises that are currently adopting Cloud Computing Technologies;
- What are the Cloud Computing Technologies more used by the Portuguese Enterprises;
- Determine how the change from Monolithic Services to Cloud Services was made and what was the impact of that change;
- Create a guide for all Enterprises to use, that explains, step-by-step, how should they change from monolithic systems to Cloud Systems and what are the advantages of that change.



METHODOLOGY

The Methodologies used in the making of this study are:

- **A study of the State of the Art**
 - This study will encompass the search and analysis of research papers, books and other sources, published in Portugal and other countries, about the levels of acceptance of the Cloud Computing Technologies in the Business reality;
- **A Survey Study**
 - This survey will be made to a group of Portuguese Enterprises;
 - This sample group will be composed of Enterprises from all districts, types, sizes and areas of economy;
 - The survey will be divided in 3 groups of questions;
 - It should not exceed 30 questions in total;
 - And it should be answered in less then 10 minutes.
- **Qualitative and Quantitative analysis (mixed method)**
 - Frequency analysis;
 - Hypothesis testing;
 - Statistical inference;



RESULTS AND CONCLUSIONS

The expected results of this Study are to:

- Gain a greater insight into the Cloud Computing Tools and Technologies used by Portuguese Enterprises, and the determinants that lead a company to invest in them;
- Understand why some Enterprises are avoiding the Cloud Computing solutions and Educate them on the advantages of the Cloud Systems and eliminate the stigma that still exists on this topic;
- Contribute to fill the gap of knowledge about the adoption of Cloud Computing services by the industry.



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