

Toward E-Knowledge Based Complaint Management

Samiha Mjahed
Institut Supérieur de Gestion (ISG)
University of Tunis-TUNISIA

Abdelfattah Triki
Institut Supérieur de Gestion (ISG)
University of Tunis-TUNISIA

Abstract *Service failure and recovery is a well-established area of services research. Research has shown that service recovery is critically important from a managerial perspective in terms of maintaining customer relationships. Yet few firms excel at handling service failures. There is a growing number of managers who claim that customers tend to be dissatisfied with their service recovery effort. Their employees cannot improve service processes when they experience recovery situations and their companies still do not learn from service failure. [19] attribute the service recovery ineffectiveness to the competing interests of managing employees, customers and processes. We agree with their contention that to address these criticisms, complaint management must acknowledge and find new approaches to achieve consistency and to correct the misalignment of interests that can exist between the actions of the organisation and the needs of its customers and employees. We believe that search in the customer knowledge management literature represents one effective means to enhance a firm ability to implement a cohesive service recovery strategy.*

A comprehensive based knowledge creation system framework where the Socialization, Externalization, Combination and Internalization (SECI) modes, and various 'ba' proposed by Nonaka and Konno are introduced for complaint management. Empirical research, involving a case study is presented to illustrate the proposed framework. This framework is believed to pave the way for e-knowledge based complaint management.

Keywords: *complaint management, customer knowledge management, information technology (IT)*

1. Introduction

Complaint management processes have two main properties. First, they utilize information technologies to break the barrier between employees and enable customers to obtain information and service recovery from companies. [16] believe that using a computerized system helps to overcome problems associated with inter organisational communication of adverse information, mainly complaints. According to the traditional styles, consumers have to complain face to face to lodge their complaints or deliver written complaint to access service recovery from companies. Second, companies can communicate and process complaint using many electronic tools, such as network, E-mail, etc. They are able to offer different choices of service recovery according to customers' different requirements such as time and place. Generally speaking, in E-age many customer services can be performed through the network. According to recent developments in complaint management, data management and information management have to be totally implemented through computer technologies, which mean that E-knowledge management will be the major trend in complaint management. This is the only way for companies to effectively manage customer complaints.

However, previous researches in complaint management have not recognised how complaint management contributes to or impedes knowledge management. Although the literature has identified many critical factors that affect service recovery performance, the essential features that lead to knowledge creation have not been explored. Identifying the critical factors of the successful improvement of complaint management by KM and investigating how these key factors affect service recovery performance remains largely unexplored.

Moreover, complaint management practices undermine knowledge management by pursuing the goal of control associated with avoiding negative failure consequences. This view is much more developed than the potential positive effects of failure. Paradoxically, firms often restrict themselves in fixing what has been broken in order to restore satisfaction and to prevent defection. This strategy stops halfway since the goal of service recovery should be to capitalize on complaint management by taking advantage of the learning opportunities afforded by service failures and proactively taking unexpected actions. [6] note that if complaints are transformed into knowledge about customers, they can provide a valuable amount of capital for enterprises.

One way to contain the negative and to promote the positive consequences of failure is to use knowledge

management. On the control side, knowledge management implies adaptive actions by quickly detecting complaint and establishing customer satisfaction. With regard to learning from failure, knowledge management uses complaint as learning and improving opportunities. Knowledge management, thus, overcomes the inherent conflict in allocating resources between control and learning perspectives.

This study describes a knowledge-enhanced service recovery implementation. We want to introduce the actual status quo of Customer Knowledge Management (CKM) initiative within complaint management and shed light on the question of how companies successfully utilise knowledge about, from and for customers to achieve superior performance in complaint management processes. In order to address these issues, case study research is conducted to identify practices of customer knowledge management in processes of complaint management.

The paper is organised as follows. After a brief presentation of background and research methodology, we offer a case study to explore how complaint management promotes knowledge creation. First we identify the complaint management steps in a process model. Second we explore knowledge-creation opportunities within complaint management. Third Socialization, Externalization, Combination and Internalisation (SECI) modes and various 'ba' proposed by [21] are introduced in order to facilitate knowledge creation within a complaint management process. Last, a comprehensive complaint management-based Knowledge-Creation System is proposed.

2. Theoretical background

2.1 The advent of Customer Knowledge management

Knowledge is widely recognised to be a vital asset for the survival and prosperity of organisations. Effective knowledge management offers a competitive advantage within the high competitive pressure in business market and the rising customer expectations regarding product/service delivery quality.

Knowledge management extends beyond the collection of data and their categorisation. In particular, knowledge management is concerned with both people and systems, and it is important to understand the link between knowledge management and organisational learning. In this context, [23] considers KM as a holistic philosophy that is concerned with the management and exploitation of corporate knowledge. The last takes a variety of forms such as policy documents, contents of databases, knowledge locked away in people's heads, 'know-how'. There seems to be a congruence of understanding that Knowledge can be either explicit or

tacit and scholars often use the word knowledge to mean both. Explicit knowledge, also known as formal or codified knowledge, can be expressed by words and numbers and it can be shared by IT-systems, whereas tacit knowledge, known as implicit knowledge is unspoken and hidden. It is knowledge that is held in workers' minds and which is embedded in the fulfilment of their job role and therefore hard to formalise and communicate.

[21] claim that these two types of knowledge interact with and interchange into each other, in a spiralling process, in which individuals learn from others and from the shared knowledge of the organisation, to create new knowledge that in turn becomes part of corporate knowledge and thus part of the new spiral of knowledge creation. Their proposed model illustrates four types of interaction, represented by the acronym, SECI.

Socialisation which involves individuals in the sharing of tacit knowledge, in the process of becoming part of "a larger self that includes the tacit knowledge of others";

Externalisation which involves expressing tacit knowledge in a form that can be understood by others, during which the individual "becomes one with the group";

Combination which entails the collection of explicit knowledge, from sources inside and outside the organisation, and its combination, editing, processing and distribution;

Internalisation in which the newly created knowledge, which is in explicit form, is converted into the organisation's tacit knowledge, through training and through individuals learning to "access the knowledge realm of the group and the entire organisation" [21].

[21] also suggested the need to create an appropriate environment in which knowledge can be created and transferred, describing this as a "Ba" - a shared space for emerging relationships, that might be physical, virtual, or mental, providing a platform for advancing individual and/or collective knowledge [21].

With the information technology (IT) explosion the focus that has largely dominated research is the role of IT in Knowledge management (capture, codify and share Knowledge). Gartner suggests that while "strictly speaking, KM does not require the use of software" they "believe that KM technology is necessary to a good KM program." Cited in [7].

Customer Knowledge Management (CKM) is an area of management where KM instruments and procedures are applied to support the exchange of customer knowledge within an organization and between an organization and its customers, and where customer knowledge is used to manage customer relationships, to improve CRM processes such as customer service, customer retention and relationship profitability [24]. The CKM process as introduced by

[25] offers a process perspective to illustrate which KM tools can be applied to the CRM sub-processes to achieve effective CKM. It introduces the four KM aspects 1) content, 2) competence, 3) collaboration, and 4) composition. Content refers to the knowledge aspect when knowledge has to be separated from individuals and codified. Competence focuses on understanding which customer knowledge (explicit and implicit knowledge) is required by employees in order to accomplish their tasks in different business processes dealing with customers. Collaboration refers to knowledge that only exists in groups such as project teams and it focuses on how this kind of knowledge can be supported. Composition characterizes the incorporation and the cost-effective diffusion of customer knowledge within an organization.

