Customer Concerns in Telecommunications Contact Centers

Information and Systems Factors

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Abstract—The contact center is a potentially strategic touchpoint between consumers and organizations, but often the service obtained leaves much to be desired. Effective use of the information and technology in our digital society appears to have many inhibitors - organizational, technological and human. This study analyses some 2150 incidents regarding telecommunications service providers reported by customers to a South African consumer portal. Their main concerns were information related issues: inadequate communication channel integration, limited functional integration and customer information inaccuracies. System issues comprised system faults, system limitations and system unavailability. Compounding this in fewer cases were non-information service-related issues: incompetent or rude staff and lengthy delays. Although telecommunications products and contact center technology may be advanced examples of the digital age, unless there is sound management, organization and motivation, customers may not receive the service they expect.

Keywords-contact center; information systems; channel integration; telecommunications; customer service

I. INTRODUCTION

Earlier telephone-based call centers were generally designed to save costs, but as they have moved to become contact centers or more optimistically, customer care centers, they have found themselves occupying an increasingly strategic role [1, 2, 3]. To satisfy today's digital society, they offer customers contact through email, text messaging (SMS), on-line self service, interactive voice recognition (IVR) self service, fax, chat, blogs, Twitter and Facebook amongst others, and have become the first line of customer contact for many organizations [1, 2, 4, 5]. Their management is sometimes torn between satisfying financial and performance criteria such as calls answered per agent per day, measures of customer service such as first call resolution (FCR), and surveys of consumer satisfaction [3, 6]. With the increase in available technology and channels of communication has come an increased need for coordination and management of customer information [7]. As consumers become more digitally aware and confident, their expectations of quality service rise accordingly.

Internationally, in many developing as well as developed countries, there has been major recent growth in the use of cellular or mobile phones, for both personal and business use. This has been demand-driven and clearly fulfils a need. Yet the telecommunications industry in many countries

attracts a relatively large number of complaints. A recent industry survey of US contact centers [8] shows that TMT (technology, media and telecommunications) was the industry grouping with the highest percentage of inbound calls that were complaints (27%). In South Africa the percentage of complaints about telecommunications service providers is similarly well above the average for all industries. This suggests that while society is being provided with a wider range of digital options, the management and coordination of those still leaves much to be desired.

This raises the research question: "Given the wide range of available digital and technology options, what are the inhibitors to effective and efficient customer service in telecommunications cost centers?"

As part of a larger study into customer service in contact centers in South Africa, over 2000 customer related complaints to a consumer portal about their telecommunications service providers were analyzed to determine what the major concerns were. South Africa has recently expanded its service offerings as an offshore business process outsourcing (BPO) and contact center destination, and it is most important that industry levels of service are maintained and improved [9, 10, 11].

This paper continues with a brief summary of some relevant background aspects, and then discusses the research methodology adopted for this study. Following that, an analysis of incidents in telecommunications contact centers uncovers the main themes. These are briefly discussed in relation to earlier literature, and the paper then concludes and makes some practitioner and research recommendations.

II. BACKGROUND

Telephone-based call centers have existed for more than two decades, their initial primary aim being a cost-saving centralization of the organization's external communications. They allowed for inbound customer calls as well as outbound calls, often for marketing purposes. With the growth of the digital society many more communication options have become available, and call centers have become contact centers, sometimes hopefully also referred to as customer care centers [1, 7, 12, 13]. They may offer customers additional communication media such as email, SMS, online self service, IVR self service, fax, chat, blogs, Twitter and Facebook [13].

At the same time contact centers have become a key touch-point for many organizations [2, 14]. The interaction experienced by consumers has become increasingly

important in determining whether they maintain an ongoing relationship with the organization, or whether there is "customer churn" [7]. Company management should therefore be allocating the necessary resources and efforts to their contact centers.

For management and their employees (agents and supervisors) there is however often a tension between the motivation of cost saving, and those of customer service and satisfaction [2, 3, 6, 12]. Well motivated, trained and satisfied agents are critical to quality service [1], and customers look to them for empathy, assurance and responsiveness [13].

