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Battlefield
A Case Study Competition
Megabucks '09
IIT Kanpur

Case Study about enhancing the use of SMS as an interaction medium for contact centers

Most of us have called up a contact center, whether to get account status, resolve problems, or to execute a transaction. These interactions do not always go as well as you would like them to, either because of the waiting time before you are serviced, or because of the expertise of the agent in solving your problem. On the other side, a contact center itself incurs additional costs (more agents, more agent time) in dealing with longer resolution times. Finding ways to enhance customer satisfaction is therefore very important to contact centers.

One way of solving this problem is to allow customers to interact in multiple ways. Given the widespread adoption of mobile devices enabled with text messaging facility, customers now have an offline means of interacting with contact centers. Many banks, for example, already use SMS messages to inform customers about their account status or activity alerts, thereby eliminating the need for customers to explicitly call (and wait) for such information. However, customers themselves can initiate contact with businesses in very limited ways (e.g. sending codes or specific keywords via SMS messages). Making this medium truly effective in serving customers presents new and interesting problems to a contact center.For example:

- How do you enable customers to easily communicate their requests (other than remembering specific keywords or numbers)? How do you deal with the fact that customers use nonstandard abbreviations and spelling mistakes when sending SMS messages? (SUGGEST: Allow users to type SMS lingo. Use text processing/mining to obtain most important keywords, most likely corrections. Use and build language/geography-specific dictionaries)

- How do you build confidence in a customer about his issue being resolved in a timely manner using an offline mechanism? (SUGGEST: Use prior information to determine processing times. Send SMS acknowledgements, reminders, etc..)

- How can a contact center itself leverage and also allow customers to leverage the offline nature of this interaction to better service the request? How do you use the extra available time to respond in a manner that provides more value to the customer? (SUGGEST: customers could request call-backs, schedule call-back at certain times. CC could automatically forward request to the appropriate person based on SMS sender, contents of SMS extracted by text analysis. CC could send an SMS requesting more information to be readied before call)

- What are the potential pitfalls of this mechanism? How will you address them, if any? (SUGGEST: Errors in understanding SMS messages, forwarding to incorrect agents, inappropriateness of use when online mediums are more applicable. SMS messages cost users money. SMS may not always be delivered promptly. SMS is *short*, so limits input. SMS has no interactivity.).

- What interesting applications do you see for multimedia SMS messages in this scenario? (SUGGEST: Showing a CC agent something, CC sending a customer more visual information, etc..)

- Can you use the wealth of information available SMS interactions to improve contact center? How? (SUGGEST: have better SMS text processing, turn frequent inbound request into proactively sent SMS messages, etc..)

In this case study, you are expected to describe how you would plan for and realize a product that enhances the use of SMS as a medium in a contact center. In addition to being very technically sound and detailed, your plan should also focus on business aspects. Some of the important considerations are:

- Business case statement: Identify the business opportunity and the value proposition that your solution brings, including a statement of how your solution increases productivity, decreases servicing cost, improves customer satisfaction.

- Target segment analysis: Identify the target businesses who will benefit from your solution. The solution will not always be relevant and applicable, so it is important to elaborate on the types of businesses that benefit from your solution, and the typical use cases where the solution will yield significant value.

- Market size analysis: Identify the segment and size of the customer base that will be receptive to this solution. For example, primary considerations would include the cell-phone penetration percentage in India, the proportion of cell-phone owners who are likely to use SMS, and the proportion of this population who has the *need* to use SMS in the manner that the solution involves.

- Competitor analysis: List the main players in the market, and what related solutions they currently offer. Identify the strengths and weaknesses of their solutions, and why your solution is unique in this context.

- Effort estimation: Concretize your realization strategy in terms of the steps involved, the effort (manpower,time, resources) involved in design, development, testing, deployment, and your release strategy.

- Technological limitations: Elaborate the available tools, techniques, and components that you would use, keeping in mind that (i) your time-to-market will allow to spend only a limited amount of time and money on development, (ii)you will not always have all the data you desire, and (iii)your solution cannot always incorporate *all* the desired features.