Solution for Financial Institutions Utilizing the "Opinions of Customers" with Information and Telecommunications Convergence

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Many financial institutions these days, particularly banks in Japan since the financial "Big Bang", have been adopting management strategies that "emphasize retail business" while focusing on differentiation for their survival. Ventures in the retail business sector in terms of differentiation can be broken down into the following management issues:

- Improvement of management to make it customer-oriented
- Enhancement of the risk management organization
- Secured new revenue sources

These issues are strongly interrelated and require a maximization of revenue while risks are avoided and customer satisfaction (CS) is improved. Although the call for customer-oriented management has been known for some time now, the situation is one for which we are yet to see any uniquely original and specific form of management that can be understood by customers. Further, the handling of risky new products for new revenue sources brings about yet another risk requiring even further enhancement of the risk management organization, as is evident in the new BIS regulations or the Inspection Manual for Deposit-Taking Institutions[1][2][3].

Superficial customer-oriented management or by simply following what everyone else does, as was done in the past, no longer appears to be the answer for achieving the objectives for management. Improvements are required that are truly rooted in the opinions of customers.

This paper will introduce a solution that utilizes the "opinions of customers", which conveys the opinions of customers to the management in an appropriate manner and offers support for sales activities with strict compliance. This is seen as a solution derived from information and telecommunications convergence using IP communications.

Purpose and background of solution utilizing the "opinions of customers"

(1) Increasing complaints and consultations

From the standpoint of financial institutions even a slight complaint or consultation has the potential to grow into a problem that can shake up the management. Complaints and consultations brought to the attention of the National Consumer Affairs Center of Japan is headed on a continually increasing[4] path, as shown in Figure 1. There is reason to believe that a portion of these issues may have already been addressed with the contact
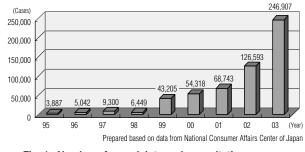

Fig. 1 Number of complaints and consultations on a continually increasing path

centers of financial institutions. There are many underlying reasons for these complaints as well as many wishes and opinions voiced by customers that are believed to be instrumental in improving corporate management or customer satisfaction. It is necessary to understand all such opinions and to strive to improve them.

(2) Improvements for transforming management to be customer-oriented

Everyone is aware that many financial institutions are claiming to be "customer-oriented" or "customer-focused" in their management policies. In particular, with the "pay-off" set to take place next spring a lot of interest has been generated and people are wondering if the appraising of available financial products, performed by both banks and their customers as well as a scramble among the banks, will actually take place. Further, the majority of what is known to be one quadrillion yen of assets in the hands of the financial institution are owned by the elderly, and so it is said that we will be entering an era of major inheritance[5]. The starting line for steadily succeeding in the trials of winning over customers is understood to be the trustworthiness and customer-oriented services.

Therefore, what needs to be done and what can be done, in order to get away from the old habit of following what everyone else does, the management method must do all that is necessary. One way to do it may be the adoption of a management method using a Balance Score Card (BSC) to attain revenue through management that focuses on customer-oriented management. The BSC is a series of activities that raises the customer value through staff training and process improvements while attaining revenue targets. The objectives are attained by rotating the Plan-Do-Check-Action (PDCA) cycles over a long term[6].

In order to claim customer-oriented management, it is necessary to first understand the opinions of the customers. Direct and indirect opinions of customers are evident. The direct opinions include what has so far been dealt with as appropriate responses known as complaints, as well as those that have not yet reached the level of complaints but can potentially become issues that require a response, known as requests.

On the other hand, the reason why the number of customers who line up for tellers does not decrease in number is considered to be due to the indirect opinions. The effects of directing customers to automated teller machines is but a transient thing, with the customer returning to the tellers on the next time visit. This should really be interpreted as a representation of a sort of customer request and it is quite possible that the underlying message is not in line with the expectations of financial institutions. People who utilize tellers tend to be elderly, so instead of just rigidly identifying the customer groups that possess and require management of their assets, it may be possible that an opportunity to create business exists if potential needs of these customers, which can also be the needs of other customers in general, can be determined. For example there may be a potential need that could lead to a new business of protecting their precious assets from crime, such as fraud, which is prevalent nowadays.

It is essential that the opinions of customers be collected far and wide in this manner, which will in turn provide strong support for the solution.