2.2 Complaint management

Given the predominance of a marketing and customer focus in the service recovery literature, the operations perspective has received only a limited attention [18]. The interest in complaint management, from this perspective, is the process by which complaints are handled and customers recovered. The design, planning, control and execution of these processes are core operations tasks [11]. A number of attributes of high quality complaints-handling processes have been identified [8], [11]. These include: - having clear procedures; - providing a speedy response; - the reliability (consistency) of response; - having a single point of contact for complainants; - ease of access to the complaints process; - ease of use of the process; - keeping the complainant informed; - staff understand the complaint processes; - complaints are taken seriously; - employees are empowered to deal with the situation; - having follow-up procedures to check with customers after resolution; - using the data to engineer-out the problems; - using measures based on cause reduction rather than complaint volume reduction.

There has also been research on complaint management in human resources. [2] who introduced the concept of "internal service recovery", described it as the way an organisation endeavours to make front-line employees more able to deal with dissatisfied customers, examined the idea of service recovery and looked at the importance of internal customer service. The importance of supportive internal relationship with frontline employees through the provision of resources (training, information technology systems, empowerment, and organisational culture) has been well demonstrated by a number of studies [2], [21], [1], [28], [13], [14].

It is worth noting that some researchers described the approach to complaint management taken by organisations, mainly as how to cope with complaining consumers and learn from complaint. Indeed,

employees have trouble hearing a complaint as feedback. Instead they hear it as a personal attack on their self-esteem and self-efficacy and perceive it as an external job stressor and as a source of role conflict [27], [11].

Technology enabled service recovery processes remain a ripe area for research. It is argued that the use of information technology and the Internet in particular, has led to a change in the service's firm-customer interaction. More services become self-services and supported by technology. Studies focusing on self-service technology are frequent, but studies focusing on service recovery in a self-service technology context are scarce [12]. Service recovery has become increasingly dependant on information technology to enable capabilities such as capturing, tracking, and acting on recovery data but little work has been devoted to IT influence upon service recovery [3].

3. Research Methodology

In this study, we were especially interested in ascertaining how and why complaint management can be successful within companies and how CKM can enhance the performance of complaint management processes. The deployment of case studies is recommended in order to answer "how" and "why" research questions [29].

In order to identify the status quo of a knowledge-enabled service recovery, we studied the case of a bank. We conducted ethnographic fieldwork, observing and interacting with banks' employees, customers, and consultants. We toured facilities and initiated conversation with whomever we met. When we understood how a complaint management is implemented and our observation raised no further questions, we agreed that our understanding had reached saturation.

Our findings about the process and the analysis of service recovery were checked by a consultants team, both to help verify the accuracy of our representation and interpretation and to provoke additional chronological stages: before and after the banking restrictions recommended by the consultants. In fact we continued visiting the bank from time to time to develop insights into the change in complaint management processes that the consulting group set up for the bank.

This approach is adopted by [5] when they proposed to understand how organisations change to become more market oriented. They ascertain that participant observation in the field gave insight into the lived experience of employees engaged in everyday activities.

To understand how firms implement successfully service recovery, we observed and analysed a bank

seeking to implement a knowledge based complaint management. We used in depth, qualitative data collection techniques: ethnographic observation, depth interviews (in particular oral histories) and historical documentations; methods that are common in consumer behaviour, anthropology, sociology and organisational research [5].

The content of the most crucial immersed episodes describing those moments at work when employees were dealing with complaints is transcribed as verbatim and interpreted. The discrepancy between best practices of complaint management normatively identified in the literature and actual implementation in the case before hand impelled us to identify and describe successful practices where KM helped to improve complaint management processes effectively. The ultimate goal was to derive a guiding framework that may help to overcome the practical challenges associated with the topic.

4. Analysis and Discussion of Knowledge-based complaint management practices

For our research purpose, we adopted the proposed structure in respect of the topic of how complaint management is enhanced by KM initiatives: 1. the diagnostic of the complaint management in the bank, 2. Knowledge components in the complaint management process and 3. Knowledge transference in the complaint management process.

4.1 The diagnosis of complaint management in the bank

Being immersed in the routine practices of complaint management, we have been part of the various task processes. On the basis of observations, interviews with employees and of internal documents, and referring to [9], [4], [18], and [27] researches, complaint management in this case reveals a process of five stages: (1) reception of complaints, (2) analysis, selection and classification of complaints, (3) formulation of replies to complainants, (4) tracking of complaint information and trend analysis (see fig 1 in appendix 1).

Then strengths and weaknesses of such a process are underlined (see table 1). The former consist in top management commitment to daily complaint tracking which result in proper complaint handling, account information sharing, and appropriate decision making. The weaknesses lie in the variability of the feedback, in the measures taken by the different bank services, in the neglect of oral complaints in comparison to the written ones, and in the lack of motivation of front line employees.

Table 1. Strengths and weaknesses of the bank in managing complaints

Strengths	Weaknesses
The creation of a service dedicated to complaint management provides a global view on the number and the nature of complaints	Despite the fact that the complaints are transmitted to the relevant services, the reply deadlines differ from one service to the other
The processing of the complaint is centralized in the bank's headquarters and decentralized in the different services at the same time. This mobilizes the bank's staff to a maximum and sensitises them to the importance of customer orientation.	Apart from the face to face complaints received by the bank headquarters, all other complaints are not recorded and are not subject to processing, monitoring and follow-up.
The complaint service is valorized by an adequate hierarchical unit as well as by the involvement of the person in charge of it in meetings and decision making.	The complaint management system overemphasises written complaints while oral complaints (i.e. telephone or face to face) seem to be ignored.
The complaints are managed on a daily basis so as to account for the seriousness of the case	The lack of integration of the call centre to the complaining service process.
The involvement of top management in managing complaints is believed to improve the processing of the complaints and to reinforce the change towards a client oriented mindset and behavior.	The system of complaints treatment suffers from a segregation problem. It only listens to important customers. Small accounts are totally ignored.
The person in charge of complaints is endowed with an expertise in written as well as in oral communication that makes of her an adequate spokesman of the bank in the media. Her active participation in training on complaints management reinforces her sense of service quality.	The system of complaints treatment lacks maturity in comparison to state of the art CRM capabilities. Based on an Access data processing tool, the application has the following drawbacks. It does not record the complaint data so as to identify segments and to use models for the understanding and the prediction of client behaviours. Nor does it give access to pieces of information provided by the different services about the status of the complaint and the decisions made
The person in charge of monitoring and updating the data base is knowledgeable about banking techniques and adheres totally to the management philosophy of client satisfaction. He makes sure to file and answer the complaints and to remind the failing service to provide the needed piece of information.	The system of complaints treatment cannot provide a tool for an advanced monitoring of service complaints so as to make adjustments and to improve service quality on the basis of indicators of performance such as the percentage of customers having received a reply in one or two days, repetition of errors, number of recidivist complainers.
The information obtained by the bank is diffused to the people that are concerned with the problem. It is deemed	The system of complaints treatment doesn't provide any indication on the outcomes of external investigations so as to

strategic information and is suitably exploited. The feedback represents a tool of reinforcement of customer orientation.	assess client satisfaction or client evaluation of the complaints treatment processes and consequences.
---	---

4.2 Knowledge components in the complaint management process

The complaint management process reveals a strong knowledge intensity. It involves a two-way flow of feedback: an external feedback from complaint to organisation and an internal feedback or intra-organisational feedback. This information process is characterized by descendant and ascendant flow (see appendix 2).

We analyse the KM instrument supporting this customer- oriented business process by referring to the four KM aspects identified by [25]: 1) content, 2) competence, 3) collaboration, and 4) composition.

Aspect of content:

Complaints revealing customer dissatisfaction reach the customer care department through calls, mails, web site, fax and written inquiries. The content within the organisation was disseminated via e-mail. Each department had to use the complaint content in the way they deemed appropriate. As the amount of content increased, the navigational structure become more and more cluttered.