Contact centers use a wide range of technology, including automatic call distributors (ACD), IVR and speech recognition, call recording, PBX, auto-diallers, workforce optimisation, helpdesk systems, telephony soft-switching, and workflow. Recently there has been a strong move to IP and VOIP [5, 14, 15]. Agents or consultants need information on customers, their products, transactions and past communications with the organization. This is provided (with varying degrees of agent access) by customer databases, knowledge management, customer relationship management (CRM) and ERP systems [5, 16]. While CRM has been pushed as a "technology silver bullet" for managing customer information and relationships, its practical success has been limited. "it is important to consider where the company might have failed to address the factors most closely associated with CRM success — people, processes and day-to-day customer management activity, while overinvesting in the factors which are, after all, only CRMenabling systems and data" [17, p. 349].

The variety of communication channels now available creates problems of information management [18, 19, 20]. Multi-channel integration is more talked about than practiced: a 2009 global survey of 554 contact centers found that less than 22% of centers had non-voice channels integrated into their universal queue [5].

A relatively recent phenomenon is that of contact center outsourcing and offshoring [21]. This has primarily been for cost-saving reasons, but over time companies have realized the risks of considering cost alone if, for example, the overall image of the organization will suffer due to inexperienced, inefficient or "incompatible" contact center agents communicating with their customers. First conducting a SWOT analysis of the potential outsourcing situation can be beneficial [11].

A. South Africa in the Digital World

South Africa's mobile cellular subscriptions increased from 16.8 million in 2003 to 45 million in 2008, and there is now effectively one mobile phone for every person in the country. At the same time the number of fixed lines decreased slightly to 4.3 million [22, 23]. South Africa has the highest ICT Development Index (IDI) in Africa for Skills, coming 3rd after Seychelles and Mauritius for the IDI Access and Use indices [22]. South Africa is rated 9th of 139 global countries by the World Economic Forum for its financial markets and banking systems, 35th for its firm-level technology absorption, but only 76th for overall technological

readiness [24], and is often referred to as a mix of 1st and 3rd world economies.

III. RESEARCH METHODOLOGY

Following recent research into similar issues in the banking sector, this study focused on telecommunications service providers, mainly of mobile or cellular phones. The research was exploratory, aiming to uncover the main information and systems-related concerns of customers dealing with telecommunications contact centers. The consumer portal HelloPeter [25] has in past research [26] proved a useful source of information for customer-related incidents. This portal enables consumers to register online, and then anonymously post a comment (complaint or compliment) in connection with service received from a supplier. Companies who register (for a fee) are able to obtain the contact details of the customer, follow up with them, and respond publicly on the website if they wish. Based on the response received, the customer then has the option of giving their feedback on the supplier's response and their rating as either "over the moon", "quite impressed", "indifferent", "unimpressed" or "utterly disgusted". There are currently over 1200 companies registered on the site (up from 650 two years ago), and over 11,000 comments are received per month. On average about 20% of comments are compliments, and the balance are complaints (fairly expected due to human nature). However, amongst the cellular phone providers, the percentage of compliments is typically only between 5% and 12%.

While almost all South Africans are cellular phone owners, far fewer use the Internet. Posting HelloPeter [25] incidents requires on-line access, and the motivation to submit to this website, and so the set of incidents cannot necessarily be considered to be representative of the full South African consumer community. It does however describe a large number of actual incidents experienced by digitally aware telecommunications customers, and an opportunity to gain an idea of the variety and extent of information and system-related consumer issues in contact centres. Incident details posted can be viewed by everyone, without passwords, and in addition the founder and owner of the site has given the author permission for the data to be used for research purposes.

Over 2100 postings between November 2009 and March 2010 to South Africa's six main telecommunications service providers (90% from four mobile and 10% from two landline operators) were selected for analysis. While a largely qualitative approach was adopted in order to explore the incidents, there were some useful quantitative measures available to give context. Being exploratory, the approach was inductive and cross-sectional, and thematic analysis [27, 28] was used to iteratively derive major themes and subthemes. Incidents were initially screened to ensure they all concerned contact center communication, information, technology and/or systems issues (others were excluded from analysis). Data was extracted from HelloPeter [25] to an Excel spreadsheet, and then imported to NVivo 8 CAQDAS software. A six step iterative process [29] for identifying, analyzing, coding and grouping nodes and themes was followed until the final themes and subthemes shown in Figure 1 emerged. These are discussed in the following section.