(3) Enhancement of risk management

The framework of management is similar to the new BIS regulations that require the inclusion of operational risks in the calculation of capital adequacy, which is similar to the stipulations of the "Inspection Manual for Deposit-Taking Institutions", the preparation of which was triggered by the Basel Committee on Banking Supervision. Although the scope of risks for the latter is limited to administrative and system risks, it is nevertheless considered to be important due to the principles for determining whether realistic operations and management are being conducted. There are, however, financial institutions that do not adhere strictly to these principles, such as those that do not rapidly report critical issues and other matters to management.

The former, on the other hand, are the new BIS regulations, instigated to calculate the amount of operational risks (quantifying). These differ from the Inspection Manual for Deposit-Taking Institutions that probes into the management and operation of risks.

The solution herein responds to the need for a realistic risk management that is required by the Inspection Manual for Deposit-Taking Institutions.

(4) Securing new sources of revenue, such as offering new products by tellers

Due to a series of deregulations banks are now able to offer risky products, such as investments or insurance, through their tellers. Revenue from fees and commissions constitute the so-called fee business, which is being considered as an effective pillar for new sources of revenue.

These products, however, have a different character from products, such as savings in that the principal can be lost. In order to prevent problems associated with the sale of risky products the Financial Instruments Sales Law was established. According to this law financial institutions are required to establish policies for sales and they are required to disclose the possibility of loss of principal to their customers as well as being prohibited from making improper inducements even though the purchaser is responsible for the purchase of the products.

Any loss to a customer arising from sales activities contrary to this law must be compensated. Therefore, the staff is required to abide strictly by this law (compliance).

There is of course a problem associated with quota because there is a limit as to how much can be expected from the training of staff. Furthermore, it is difficult to sustain compliance or keep staff on their toes for a prolonged period of time. In order to prevent any arguments in the future on whether something was said or not, it would be wise to establish a mechanism for monitoring the daily activities of staff.

In order to enhance compliance the solution herein realizes the monitoring of conversations with customers by utilizing the voice recognition technology, which will be explained later.

System summary of a solution utilizing the "opinions of customers"

Usually the concept of a virtual contact center, which is composed of multiple, geographically distributed contact centers[7], is introduced as a means for simulating the combination of all contact centers into one location.
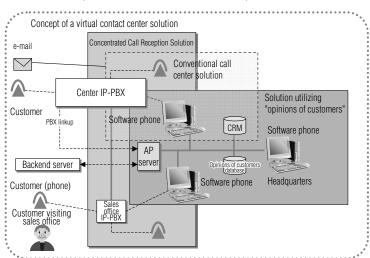
Opinions of customers are brought to the attention of not only the existing contact centers but also the sales offices. For this reason, each sales office for this solution, is considered to be a single contact center and a framework is then established that will function as a virtual overall contact center. Further, a linkup with a concentrated call reception solution is also being considered, where all calls made to sales offices are first transferred to a contact center to reduce the load of calls handled, with only those calls that need to be dealt with by sales offices returned to their respective sales offices. This relationship is shown in Figure 2.

The solution that utilizes the "opinions of customers" has the following features, which include the functions of existing contact centers.

(1) Integrated management of opinions

The opinions of customers need to be handled altogether, including orally transmitted messages via telephones or sales offices and also those that come through e-mails and posted mail. Further, a management methodology that includes the management of clerical errors, which has a strong correlation with the occurrence of complaints, is considered to be effective.

For this reason this solution offers a mechanism that, along with the opinions of customers (complaints, requests and opinions) that come in through various channels, clerical errors and requests for improvements stemming from staff, are also widely collected and managed.

The virtual contact center solution is one that encompasses conventional contact centers, the concentrated call reception solution and a solution that utilizes the "opinions of customers".

Fig. 2   Solution that utilizes the "opinions of customers" at a virtual contact center

(2) Enhancing coordination between sales offices, headquarters and the general reception

Another important issue is how the opinions are collected. With complaints, for example, a response to a customer in a way that avoids the escalation of a complaint into an unnecessary problem, which arises from a poor response, is considered to be important. As mentioned earlier with the concentrated call reception solution, complaint calls made to a particular sales office, intended for the branch manager of the location, is forwarded to the concentrated call reception center along with all other calls. Staff at the concentrated call reception center must quickly verify the purpose of each call and for calls requiring the attention of a branch manager they must verify whether the branch manager is available or not and then relay the call. In order to avoid the unnecessary escalation of a problem a seamless response throughout the relaying of the call from the center to the corresponding reception or sales office is essential. This solution shortens the relaying time, prevents a runaround and is a means to convey the purpose of the calls accurately with the adoption of IP phones and voice recognition technology. Further, escalations sometimes occur when inappropriate expressions are used in response to customers. The solution herein makes it possible to take countermeasures even with rare shortcomings in a customer's response by consistently recording all conversations with customers (refer to Figure 5-1).

