HOW A CALL CENTER REMEMBERS ITS PERFORMANCES?
CASE STUDY OF A LARGE INSURANCE COMPANY[1]

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Abstract:

This exploratory research forms part of a larger research investigation conducted with the CIGREF[2], which aims to analyse the contribution of the use of Information and Communication Technologies (ICT) to company's performance.

This paper does not claim to bring final answers to this question. Before that, one can ask: how performances are represented in the organisation? How they are combined, transformed and propagated in it? And, what is the place of ICT in this process?

These questions stress the cognitive system of the organisation: the way the information is represented in it, combined, transformed and propagated. In this paper, I will focus my analysis on the information's performance, and will examine the role and the place of ICT in the performance representation and propagation into the organisation.

For that, I will take as a theoretical framework the distributed cognition theory of Hutchins (1995). In order to examine the cognitive system, this perspective has proposed to extend the unit of analysis from individuals to a larger unit integrating representations, material media, physical processes, etc. This proposition is not new (Simon and Kaplan, 1989). What is new in Hutchins proposition is the examination of the role of the material media in which representations are embodied, and in the physical processes that are propagate representations across media.

To examine the role of ICT in an organisational cognitive system, I choose as field study a large insurance company, TopInsure Corporation (a pseudonym), which provides insurance services to individuals as well as business clients around the world. TopInsure have brought deep transformations to one of its traditional channels of distribution leading thus to the emergence of call centers within its structures specialised in the claim management.

I will take these call centers as my unit of analysis and will examine how performance is represented in these call centers? How it is combined, transformed and propagated in it? And, what is the place of ICT in this process?

In this exploratory paper, I will give the preliminary findings which come out from the first interviews analysis. I will first present the methodology of this research study, a deep analysis of the call center's cognition process and the preliminary findings.

Keywords: Distributed cognition, call center, information technology, performance.

1 RESEARCH STUDY ANS METHODS

My research study examined the implementation of a technological device (mainly a Customer Relationship Management device) into the call centers and its impact to the performance of TopInsure, over a period of 12 months.

The study was conducted through unstructured interviews, review of office documents, and observation of the daily call center's operation[3], of meetings and work sessions.

[1] Notice: some detailed data were modified due to confidentiality reasons.
[2] CIGREF, Club Informatique des Grandes Entreprises Françaises. www.cigref.fr
[3] Some displacements were organised in three of the ten call centers.

Over twenty tow interviews were conducted, each about one hour and half on average in length, with some participants being interviewed more than once.

The persons interviewed spanned various functions: chief information officer, members of the technology support function, managers of call centers, client service support, technical support, person who follow up the call center's performance indicators, agents…etc.

The research study began in April 2005 before the generalisation of the technological set to the 10 call centers situated in France. Six call centers were already equipped and the four which remains were equipped between May and September 2005.

2 EMERGENCE OF CALL CENTERS IN TOPINSURE

To apply the distributed cognition frame to call centers, one first needs to know something about the insurance sector activities and distribution channels and something about the organisational transformations occurred in TopInsure which leads to the emergence of call centers.

2.1 Main insurance sector activities

TopInsure propose many insurance services covering the two main insurance activities:

- *Life insurance:* provide protection of persons. It covers both insurance savings and insurance protection. Insurance savings allowed the subscriber to constitute savings through products such as retirement placement. Insurance protection includes physical damage and the risk of death of the insured.

- *Property and casualty insurance:* provide protection of damages. Property insurance provides protection against risks to property, such as fire, theft or weather damage, such as fire insurance, flood insurance, home insurance, etc. Casualty insurance includes almost any coverage that is not related to life, health or property.