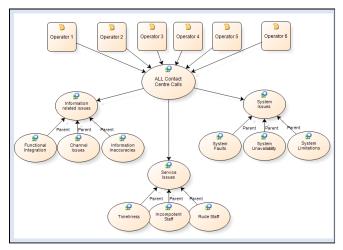


Figure 1. Themes and subthemes.

IV. ANALYSIS OF INCIDENTS

The two main themes that emerged were Informationrelated Issues and Systems Issues. In addition certain Service Issues were often mentioned as compounding features of the incident description, and these have been included in a separate theme. All three were further divided into subthemes. Each emergent theme and subtheme is now briefly discussed, with limited supporting quotes due to space considerations. It should be noted a few issues were often mentioned during the course of an incident, and many incidents were therefore coded under more than one node. These reflected the perceptions of consumers, whose assessment of the underlying cause might sometimes be inaccurate (although supplier response would often clarify matters). Numbers of incidents reflecting each theme is shown merely to indicate prevalence in the sample, and should not be generalized further.

A. Information Related Issues

1) Channel Issues: multiple communications channels used, but often limited channel integration (1268)

In most cases, customers stated the channel(s) of communications they used to interact with the contact center, including (in order of utilization): Phone, Email, SMS, Website and Fax. Very few used the post, whilst SMS's were primarily used for customers 'to get in touch' with agents with whom they had previously made contact. All complaints where multiple channels were used were coded here. The variety of digital communications media provides consumer flexibility, but demands efficient channel management and integration. Yet channel issues were the major cause of customer dissatisfaction. Agents lacked a 'single view' of customer communication, which greatly limited their ability to resolve incidents. Multi-channel integration was often limited or non-existent, and

information sent via one channel appeared to have disappeared into a black hole when customers contacted the organization via a different channel. Some incidents showed repeated use of multiple channels to assist with queries.

"...I phoned them, faxed a letter and e-mailed a letter of cancellation. I then phoned to make sure they received it and that it would be cancelled. I was assured that it would be. I then received an sms to confirm this, only to wake up this morning and receive an sms that my airtime was topped up. When phoning them I was told that it still shows as active." (Q1).

"...Called last Thursday and was told to send the necessary letter head with request which I did on Friday. Come Monday I called and was told they had not received it - so I sent it again. Tuesday I called them 4 times!!!!! I eventually had to email them to a X. He said he sent them at 11h00 and it would take about 2 hours to get them. Well one week later I have still not received a thing.....and I am yet to get a call back from any of the agents I spoke to" (Q2).

These types of interactions lead to a breakdown in communication, and frustration with the operators, and could be caused by bad processes, carelessness and human error, as well as poor channel integration.

2) Information inaccuracies or unavailability of information (593)

The second most common subtheme was inaccurate information stored on the operators' information systems. This relates to the ability of the agent to offer correct information to the customer and have the necessary (correct) information available to assist the customer with their query.

"I applied for a new contract with X on the 25th of February 2010 and my contract was approved on the 26th of February 2010. However, due to a mistake in the database records in X (phone description in database did not match phone available in stock), I was only able to obtain my phone on Tuesday 2nd March 2010" (Q3).

In rare cases the user may not necessarily have been negatively affected by the original issue, but the information accuracy may still lead to unexpected results:

"After the second month I realised that they still had not taken the first 2 payments off and I also never even received an invoice. I called to see what the problem is and they said they don't know but will instruct the account department to take the amount immediately... I asked the account department to call back, they never did. I called again a week after and I said to the guy I have never heard of a company that the client actually needs to chase to take the money off his account... Yesterday, my service was suspended" (04).

Information accuracy can be a function of poor processes or data quality management. Information unavailability may indicate that agents are not given access to certain systems, or do not know how to access it.

