

Analysis of Customers' Satisfaction on Disaster Recovery Outsourcing

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Abstract. Disaster recovery is a used to backup data after disaster, such technology has turned into a key issue of all the industries depend on computer software system. Customers' satisfaction of disaster recovery outsourcing is analyzed in this paper, the main factors are captured. It is helpful to improve service quality, customers' relationship and customers' satisfaction.

Keywords: disaster recovery; outsourcing; customers' satisfaction

1 Introduction

With the development of information technology, process of enterprise information continues to evolve, enterprise information construction is rapidly expanding at an unprecedented rate. At the meanwhile, the daily work of enterprise unprecedentedly depends on its computer software system. Thus, information and data security has become an unavoidable topic of all the enterprises. While emerging variety of catastrophic events bring huge economic damage and obstruct development, more and more people begin to examine the disaster resilience of their business computer information systems.

2 Disaster Recovery Metrics

RPO(Recovery Point Objective) and RTO(Recovery Time Objective) are important indicators to measure the quality of disaster recovery project, Recovery Point Objective (RPO) is the metric in the case of a disaster company acceptable amount of data loss, represents the amount of data allowed to be lost when a disaster occurs. For example, a corporate setting RPO is 24 hours, then the corporate allow to lose 24 hours business data through disaster recovery system to recover. Recovery Time Objective (RTO) represents the time required to restore the system, generally a few hours needed for short, a few days it takes for long. The shorter the RTO indicates the shorter time required to recover information system. Purely on the application perspective, RTO is the shorter the better. However, this also means that need to buy more high-end storage, faster hardware system and application software, which need

more capital investment. For different industries, their RTO objectives generally are not the same. Even within the same industry, since each company's specific business and requirements are not the same, their RTO could be different as well.

3 Disaster Recovery Outsourcing Customer Satisfaction Analysis

3.1 Questionnaire design

Disaster Recovery Services Outsourcing Customer Satisfaction Survey table design draws some real relevant provisions of outsourcing contracts, in addition, interviews have been made with the related staff from some professional outsourcing enterprises and financial enterprises and manufacturing enterprises who is need for disaster recovery and backup service to gain authoritative first-hand data. The specific design of the questionnaire are shown in Table 1.

Table 1. Survey Design and The Index Scores

Code	Factor	Importance	Satisfaction
A	Data Security	8.25	7.82
B	Service Prices	6.23	3.81
C	Geographical Location	3.38	7.36
D	Enterprise Scale	3.27	4.17
E	Timeliness of Data Backup	7.88	4.12
F	Correctness of Backup and Recovery	9.45	9.32
G	RPO	7.28	4.01
H	RTO	8.76	7.72

3.2 Paper Payment and Collection

Two hundred copies of the questionnaire were on-site distributed in Bank of China, Postal Savings Bank, Hua Tuo Digital Technology Co., Ltd. and other financial institutions and enterprises, 200 copies of questionnaires recovered, 198 copies were valid, effective questionnaires respond rate was 99%. Full credit of characteristics importance degree and customer satisfaction is 10 points, higher scores indicate the higher importance or satisfaction.

3.3 Statistical Results of Importance and Satisfaction

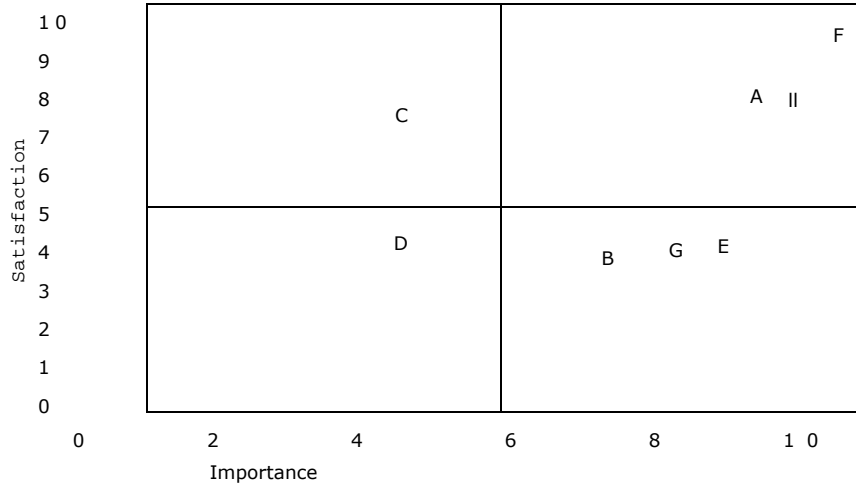


Fig. 1. Importance of Factors and Satisfaction Scatter Diagram

As shown in Figure 1 coordinate chart, factors in first quadrant are data security, backup and recovery is correct and the recovery time objective (RTO). This shows that the customer is generally believed that after the disaster, it is important to recover the application data accurately, safely and in time. This conclusion is in conformity with the relevant research results of consumer psychology, recovery backup as the last line of defense after disaster is attached importance to the customer, the accuracy of the data recovery is the basis of the disaster backup, data security is the precondition of business security. The outsourcing service provider is fully aware of the importance of correct data security, backup and recovery time objective (RTO), relevant measures of above aspects are made to maintain customer satisfaction at a high level.

The factors of second quadrant includes: service price, backup data timeliness and the recovery point objective (RPO). The disaster recovery backup services for small probability event, the investment effect can be measured only after the disaster, therefore, often cause ROI not reasonable, so most of the customer will be very concerned about the price factor. However, due to the importance in the process of reconstruction after disaster occurred, the construction of disaster recovery center and later operation and maintenance costs are very high, cause service provider offer is often high which might damage customer satisfaction. Furthermore, because disaster recovery work can not affect the customer's normal business, data backup often not timely phenomenon which affects the customer Recovery Point Objective (RPO) satisfaction. From Figure 1, we learned that a point in the second quadrant belongs to the high importance but not let customer satisfaction, so be called service indicators in the threatened area. If service provider can not make improvements to these factors,

customer satisfaction would be seriously affected, even threat contractual relationship of disaster recovery outsourcing.

Factor in the third quadrant is service provider scale, importance and satisfaction of this factor is not high. Because scale is not a direct factor of safety and quality in the services, therefore, customers generally believe that this indicator is not very important. The score of that factor is not high which indicates that in our country scale of disaster recovery service providers is small, attraction for some large scale customer is not strong. This quadrant is called Opportunity Zone, if subdivision the various types of disaster recovery projects, expand scale and impact of the business in a particular area, it helps service providers find new value growth point, improve customer satisfaction and loyalty.

Factor in the fourth quadrant is service provider location, this factor is not very important because by the help of modern information and network technology, services can be provided in any suitable location. However, the service providers need to be aware that the customers generally do not care about the service provider location, but efficient and timely onsite service is an effective way to improve customer satisfaction, thus, while choose business and office location should also fully consider the possibility to target customers with timely and on-site service.

4 Conclusion

Disaster recovery services outsourcing industry maturity is low, manifested in small scale of the service provider which can not take advantage of economies of scale to reduce cost, and be restricted on the business scale. In addition, the disaster recovery service providers are lack of experience, service process is not standardized, quality of service is low. To promote the healthy development of disaster backup outsourcing and improve customer satisfaction, recommend that the disaster recovery service providers should pay attention to the following points: Emphasis on raising the level of professional business; Strengthen communication with customers and feedback; Correctly determine market orientation; Establish and improve customer satisfaction index system.

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