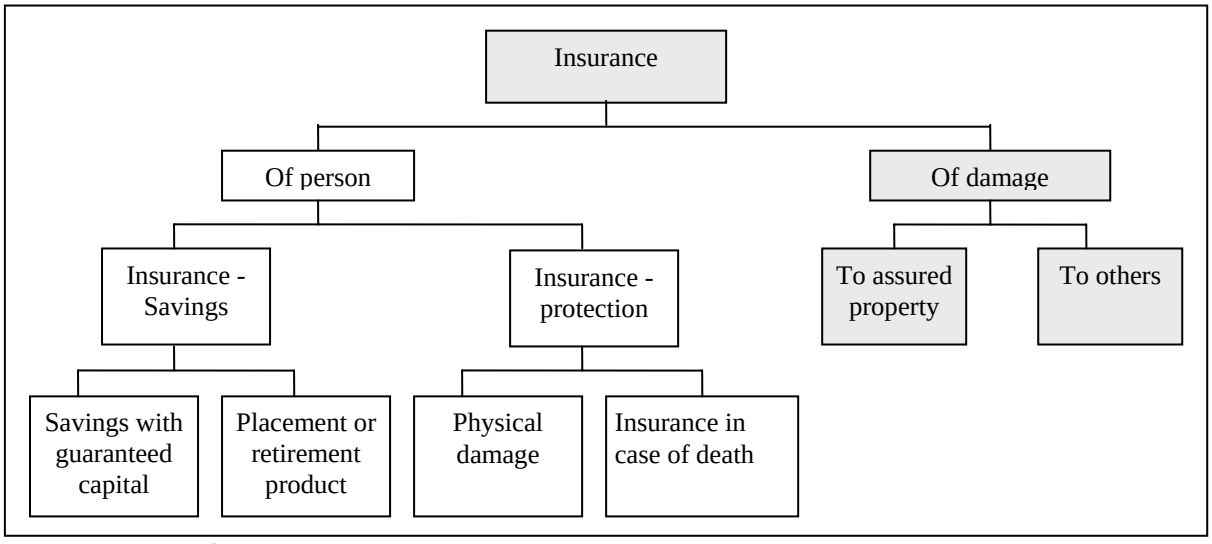

Figure 1. The main insurance activities

2.2 Traditional insurance distribution channels

These services are traditionally commercialised over three channels of distribution:

- Brokers: are registered in the trade and companies register. They have their own office and are allowed to offer to their customers products of various insurance companies. They are mandated by their customers to find an insurance which is appropriate to them among all those proposed on the market. They are often brokers who work for large companies.

- Sales employees: are related to an insurance company by a contract of employment. They do not have an office open to the public and then have to seek customer or prospective customer in their home to sell their products. The activity of sales employees had developed around three main characteristics: specialization in products of life insurance and of capitalization, positioning on "popular" customers (which does not have usually life insurance) and practice of the hard selling.

- Sales agents: are dependants workers. Contrary to the brokers, sales agents are not mandated by the customers, but by an insurance company of which they propose many products. Sales agents are traditionally specialized in property and casualty insurance. They are remunerated on the basis of commissions.

These distribution channels are compared in the following table:

	Sales employees	**Sales agents**	**Brokers**
Legal statute	Employee	Independant	Independant
Mode of remuneration	Wages (with variable part)	Commission	Commission
Commercialised services	Only one brand	Only one brand	All brands
Privileged services	Life	Property and casualty (P&C)	P&C or industrial risks for business clients

Translated from: Benedetto M.-O., 2002[4]

Table 1. Comparison of the insurance traditional channels of distribution

2.3 Emergence of call centers in TopInsure

The organisational changes which leads to the emergence of call centers in TopInsure concerns the activity of property and casualty of the sales agents.

TopInsure decide to transfer the administrative management of claims from the sales agents to call centers.

Then, sales agents who before: sell insurance contracts to the customers, receive the payment of the contributions of insurance, receive the declarations of claims, pay the insurance indemnities, are now concentrated to the sales activities (i.e. sale of the insurance contracts and the reception of the insurance contributions).

The main goals of these transformations is to allow the sales agents be focused on their commercial role and to deliver to customers homogeneous and high level services. Moreover, the new direct contact between TopInsure and its customers allow the company to know them in order to better serve them and then make them more faithful.

3 HOW THE CALL CENTER REMEMBERS ITS PERFORMANCES?

After these organisational transformations, ten call center were created. Each one is composed by:

- A manager, which has for principal tasks to animate the team, to ensure the activities planning, to follow-up the sales agents needs, to manage the team performance, to make the reporting of the operational performance, etc.

- A technical support, is the expert in legal clauses related to the insurance. He can intervene to help agents if necessary.

[4] According to Derrien J.-L., Johansen A., Lion J., 1995, La distribution dans l'assurance : agents généraux et courtiers – Contrat d'Etudes Prévisionnelles, La documentation française. P.34

- A client support, is the expert of the customer relationship. He can intervene to help agents if necessary. He also can replace the manager for some tasks (activities planning, follow-up the telephone waiting queue, etc.).

- Agents, are charged to answer to customers requests.

The call center activities can be described as follow:

Mails or fax received from customer are transformed into an electronic format and then integrated into the customer relationship management device (CRM device) according to their object. Customer calls are oriented by the interactive server vocal to the appropriate agents according to the call origin (customer or sales agent) or the agent profile (car claim, non car claim). To answer customer's calls, agents have to authenticate into the computer-telephony integration device (CTI device). This device combines the telephony and the data-processing applications related to the customer relationship.

The call center's managers have to coordinate the agent activities: prepare the weekly planning, and adjust it according to the preceding week performance, supervise the phone queue and affect agent to telephone if necessary, supervise mail stock and take care that the delay of response is respected and make sure that the agent respect the performance objectives, etc.

By the end of the month, managers transmit some performance indicators to a central service responsible of following-up the call center's performance. These informations are then combined with other informations collected from other company's services (such as, distribution service) in order to establish the monthly call center performance dashboards. These dashboards are then distributed to the ten call center's managers, in order to know their performance level, to compare it with the other call center's level, and to envisage the necessary actions for the next month.