Complaint acquisition also involves storing this knowledge in a convenient format for future retrieval. The bank uses a management information system to record the complaints and its related data like complainant name, address ... No document is available to standardize content creation processes and therefore facilitate a review of relevant documentation across multiple complaints cases. The portfolio established by the chief executive of complaint management provides a means to record feedback. It is a manual transcription of the numeric database. Actually no lessons were learnt from the complaints (See situation A in appendix 3).

Aspect of competency:

Although the software is a simple management information database, reports could be generated so as different categories and formats provide the manager with a basis for decision making. The service recovery assistant benefits from this ability to consolidate and categorize unstructured information.

There are formal documents, internal notes, company rules and regulations, personal notes use of all knowledge about financial techniques, but no practical or procedural manuals about complaint management that describe experience of previous customer and proposed solutions. In addition there is an informal discussion between staff to take measures for rapid

recovery. An informal meeting space has been set up to encourage staff to acquire knowledge from and to transfer private experience and knowledge. These tools provide the supporting environment to enhance the acquisition of employees competency in their work. No external source of data is formally provided for staff use. Service recovery staff have no access to the internet. Knowledge acquisition is possible mostly from guiding the internal resources (See situations A, B, C, D in appendix 3).

The aspect of collaboration

Collaboration is implemented via direct interaction between the chief executive of the complaint management service and her assistant and through the network mediated interaction between members of the service recovery team. This collaboration enables the dispersed complaint team to store and retrieve documents from virtually anywhere and to share and use such documents for service recovery.

The aspect of composition

The provided work space promotes knowledge exchange between teams. In a wide space the service recovery unit communicates with two other units (see situation E in appendix 3).

One major shortcoming is the design of knowledge composition. The bank operates as a subsidiary and more than 30 agencies in different regions provide commercial activities. The complaint management process is not supported by systems enabling local service organisations to be connected. The customer service contact can not operate systematically to conceive and optimise complaints answer and service requests efficiently. With further investments in the technical infrastructure, a knowledge platform was created using basic web technology software and applications. The introduction of this centralized complaint base, optimised the systematic collection of knowledge from customers about financial trends expectations and the support of complaint management both for customers and employees at the call centres and local agencies. Providing a common electronic platform for frontline staff and different service departments, the new SI improved timeliness of information available on the knowledge platform and support team service recovery agents. It enables them to provide faster answers.

Analysis was made of the high volume of complaints in order to pursue product enhancement and innovation. At the end of every three months, service recovery department provide a report to the manager to give a statistical view of complaint recovered who as an expert and advisors recommend strategic actions. Once the idea has been found and implemented successfully, the new knowledge can be made available organisationally by management. Despite this bank's focus on the use of knowledge from inbound customer complaints and feedback for product

enhancement and innovation through the recommendation of headquarter, there is no central aggregation of complaints in the customer care domain, or a connection to the global product development department.

So far there hasn't been any system to encourage or reward staffs to collaborate in order to create or innovate a new way for their job because there is no such rule in the bank (See situation D in appendix 3).

4.3 Knowledge transference in the complaint management process: Using the SECI model to analyse the complaint management process

To understand the process of integrating KM into complaint management processes, a framework is needed for assessing and validating an organisation's effort in so doing. As stressed by [20] and [21], a knowledge forum, "ba" is an important platform where knowledge can be shared and new knowledge created.

It seems that several conceptual parallels underpin the complaint management literature and the SECI. Both streams attempt to capture the dynamic processes associated with internal operations, as well as the interactions of the organization with the external environment, mainly the customer. The SECI models acknowledge that organizational members must balance conflicting demands. Likewise, the competing interests for managing employees, customers and processes should be considered to ensure service recovery effectiveness [19]. The above verbatim illustrations show some viable connections between complaint management and Nonaka's knowledge creation process.

Socialization mode

The knowledge management category comprises two perspectives on the management of customer knowledge within the organisational context: (a) knowledge exchange between customers and the organisation and (b) knowledge dissemination within the organisation to those entities where it can be reused most effectively.

The complaint management process involves two parties of exchange, we can admit that the socialization process in complaint management occurs when organizational members interact with customers, and employees interact with each others to share tacit knowledge.

Creating tacit knowledge in complaint management requires both awareness of employee that facilitates communication and understanding between organisational members and dissatisfied customers, and skills for this specific context. This was exemplified by frontline employee expression:

"Based on meta-linguistic features such as the tone and facial expressions, I understand that the customer needs help but I am unable to trigger the needs because I fear that I can't control his anger. I used to ignore complaints"

This bank fails to build emotional intelligence in staff. That is: Imbue frontline employees with the ability to more effectively gain trust and build rapport, understand emotions when dealing with angry customers and improve listening and questioning skills generally. Overall, there is a need to build the confidence, self esteem and desire of staff to solicit complaint.

"I used to ignore complaints" has much in common with [2] "learned helplessness" (LH) which posits that repeated trials of experiencing lack of control over recovery situations lead employees to develop a sense of helplessness that is passive, alienated and maladaptive behaviour such as being unhelpful, acting immaturely or uncreatively or withdrawing. This learning inhibits trying not to be resistant to change.

The customers and the bank have different visions of the failure and the degree of the situation criticality.

While customers tend to blame the bank, the bank tends to use objective approach and to place a great emphasis on failure evaluation from its perspective and break through social and relational boundaries and therefore cancelling the trust of customer.

The customer-perceived "acceptability" of a service failure may be a stronger predictor of the failure than provider-defined failure magnitude [19].

A phone conversation with a complainant reveals that the chief executive regards complaining customers as nuisance and too demanding:

Your complaint cannot really be considered as such. It is the third of this type. We have already explained that we can do nothing for you. It is not possible, it is the implemented procedures and the rules which guide our decisions.... I have just said to you that it isn't a complaint. Moreover, the manager banker has not appreciated your complaint letter ". Having finished this call, the person in charge of the complaints follow-up and treatment said: "They don't know "our internal kitchen". They assimilate all their needs to a complaint. They believe that this service is set up to achieve all their ambitions and resolve all their problems. Customers are so selfish."

Another discourse of the person in charge of the complaints follow-up and treatment is indicative of her service recovery orientation:

We must keep a distance in our relationship with the complainants, otherwise they will take an advantage and their expectations toward this service will increase.

The bank gives hint that it views complainers with suspicion. The following illustration shows that managers doubt customers' honesty when voicing a complaint:

Several complainants write in their letters that they had received from the ATM an amount less than the one they asked for and that their account was debited with the wrong amount. The response to such complaints is as simple as this: "investigations reveal that the amount withdrawn corresponds effectively to the one debited by the account. Full stop.

The bank is a latecomer to customer orientation philosophy.

The identified weaknesses, the absence of listening mechanisms and of encouraging customers' complaints and of monitoring customer satisfaction, soliciting customer feedback and communicating customer success and failure stories are reflected in the following frontline employee recollection:

"If every customer in this bank knows about my own experience with a complainant, any customer criticism geared towards improving service delivery is welcome. I never forget this famous customer who complained about waiting for too long. I am surprised when the workload was alleviated as a consequence of the complaint".

These revealed shortcomings in this bank illustrate that the promotion of listening mechanisms which encourage customers to complain allow socialization between customers and the organization because it provides vital tacit knowledge of customer unexpected need and customer perception. complaint management practices that foster contact and interactions between organizational members and customers allow knowledge to be created through socialization.