3) Functional Integration: information not integrated across organisational units or functions (256)

The different functions organizational of telecommunications operators include billing can departments, performance management, retail stores as well as other partner sites. A query handled by different departments in an organization was often devoid of supporting information captured at previous points of contact. This often results in users being subjected to numerous call transfers in order to locate the resolving party, for example:

"I've been trying to get through to the X upgrades department since last week Thursday already. I've been dialling the call centre number. Most of the time I get cut off and if I do get to speak to a consultant I then get cut off when they try to put me through to the relevant department, at one stage I was transferred 3 times, held on for ages each time only to get cut off yet again." (Q5).

This highlights the difficulty users can endure when being transferred to alternate departments or divisions instead of the initial agent resolving their call. Functional integration issues may lead to customer dissatisfaction either through lack of information integration within systems or due to restrictive company protocol:

"Phoning X resulted in nothing - apparently the admin department requested legal department to close the account. Legal referred me to admin and vice versa. I went to the nearest branch (X), only to be told that the accountholder (deceased) must sign to transfer the number!!!! Eventually they insisted that I fill in forms and supply bank statements, even though I am a customer for the last 10 + years!" (Q6).

A common cause for functional integration issues can be incompatible systems used between different business units, and unimaginative business processes. Lack of coordination and distributed systems, and limited technological infrastructure may also hinder the ability for an organization to share its information.

B. System Issues

1) System Faults: technical faults or errors experienced during interaction with the customer and the agent's information systems (527)

In many cases customers complained about the technical state of the contact centers' hardware or software and its impact on the resolution of the query.

"They promised that this would all be corrected and the money I paid for the services would be refunded - fat chance as I am still waiting for this! In addition my contract would be cancelled on the 5 January 2010. Funny how I ended up getting a bill for February!!! this month I applied for finance on a car I wanted to get only to be told that I have a negative credit score and that no one will finance me - X blacklisted me for their error!!!! Useless." (07)

In situations like these, customer dissatisfaction is further compounded and could result in subscriber churn. 2) System Limitations: restrictions or policy directives that prevent the system behaving in a manner that the customer expects (417)

System limitations refer to the lack of perceived functionality of information systems to address customer complaint resolution. In particular several cases emerged that highlighted policy directives or the inability of the information system to address the customer query. The statement below is a case in point:

"I called in several times requesting my bill via email and every time they sent me some link to download and I keep trying to tell them I can't download it please sent it via pdf or something and when I check it's the some link again. Friday I spoke to 10 different people, the bill has 8 pages she sends 1 page is this a joke there's something called 1st call resolution ..." (O8)

3) System Unavailability: downtime associated with contact centre information systems (464)

Customers expect that information systems will be available during their interaction with the contact center or its related functions. Failure may be due to inefficient technical infrastructure or resources and in many cases leads to severe inconvenience and dissatisfaction.

"Apart from the fact that they were offline and couldn't accept payment and I had to go to Y to pay my cellphone account for which they felt no need to apologize..... In 5 months time my contract comes up for renewal. It will be insane to renew with X." (Q9)

In some cases users are also unable to make contact due to excessively long waiting times:

"I tried calling back that night and they were offline so could not help me once again. I then tried calling again from yesterday morning and my calls have gone unanswered. I have held on for an average of 30 minutes each time I call (before I hang up due to frustration!) and no one has answered the phone" (Q10).

Issues of this nature demonstrate the mismatch between expectations of the user and the ability to offer customer service by the contact centre.

C. Service Issues

1) Rude Staff: dissatisfaction from customers interacting with rude or bad mannered agents (199)

In addition to the above systems and information-related problems, a few customers specifically mentioned perceived rudeness of behavior or attitude to them by the agent. This usually compounded the negativity of the complaint. Reasons included perceived unwillingness to hear the customers' side of the story, or to escalate a problem to more senior staff, and a lack of respect or empathy.

2) Incompetent Staff: agents that cannot perform their expected functions effectively (183)

Examples included failure of agents to perform tasks properly, e.g., form submissions, return phone calls, valid explanations etc. A common complaint was the poor

response from contact center agents to requests to diagnose technical issues with the customer's devices.