(3) Management, analysis and utilization of collected data

The utilization of collected information is important for both the aspect of risk management, such as handling complaints that require an urgent response as well as for the aspect of causal relationship analysis, which can lead to new business operation improvements and new product planning. Realizing these is the primary purpose for implementing this solution. Figure 3 shows the flow of these processes.

This solution is based on a management that relies on information collected as indicated below. However, there are still segments for which human intervention is necessary and improvements with operational systems as well as the utilization of various tools available in the market are also necessary.

1) Handling complaints

Some complaints made by individuals require a cautious response, while other complaints by customers require a sincere response. The latter requires a customer response function that can determine the merits of a response, verify the facts, identify any possible fault of the financial institution and determine the content of the response for the customer as well as a series of functions intended to prevent further occurrences of the problem. It should also contain a reporting function that provides a report to the management according to the degree of importance of the complaint and an identifying process to determine the problem's origin, as well as examine the merits of improvements while sharing the information with staff. Although on one hand strict management according to the workflow is a fundamental requirement, playing-it-by-ear-type of responses are also required. Problems are truly diversified as some issues can easily be dealt with using answers for FAQ, while others require a lot of time. In any case, there are many aspects where responses rely on human intervention. In order to secure consistency through to the future it is necessary to make definite records of each example with a chronological record of the responses.

2) Handling requests

Requests from customers vary. Among them are requests that do not need an urgent response, others that may eventuate into complaints if left unattended, requests that lead to customers drifting away and those that result in the loss of business opportunities. There is
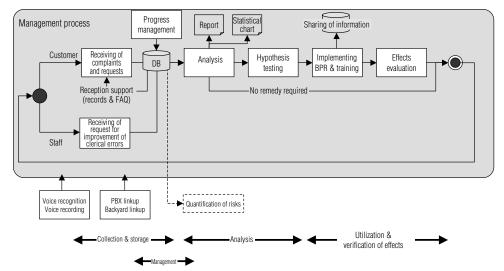
Fig. 3 Management process for a solution that utilizes the "opinions of customers"
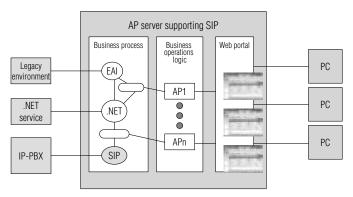

Fig. 4 Platform for a solution that utilizes the "opinions of customers"

a need to accurately grasp the trends of the opinions of customers from messages that contain numerous suggestions and to reflect that knowledge on the planning of new products, etc. In the process of implementation there is a need to determine whether an opinion represents merely a segment of the customers or if it represents many of them. Further, due to the need to collect as many opinions as possible and extract the trends from the collected opinions, utilization of a means to do so, such as text mining, is necessary[8].

3) Clerical errors and requests for improvements

Clerical errors can become a causative factor for complaints. Even if these errors do not lead to actual complaints, regardless of their number or scale, a remedy must be considered from the perspectives of customer satisfaction and their degree of influence.

Improvement requests, on the other hand, are proposed proactively by staff. These are important from the aspect of improving clerical efficiency, improving training, enhancing IT and improving customer satisfaction. Usually these are functions firmly rooted in quality control (QC) and improvement activities. The know-how of these improvement activities, which also include clerical errors, is used for dealing with customer

complaints and requests.

(4) Linking up with the next sales office systems

Various considerations are being made for the way the next sales office systems at banks ought to be. Integrating into knowledge, inserting in the database as well as linking up with information and communication systems through a web portal, are considered as effective means for promoting improvements in the dependability and efficiency of clerical work. This solution offers a platform that can be built by integrating telecommunications, among people affiliated with clerical processes in particular, as Java application logics that operate on a web server, just like information system (calculations and information) applications. This was difficult to realize with conventional Computer Telephony Integration (CTI). Access, not only to IP-PBX but also legacy calculation systems and other servers, becomes possible through this server (refer to Figure 4).