We shall add that in the organizational culture of this bank, a complaint stands for failure and blame. Culture of fear dominates supervisor and employee relations. The hierarchical organization renders team work difficult. Now, service failure demands cross functional collaborative investigation. With the fear of offending authorities and the employees' perceived lack of safety, upward complaint assimilation becomes more complicated. Some frontline employees summarize this frustration as follows:

"If we tell our supervisor what customers are saying our career will be at stake".

In view of this shortcoming, the bank cannot effectively socialize employees so that they "buy into" a customer orientation and feel compelled to deliver good service recoveries. This is surprising given the attention that the bank would like to give to dissatisfied customer within its new orientation:

The person in charge of the complaints follow-up and treatment told me about the privatization of the bank: "It is not only a visual change (logo, name, and colour) but it is also a change of the bank vision. The new hierarchical management has a strong customer orientation and is concerned with the value of the internal resources. This change calls up to share this vision between the

different actors; that is, build the new signature of the bank: "you will change your opinion about the bank". The establishment of this unit is the best proof. Its aim is to dissipate the customers' dissatisfactions and to improve our procedures, systems and quality".

To the extent that organizations encourage interaction between organizational members they facilitate the socialization process where employees can share tacit knowledge.

Establishing friendly complaint culture is part of the originating ba. In this ba, employees can interact with each other to acquire tacit knowledge in order to improve their competence and they are therefore proactive in initiating closer collaboration and cooperation along with a willingness to share knowledge. In addition, this ba helps establish a foundation for shared experiences and mental models between customers and the organization, improving the credibility of the complaint and enabling employees to both resist to debilitating contingency effect that negative customer feedback elicits and to cope with complaining consumers and learn from failure. Socialization between employees and customers provides a basis for learning.

Thus, greater blame-free cultural understanding and openness will increase interactions between customers and the bank, and within the bank and will lead to the rapid assimilation of tacit knowledge.

Externalization conversion process

To understand the properties, the purpose of failure as perceived by the customer, the bank needs to take an operational view of the failure by internal reflection and investigation (see complaint management process). Tacit knowledge about unsatisfied requirement specified by the customer is recorded, documented, analysed and structured and thus become explicit. This is a key manifestation of knowledge.

To the extent that the bank tend to conceptualize the complaint it promote externalization. A cross functional team, including participation with the right mix of specific knowledge is interacting ba which serves to speed the externalisation conversion process. [10] note that "by fostering opportunities for cross-functional knowledge exchange within and between Self-managing teams (SMTs), tacit service recovery knowledge may be turned into explicit knowledge that is shared within and between SMTs". As we observed:

Having received an atypical customer complaint about the behaviour of a frontline employee, the person in charge of complaints follow-up and treatment unit to her co-worker: "I am unable to reply to this "unusual" letter, could you please help me do so? I examined the clarification supplied by the agency manager during two hours, but I can't write any word. It is an uncommon complaint. There is neither internal regulation, nor rule to be guided with. I am afraid that the customer will not be convinced of my answer"

The person in charge of the complaints follow-up and treatment department addressed a co-worker: «is there a note addressing such a technique? It is ambiguous for me. I need information to reply to several complaints.» The co-worker answered: «such information is not ready yet to be put on the intranet, but you can get it from Mr H who wrote it».

Combination conversion process

It is knowledge transmittable in formal, systematic language. A weakness was identified concerning the codification strategy in which knowledge is codified and stored in databases but where it can be only accessed and used by the service recovery department. The bank implements its information system to analyse the explicit knowledge of service failure, track the weaknesses over time and make comparisons. Schema analyses help understand how gaps between specifications and perceptions create customer dissatisfaction. Such configurations are a basis to new explicit knowledge. These work activities are cyber ba which provide synthetic knowledge of causes of potential failures.

The words extracted from the complaint letter of a customer who hopes to get back the amount of money existing on the savings - book of her deceased husband: "I was like a ball kicked off by players. Every time I address a person, he sends me to his colleague. And after four months spent in going back and forth and in waiting, they advised me to contact Mr x in the bank headquarter. The latter in turn directed me to you and reassured me that only Mrs L who is responsible for the complaints follow-up and treatment would solve my problems. I am very disappointed. Such a claim was not really worth all the efforts, but what are new technologies useful for? How come the agency staff know nothing about such an essential operation? What are computers used for? Such a fundamental knowledge is not shared by frontline employees and all the other staff"

Internalisation conversion process

The explicit knowledge gained from the complaint management analysis (system information) is directed toward managers to initiate preventive action such as new quality policy and training programmes for personnel performing such tasks like treasury, compensation, and accountability. The institution of training programs provides vital explicit knowledge of technical or process know-how which enhance potential firms' ability to meet escalating expectations.

With the implementation of service recovery unit, a note from the manager was circulated. It explicitly to *formalizes* the banks' evolving complaint-handling orientation through symbols, rituals, artefacts, procedures and behaviours. These included structural organisational changes and the explicit definition of cultural values needed for the new bank service recovery responsiveness.

This illustration clearly shows that the bank approach in executing complaint management strategy

would ensure that all employees understand business objectives so as the vision becomes a reality.

The knowledge gained from complaint management strategic deployment serves as a basis for organizational alignment so that everyone in the bank is moving in a common direction or aim. This part of exercising ba promotes and reinforces the internalization of strategic complaint management orientation in the bank.

To the extent that the bank consistently acts in accordance with its purpose, aim, and strategy it facilitate internalization.

[17] Underline quality management practices that help the organization act consistently in accordance with its purpose, aim, and strategy and that allow knowledge to be created through internalization.

A curious phenomenon occurs during the life of service recovery: Employees develop divergent commitment to service recovery. Given these variations for ongoing complaint management connection activities, the bank relies on the power attributed to the unit in charge of the complaints follow-up and treatment to make decisions and act on behalf of the firm in an effort to ensure that their organisationally shared complaint management understandings were up-to-date, that employees participate and adopt the identical system and thus to maintain a fit between service recovery department and the workforce. This was clear from this phone conversation between one employee from the bank subsidiary and the assistant of service recovery executive.

X: X from the complaint follow-up and treatment department hello; I sent you an e-mail three days ago, to enquire about the handling of our client Z complaint but I have received no answer so far.

Y: I beg your pardon, but I do not know who you are?

X: I am in charge of complaints follow-up with my supervisor Mrs L. Our unit which was set up eight months ago is connected with the new board of the bank. In fact complaints are sent to the top manager who gave instructions to treat the complaint in three days.

Y: OK! I will send you the answer today.

A couple of hours later, the person in charge received the answer and told me: I wouldn't have obtained the complaint reply as quickly were it not for the position of our unit which I underlined.

Complaint management-policy communication work to be exercising ba. In this ba, management disseminates complaint management consciousness down the organisational hierarchy in order to make sure all employees are committed to meeting the disappointed customers' requirements:

In sum, based on the various situations described we conclude that within these knowledge-enriching activities, learning by continual improvement and continuous self-refinement through on-the-job training, formalisation, strategic alignment is stressed in exercising ba and triggering the internalisation mode.

5. Conclusion

Our research model focused on an organisation's KM execution structure-the "ba" of service recovery KM- and how this knowledge structure helps manage knowledge throughout the complaint management process.

By explicitly identifying the KM steps within each complaint management phase, we have demonstrated how the organisation improves its ability to implement a KM- enhanced service recovery. For each phase of complaint management, knowledge cycle through the four quadrants of the SECI model (fig 3 in appendix 4). Organisations implement effective service recovery by engaging in a four stage continuous process of knowledge creation: (1) socialisation, (2) externalisation, (3) combination and (4) internalisation. This process imbues the organisation with a set of cultural values and behaviours that support complaint management activities (tab 3 in appendix 4)

The results of this study build upon previous works that described complaint management and discussed antecedents of service recovery. The current study identified also the importance of such factors in knowledge management. We find that such antecedents must not only be present but must be brought into play in the correct sequence to ensure successful complaint management. Indeed the analysis identifies both the dynamic sequence of actions as a key and the value that the sequence of actions creates. In particular, we identify factors that firms embrace for the successful improvement of complaint management by KM.