3) Timeliness: ability of the agent to address, respond to, or follow up a customer complaint timeously (143)

Customers expect queries, and their follow ups, to be handled in a timely, effective manner. However there were a number of incidents where operators took exceptionally long to address or resolve queries. In many cases the delay was attributed to system disruptions or agent incompetency, as well as functional integration issues, where calls had to be routed to another agent for resolution.

These results will be discussed in the following section.

V. DISCUSSION

The dominant themes that telecommunications customers complained about concerned incorrect, missing or delayed information about themselves and their past communications with the organizations. It was very clear that use of more than one communication channel often caused problems due to a lack of information integration. The challenges of multichannel integration mentioned in [18, 19 and 20] were clearly not adequately addressed in most cases. Different channels may be based on varied technologies and generally appear to be managed separately, if at all. CRM software, while dealing with some customer information, does not seem to be integrating it satisfactorily across different channels. A common consequence is multiple submissions or requests for customer information, with resultant delays and customer irritation.

Ensuring correctness of information should be part of a general drive for data and service quality in any organization [1, 13], and examples show there is clearly room for improvement here. One of the other major causes of consumer unhappiness was the inability of the agent to achieve first call resolution [3], for a number of reasons. One may be that the organizational systems themselves are not adequately integrated – the main aim of ERP software. Alternatively, the agent may only be given access to certain modules, processes or functions. There can be valid situations where the agent is required to obtain information from another person, or where the request needs to follow a controlled process through other business units. This then needs to be well managed within the organization, with one person taking responsibility for resolution of the call, processes being re-engineered if necessary [15], and not sending the customer from pillar to post and cutting them off in the process. Ideally the agent should have access to as much customer-related information as possible, through a user-friendly portal, and receive sound training in the effective use of ERP, CRM and knowledge management software [1, 2, 6, 7, 15, 16, 17].

Many customers also experienced system issues – faults, limitations and unavailability. Because these are "customerfacing" systems they deserve above-average attention, with meticulous design and meaningful service level agreements [5]. If they cannot operate and be available to service customers 24x7, this should be clearly publicized to

customers, and top management should be involved in decisions of this nature.

The first two service issues – incompetent and rude staff – are largely a function of agent training (classroom and onthe-job), coaching, mentorship and motivation. Agents need an empowering environment [2, 6], with supportive follow-up and quality monitoring of their communication. Apart from training in product, organizational, systems and process knowledge, agents may require additional language, communication, life skills, math or computer literacy skills. Training in "customer care", empathy [13] and customer responsiveness is currently recognized to be of major importance.

The final service issue, timeliness, was only coded in more serious cases, but is the end result of most of the other problem areas noted, and a major customer irritant. With proper measurement processes and criteria in place [3, 5], this should be greatly improved.

It should be noted again that these incidents should be regarded as illustrative, and not necessarily representative.

VI. CONCLUSION

The digital society is making wider use of a range of communication channels. As contact centers provide more of these for their customers they need to ensure that customer communications are effectively and efficiently managed and fully integrated. There is no point giving customers the "channel of their choice" if their past communications cannot be synchronized with others received and sent through the contact center. Customers also often require information from a number of corporate systems. In theory this should be facilitated by ERP and CRM software, but in practice some systems are not cleanly integrated or may not be accessible by the agent, and the concept of a "single view of the customer" remains very elusive for many organizations.

The telecommunications industry might be expected to have a relatively strong ability to cater effectively for customers in the digital society. For whatever reason, possibly due to its rapid growth and regular technological change, it seems to engender an above average percentage of customer complaints, and come short in a number of technical, information and systems areas. It is interesting that the local service provider with the smallest percentage of complaints is one which has had to "play catch-up" to the two much bigger established players (granted licenses much earlier), and currently appears to be making a concerted, and reasonably successful, effort to use customer service as a competitive weapon.

Telecommunications companies should learn from their past interactions with customers [17] and use technology such as CRM more effectively in future. But they should also realize that increased digital opportunities imply increased organizational and managerial effort and resources, and adopt a stronger customer focus.

Further research could be carried out to obtain the perspective of the telecommunications organizations and the challenges they face in supplying better customer service. It could also examine customer concerns with telecommunication contact centers globally.

ACKNOWLEDGMENT

The financial support of the South African National Research Foundation is acknowledged.

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