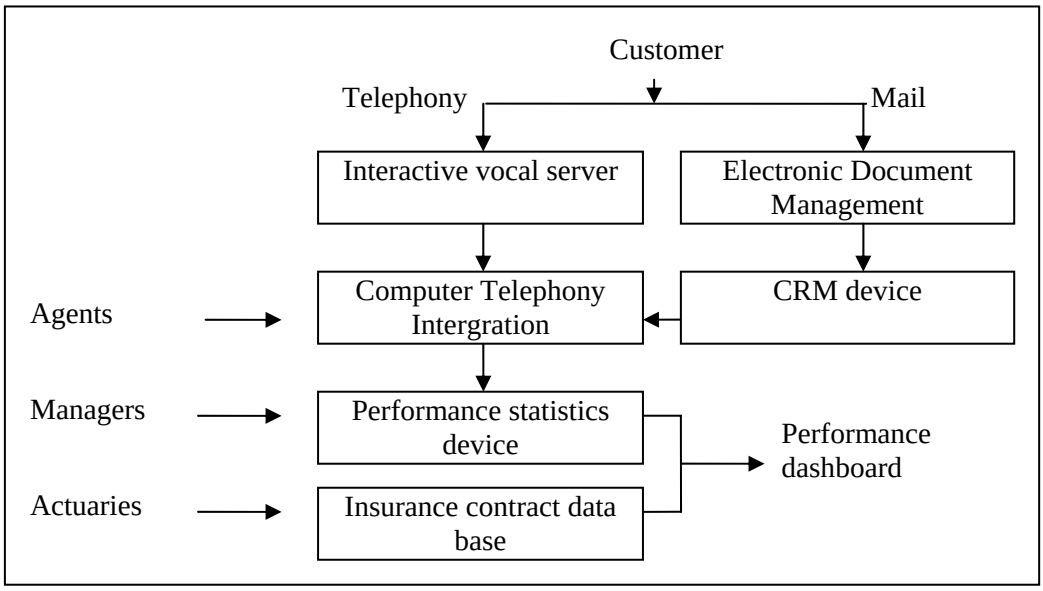

Figure 2. Who use what in the call center?

To help managers achieve their mission, we can find a set of observable representations into the call center directly involved in the monthly performance dashboard:

- a performance statistics device, in which we find a statistical instrument following-up calls (call received, call served, rate of abandon, duration of the call, etc.) and a statistical instrument following-up some performance indicators related to the agent's tasks (number of contacts per claim declaration, time to reply to customer mail, etc.),

- screens disposed over the call centers giving to managers as well agents, client support or technical support, the state of the telephone waiting queue,

- verbal exchanges among the actors in informal way (in the case of an overflowing telephone waiting queue, a manager or a support client can affect more agent to telephone instead of treating mails), or in formal way (in the weekly meeting with the call center team in which the manager communicate the main performance indicators of the preceding week and adjust according to these results the activity plan for the next week).

In addition to these directly observable representations listed above, we assume as Hutchins (1995) suggests, that some sort of representations of the call center performance has been created in other media that are not observable: the memories of all members of the call center team.

4 PRELIMINARY FINDINGS

4.1 Performance dashboard setting as a call center system's memory

The examination of the setting process of the monthly performance dashboard shows that it's a matter of producing process of representations in the call center that will serve as resource that organizes the operation of the call center for the next month (activities planning, employee's vacation, recruitment, formation, technology device improvement, etc.).

The performance dashboard becomes in its turn a new physical media in the call center cognitive system which supports performance representation.

This physical media (i.e. performance dashboard) is produced by bringing representations into coordination with one another (following telephone queues screens, weekly performance tables, tables from the statistical device of follow up of the performance, etc.) and provide representational state (rate of customer calls served by agents, rate of contacts by a declared claim, etc.) that will be coordinated with other representations internal of the call center (number of call received, number of call served, etc.) or external of it (from the other company's services, such as the monthly sales turnover from the distribution service).

As Hutchins (1995) suggest, we can call this process a call center system's memory because it consists of the creation, inside the system, of representational state that is then saved and used to organize subsequent activities.

4.2 The call center distributed cognitive system

The examination of the call center system's memory shows that the call center memory is not made only by the actor's memories (managers, agents, client support or technical support). By taking the call center as a unit of analysis rather than the individual mind as the distributed cognition theory suggest (Hutchins, 1995), we integrate into the analysis of the call center cognitive system, elements from the individual's environment (physical media, individual interactions, representations, etc.). The choice of this unit of analysis shows that cognitive system of the call center (i.e. the way the information is represented, propagated and transformed into the system) is distributed: actor's memories, material media, physical processes and verbal exchanges are here to support performance representations and contribute the propagate them across media in order to set the monthly performance dashboard, which contribute in its turn to plan the next month activities plan and then the next monthly performance dashboard.

4.3 Place and role of ICT in the call center system's memory:

Technological devices introduced into the call center are supporting representations. These representations will then be propagated and transformed through the activities of agents, client support, technical support or managers. This process is allowed by the capacity of these physical media to bring representations into coordination with one another and contribute then to the setting of the call center system's memory.

Technological devices are then affecting the flow of information in the call center. They may determine the possible trajectories of performance information or the kinds of transformations of

information structure leading to set the performance dashboards. This is important to managers who take the performance dashboards as a support to plan their further activities.

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