In order to unleash the full potential of customer knowledge we argue that firms must excel at managing all four processes of knowledge creation: (1) socialisation, (2) externalisation, (3) combination and (4) internalisation. These directions enable us to establish evidence on how the joint orchestration of all four modes of knowledge flows creates superior customer complaint management-relating capability. Service recovery performance depends upon an organisation's commitment to incorporate KM into the complaint management process and upon its ability to manage knowledge assets in each complaint management step.

To enable the companies meet the requirements of knowledge economy and effectively manage their customers' complaint, companies should develop the E-knowledge management system to value the advantages of knowledge management in complaint management.

6. Future researches

The proposed complaint Knowledge Management model should be operational as a basis for service

recovery implementation. Such a development could assist firms to strategically select factors to optimize knowledge creation and transfer which underpin successful complaint management. Future issues should also lead to a refinement of the proposed framework and ensure its generalizability.

Further case studies are needed to deduce a common knowledge enabled complaint management process and identify its stage, the obstacles impeding progress from one stage to the next and the characteristics of firms that successfully navigate through the process.

Future research should focus on conceptualising and evaluating the concept of 'spiral knowledge loop' within complaint management processes. This is consistent with [25]'s proposition which was introduced in customer knowledge, not in the specific context of service recovery.

Depending on the measured intensity of factors for knowledge enabled- service recovery it will be possible to classify different service recovery orientations and to predict on which development stage a company is situated. A connection could be seen when comparing the level of competence and corporate success in term of service recovery. The presumption is that organisations managing complaints that do not support all of the knowledge creation processes will be less effective at recovering consumers.