(5) Utilizing voice technologies

There is a strong demand for enhancing clerical support through text conversion provided by voice recognition technology and such, from people who are unable to deal with keyboards, sales persons in the field

or "lobby women", who assist customers in bank lobbies. The voice recognition technology has reached the level of practical implementation due to improvements made in the performance of personal computers (PC) and enhancements made with dictionaries. While a 100% recognition rate may still not be possible there are many applications that could benefit from the use of the voice recognition technology. The following uses have been considered for this solution:

1) Case 1 (linkup from general reception to the person in charge)

The importance of linkups has been introduced. As shown in Figure 5-1, shortening the time for relaying and preventing inconsistencies regarding the purpose of the call has become possible by using voice recognition to recognize a verification phrase used by the operator, which is converted into text and attached to the call as it

is transferred to the person responsible for handling that call. Further, an attached voice file can be used to determine whether or not the customer is composed when dealing with complaints. This application is based on the existence of a trained speaker and the preparation of a proper dictionary..

2) Case 2 (monitoring of prohibited terms and disclosure responsibilities)

A lot of time and effort is spent on the preliminary description of products and chronological recording of events for the sale of risky products. This is because strict compliance with the Financial Instruments Sales Law is required. Financial institutions are complying with the law by taking memos of the chronological records of events and by collecting verification documents. For the purpose of this application we believe that it would be possible to monitor in real-time the prohibited terms or
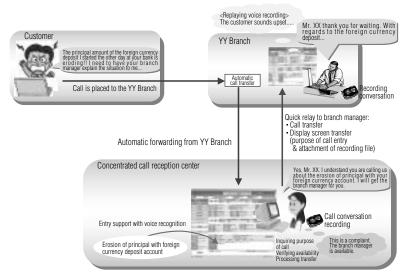

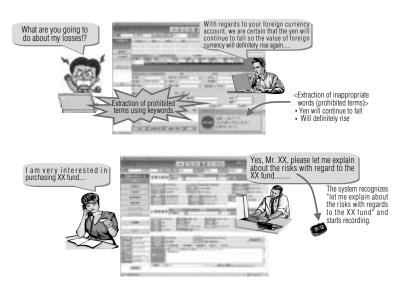**Fig. 5-1   Linkup from the general reception to the person in charge**

Fig. 5-2   Monitoring of prohibited terms and disclosure responsibilities

Please tell me the difference between AA and BB..

Customer

Connect to the Help Desk

Wireless headset

Lobby woman

"Help Desk" is recognized and the conversation with the Help Desk starts.

Information on Product AA is forwarded to Terminal No. 1

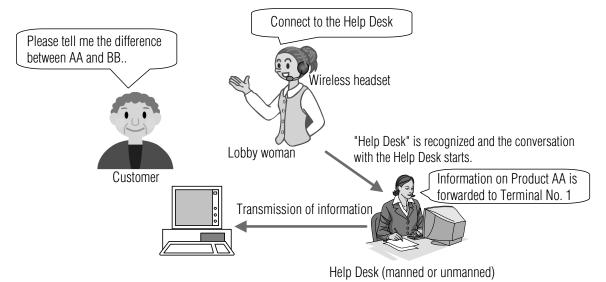Transmission of information

Help Desk (manned or unmanned)

Fig. 5-3 Support to a lobby woman

automatically record the portions of conversations that fulfill the disclosure responsibility. For example, the system can pick up on an expression included in a phrase, "let me explain to you about the risks involved with this XX Fund" and recognizing it as a trigger to start recording the conversation (refer to Figure 5-2)

3) Case 3 (support to a lobby woman)

By using a headset that supports wireless communication it becomes possible to handle a customer's business without leaving the lobby area. For example, if the lobby woman is unable to provide an answer to a question from a customer, it is possible to engage in a bi-directional conversation with a desk operator simply by saying "Help Desk" into the microphone. The desk operator can then forward information regarding the relevant product to an information terminal nearby (refer to Figure 5-3).

The solution that utilizes the "opinions of customers" is considered to be effective, as it collects and utilizes information relating directly and indirectly to the opinions of customers and staff to improve customer satisfaction, improve the dependability and efficiency of clerical work and further, for the planning of new services.

Conclusion

The solution that utilizes the "opinions of customers" was conceived within the framework of information and telecommunications convergence. It is believed that this approach will offer new possibilities to regions, such as clerical efficiency where previously it was believed that the limits had already been reached.

We shall continue to enhance the analysis segment of the solution and as its functional requirements satisfy requirements of both manufacturing and non-manufacturing industries we plan to expand its applications to areas other than financial institutions.

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