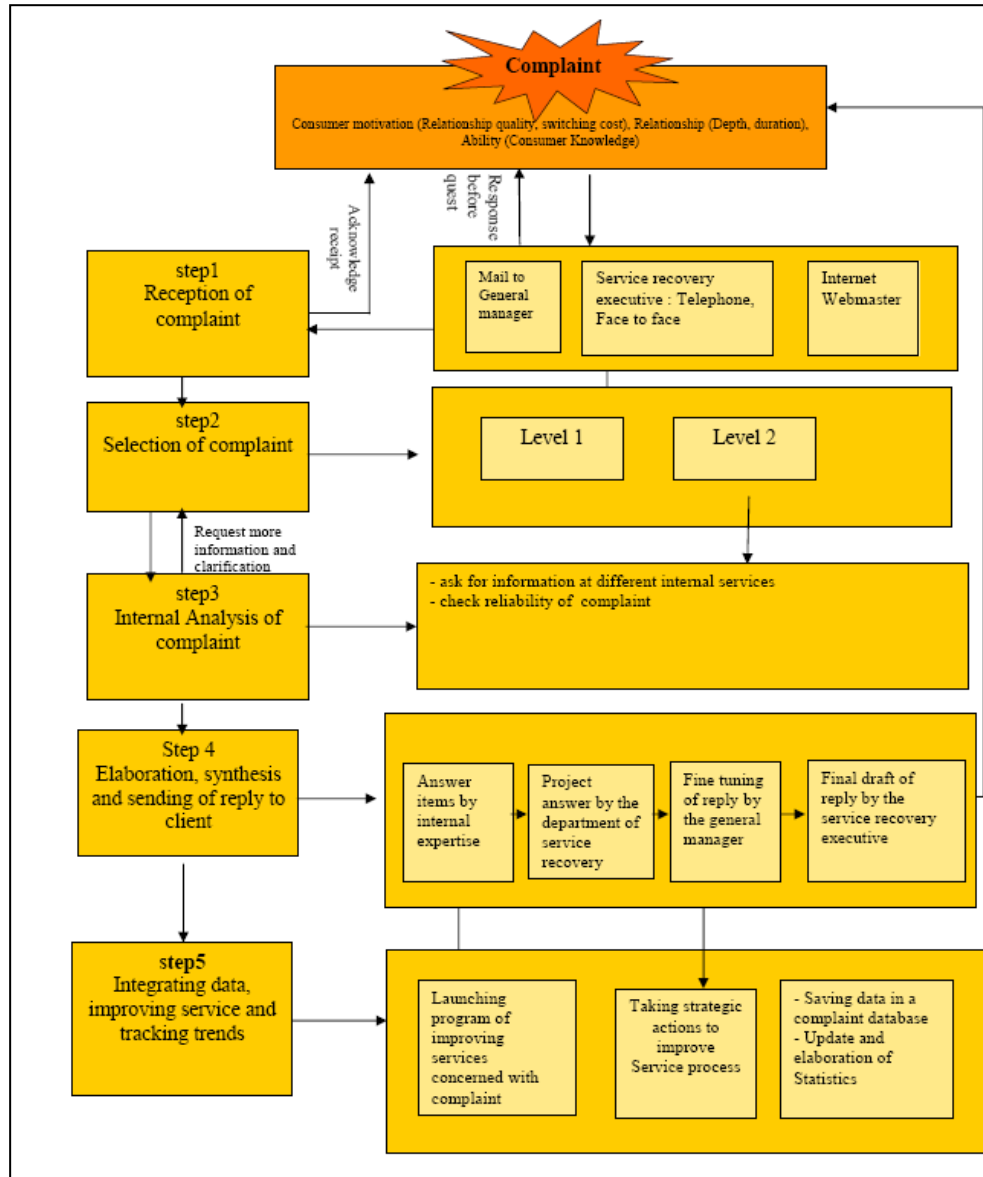


Figure 1, Complaint management process before restructuring

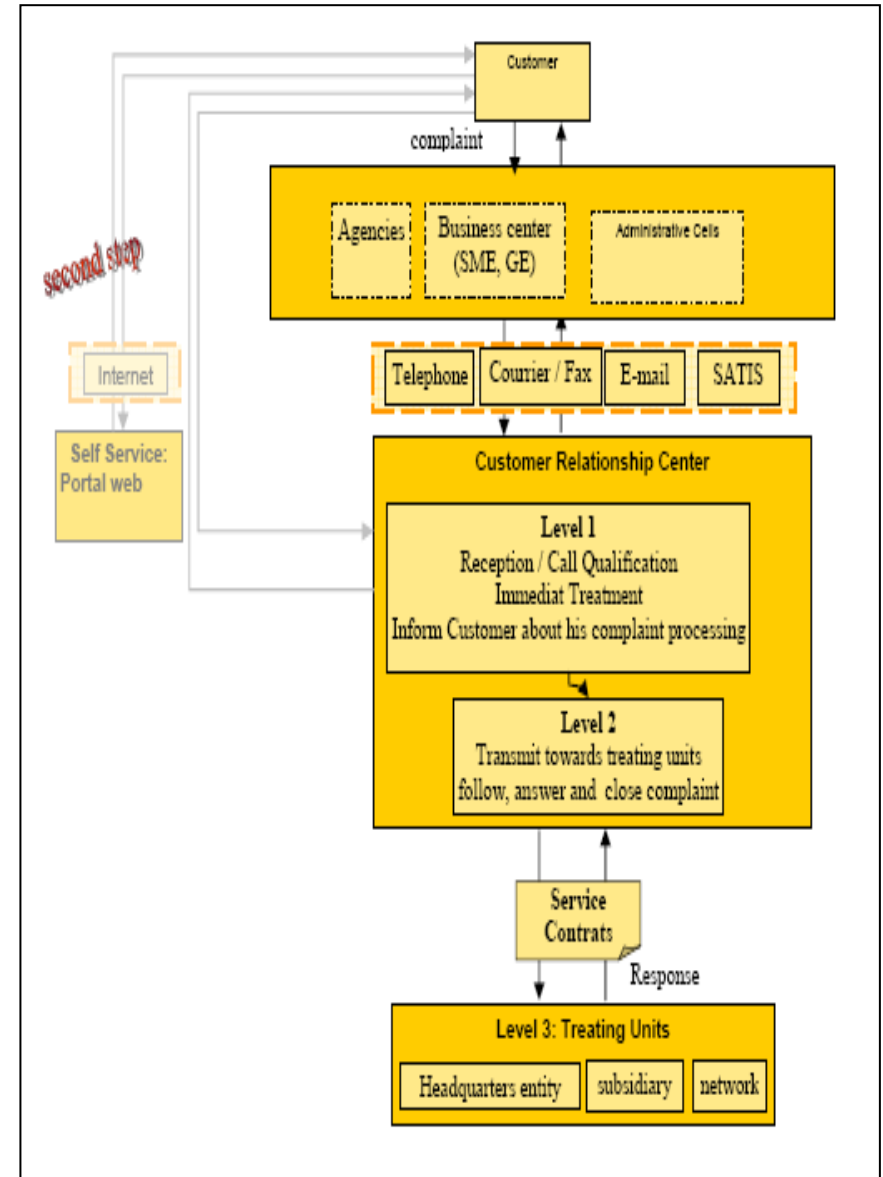
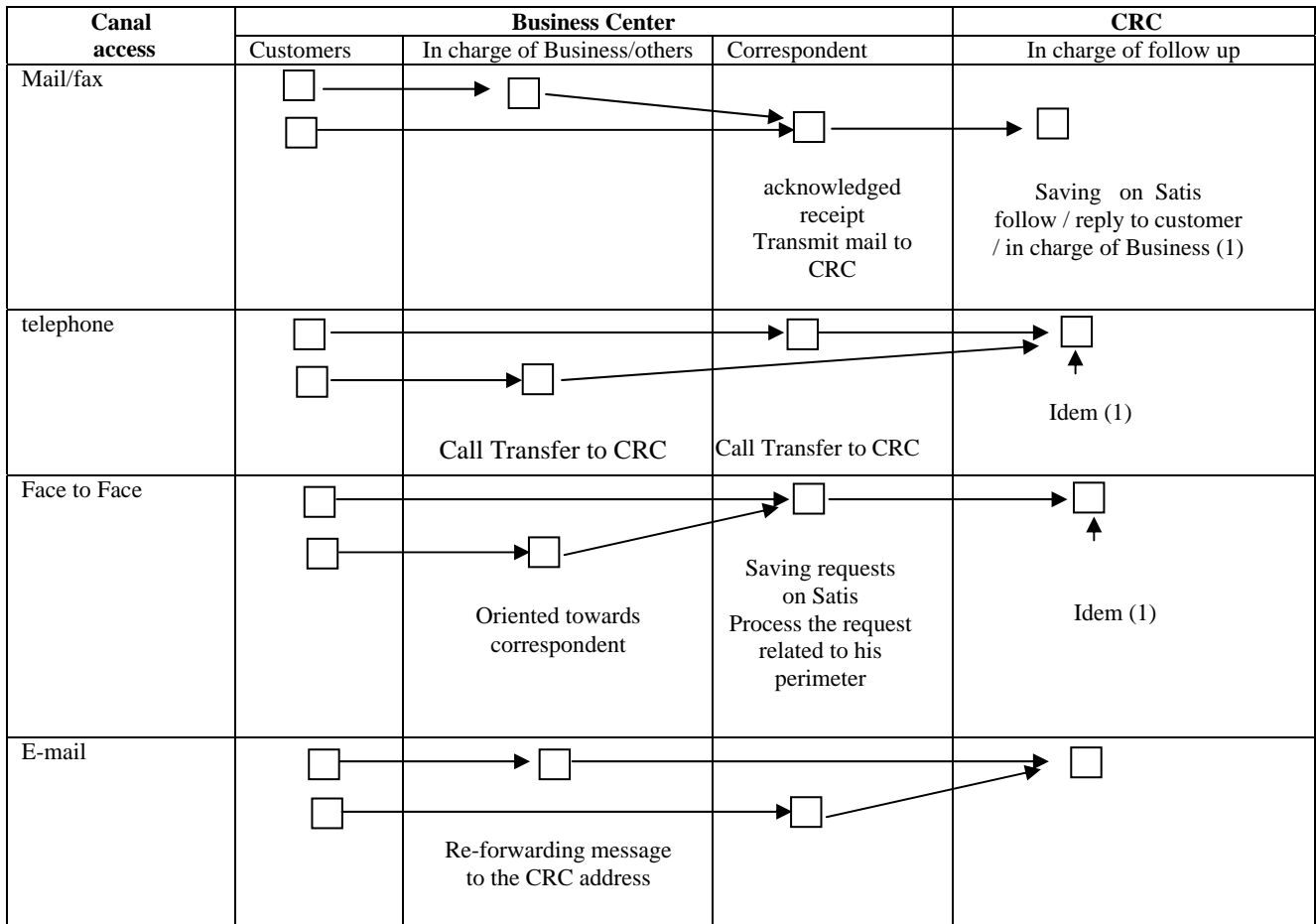


Figure 2. Complaint management process after restructuring

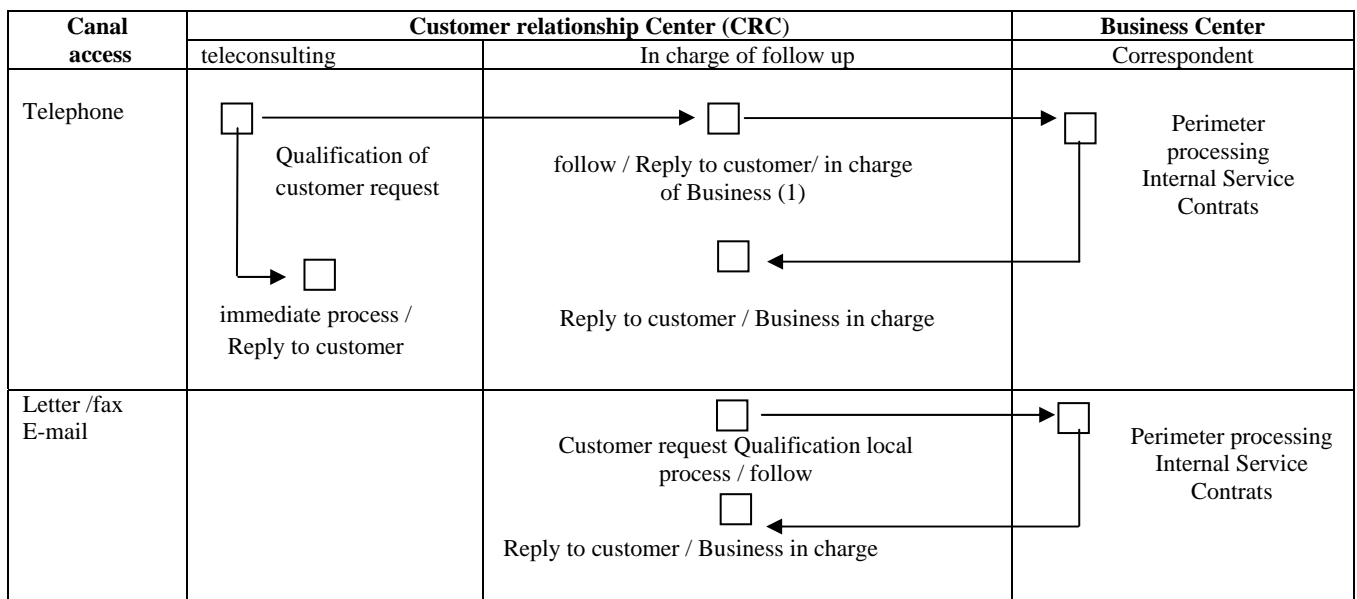
Adapted from Hermel. L (2006), Gilly .M. C et al (1991), Mitchell (1993) and Tax. S et al (1998)

Appendix 2

Ascendant Flux: from Business Center to Customer relationship Center (CRC)



Descendant Flux: From CRC to Business Center



Appendix 3

Table 2 Examples of immersed episodes dealing with complaint management

situation	verbatim	content	competence	collaboration	composition
A	<p>The person in charge of the department of follow-up and treatment of the complaints speaks to her assistant: "can you get us a secretarial guide from anywhere". Surprised I asked: but why do you need it for? How can a secretarial guide be useful for you? Normally, secretaries learn from you and not the opposite.</p> <p>The person in charge answered: " in these guides, we could find typical letters, models of answers which can help us to gain the time and energy of the writing effort and thus to react more quickly. We need a lot of time to adapt our own models of answers for each type of incident and each type of complainant. We have an experience of less than a year.</p>	++++	++	+++	
B	<p>The person in charge of the complaints follow-up and treatment department informed me during an informal interview: "I feel very comfortable in my position that corresponds well to my profile. They estimated properly my potential. Although my academic background is literate, sociology, communication and press, I feel I have the necessary background for such position; practice helped me to perform well in my job.</p>		++++		
C	<p>By asking the person in charge of the complaints follow-up and treatment why she has to ask for help from "X" to inquire about the treatment of a complaint and not for "Y" the person in charge of the type of tasks related to this complaint, she answered: " he was a manager of agency, he knows better that Y the procedures and he met these types of situations quite frequently". A good knowledge of various practices and procedures of the bank facilitates and makes the staff most quickly operational.</p>		++++		++++
D	<p>The person in charge of the complaints follow-up and treatment recalled the following experience: " a well positioned management in this bank, Mr B, had an incident during an ATM (Automatic Teller Machines) operation: he received an amount lower than the one he asked for. After making the necessary and usual investigations with electronic banking service, it is proved that the received sum coincided with the ATM records. Having hierarchical power management and relationship tie, our co-worker turned to the computing department for further investigation. This investigation reveals that the client was right and that there was a problem with the ATM.</p> <p>By asking if measures were taken for these types of incidents the person in charge of the complaints follow-up and treatment said: «after client recovery and the payment for the due difference no real measures were taken and we continued to follow the same procedure of investigation for a such incident". When I asked for clarification about the issue with a person in charge of electronic banking service, he told me that they usually collaborate closely with computer engineers to improve their application and that the system is reliable. The problem is that there are customers who are opportunistic. I asked for further explanations: "so how can you explain the recurrence of these complaints, are all these complainants opportunistic? An honest friend had this type of incident too. The personal banker adds: "the problem may be due to the manual supply of ATM and not to our system. During the ATM supply, the employee can make a mistake: one paper of 20 dt is buried among paper of 30 dt. But really, I don't trust the litigant customer"</p>		+++		++++
E	<p>Ah! Your translation of the complaint reply is much better than mine, I am grateful for your help, I know that this is not your task, but you master the Arabic language better than I do. I wish you join our teams, so that every time we need to reply to complaints in Arabic, you give us a hand.</p>				++++

Appendix 4

Table 3. Using the SECI model to analyse the complaint management process

	Knowledge before conversion	Knowledge conversion mode	Ba and knowledge tools	Type of ba	Knowledge after conversion
Complaint stimulation	Customer focus Internal orientation	Socialisation	friendly complaint culture: promotion of external and internal listening mechanisms/monitoring customer satisfaction, soliciting customer feedback and the communication of customer success and failure stories	Originating ba	Knowledge about customer: Dissatisfied customer expectation perception, enquiries
Complaint related process: complaint transmission	Customer complaint Response creation	Externalisation	cross functional team composition, cooperation	interacting ba	Knowledge for customer: defined response
Complaint analysis	Operational weakness	Combination	Technology adoption software Data warehouse	cyber b	Knowledge from customer: Root causes of the failure
Use of complaint information in decision	Documented key domains knowledge, report	Internalisation	continual improvement and continuous self-refinement through training, formalisation, strategic alignment	exercising ba	technical or process know-how, complaint recovery ability

Appendix 4

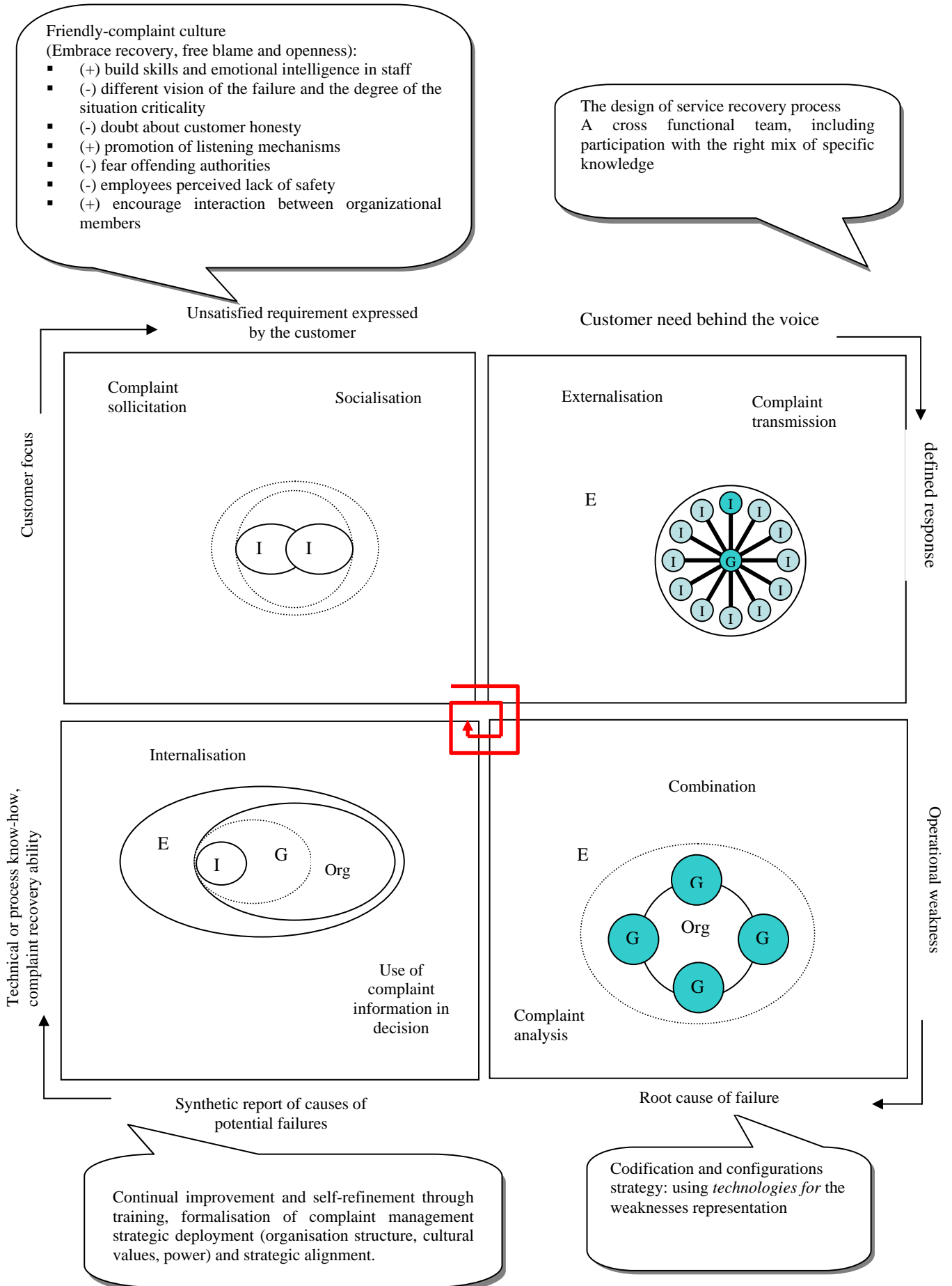


Figure 3. Knowledge transference in the complaint management
Adapted from Nonaka, I., & Konno, N. (1998)

References

- [1] Ashill Nicholas J., Carruthers Janet, Risjanous Jayne K. (2005), «Antecedent and outcomes of service recovery performance in a public health-care environment », *Journal of Services Marketing*, 19 (5), pp. 293-307.
- [2] Bowen, D.E., Johnston, R. (1999), "Internal service recovery: developing a new construct", *International Journal of Service Industry Management*, 10 (2), pp. 118-31.
- [3] Brown w. Stephen (1997), "Service recovery through IT: Complaint Handling Will Differentiate Firms in the Future", *Marketing Management*, Vol 6, N°3, pp.25-27.
- [4] Gilly Mary C.; Stevenson William B.; Yale Laura J. (1991), "Dynamics of Complaint Management in the Service Organisation », *the Journal of Consumer Affaire*, Vol. 25, N° 2, pp. 295-32.
- [5] Gebhardt Gary F, Gregory S Carpenter, John F Sherry (2006), "Creating a Market Orientation: A Longitudinal, Multifirm, Grounded Analysis of Cultural Transformation », *Journal of marketing* » Vol. 70, N° 4, pp. 37-55.
- [6] González Bosch Verónica, Tamayo Enríquez Francisco (2005), "TQM and QFD: exploiting a customer complaint management system" Volume: 22, Issue 1, p p. 30-37.
- [7] Grant Kenneth A. and Grant Candace T. (2008), "Developing a Model of Next Generation Knowledge Management" Volume 5, pp. 571-590.
- [8] Hart, C., Heskett, J. and Sasser, W. E. (1990), "The profitable art of service recovery", *Harvard Business Review*, pp. 56-148.
- [9] Hermel. L (2006), « *Stratégie de gestion des réclamations clients* », 2^e édition, ANOR, pp. 166.
- [10] Jong Ad de and Ruyter ko de (2004), "Adaptive versus Proactive Behavior in Service Recovery: The Role of Self-Managing Teams", *Decision Sciences* 35 (3), 457-491.
- [11] Johnston Robert and Mehra Sandy (2002), "Best-practice complaint management", *Academy of Management Executive*, 16 (4), pp. 145-154.
- [12] Johansson Niklas E (2006) "Self-Service Recovery", DISSERTATION, Faculty of Economic Sciences, Communication and IT Information Systems; Karlstad University Studies
- [13] Homburg Christian, Fürst Andreas. (2005), « How Organizational Complaint Handling Drives Customer Loyalty: An Analysis of the Mechanistic and the Organic Approach », *Journal of Marketing*, 69 (3), pp 95-114.
- [14] Homburg Christian, Fürst Andreas. (2007), "See no Evil, Hear no Evil, Speak no Evil: A study of defensive organisational Behavior towards customer", *Journal of the Academy of Marketing Science*, 35 (4), pp 523-536.
- [15] Homburg Christian, M. Grozdanovic, M. Klarmann (2007), "Responsiveness to Customers and Competitors: The Role of Affective and Cognitive Organizational Systems" *Journal of Marketing*, 71 (3), pp 18-38.
- [16] Lam N. W.W. and B.G. Dale (1999), "Customer complaints handling system: Key Issues and concerns", *Total Quality Management*, Aug, 10, 6, pp 843-851.
- [17] Linderman, K., Schroeder, R.G., Zaheer, S., Liedtke, C., Choo, A.S., (2004), "Integrating quality management practices with knowledge creation processes." *Journal of Operations Management* 22(6): 589-607.
- [18] Mitchell, VW. (1993), "Handling Consumer Complaint Information: How and Why?" *Management Decision*, 31, 3, pp 21-28.
- [19] Michel, Stefan, David Bowen, and Robert Johnston (2007), "Service Recovery Management: Closing the Gap Between Best Practices and Actual Practices," revise and resubmit from *Academy of Management Perspectives*.
- [20] Nonaka Ikujiro (1994), "A dynamic theory of organisational knowledge creation"; *organisation science*, 5 (1) Feb, pp 14-37.
- [21] Nonaka, I., & Konno, N. (1998), "The concept of "Ba": Building foundation for knowledge creation", *California Management Review*, 40 (3), pp 40-54.
- [22] Netemeyer Richard G., Maxham III James G. (2007), « Employee versus supervisor ratings of performance in the retail customer service sector: Differances in predictive validity for customer outcomes », *Journal of Retailing*, 83, pp.131-145.
- [23] Rowley E. Jennifer (2002), "Reflections on customer knowledge management in e-business", *Qualitative Market Research*, 5 (4), pp. 268-279.
- [24] Rollins, Minna & Halinen, Aino (2005), "Customer Knowledge Management Competence: Towards a Theoretical Framework" Proceedings of the 38th Hawaii International Conference on System Sciences.
- [25] Salomann. H, Dous. M, Kolbe, L., Brenner. W (2005), "Rejuvenating Customer Management: How to Make Knowledge For, From and About Customers Work", *European Management Journal*, 23 (4), pp. 392-403.
- [26] Salomann Harald, Malte Dous, Lutz Kolbe, Walter Brenner (2006), "Advancing CRM Initiatives with Knowledge Management", *Journal of Information Science and Technology*, 3(2), pp. 22-43.
- [27] Tax, Stephen S. and Stephane W. Bowen (1998), "Recovering and learning from service Failure", *Sloan Management Review*, Fall, pp 75-88.
- [28] Yavas Ugur, Karatepe Osman M., Avci Turgay, Tekinkus Mehmet (2003), « Antecedents and outcomes of service recovery performance: an empirical study of frontline employees in Turkish banks », *International Journal of Bank Marketing*, 21(5), pp. 255-265.
- [29] Yin (2003). Robert K, Case Study Research: Design & Methods, Third Edition, Sage publications, 2003.



Samiha Mjahed is a doctoral student at Institut Supérieur de Gestion (ISG) University of Tunis. Her research interests are geared towards customer knowledge management and service recovery.

E-mail: mjaheds@yahoo.fr

N°GSM: 216 23 239 920

Abdelfattah Triki was a Fullbright scholar at Boston University Business school in the USA in 1986-1987.



He then obtained a PhD in marketing from Northumbria University at Newcastle in 1999. He is a member of the Academy of Marketing (GB) since 1997 and a reviewer for several British academic journals. He is presently a senior lecturer of marketing and

of research methodology at the Institut Supérieur de Gestion of Tunis University. He also directs several doctoral research projects on information and communication technologies, innovation, and knowledge management. E-mail: abdel.triki@yahoo.fr
Professional address : Institut Supérieur de Gestion, 41, Avenue de la Liberté - Cité Bouchoucha, Bardo 2000, Tunisia.