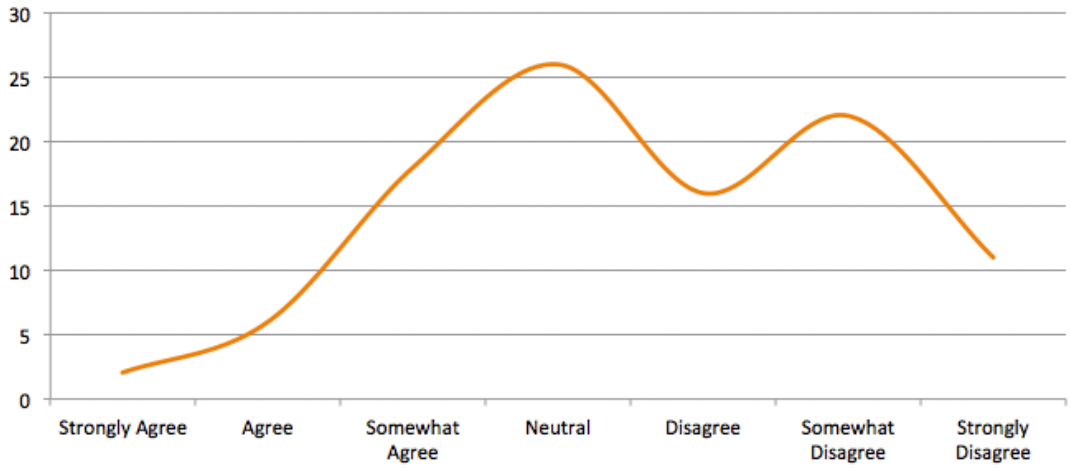
Impact of Changing Market Demands on Call Center Technology: *Realities, Options, and Priorities*

Introduction

A few years ago, one of the leading trade publications of the call center industry marked its 25th anniversary with a special edition. In that issue, they asked several of the early technology innovators in the field for their 'retrospective' on the past--with an eye to the future. One of the contributors was Gary Barnett, CTO at Aspect Software. One of his comments highlighted the reality of a shift in the market demands upon call centers:

> "*I've seen a number of innovations and achievements in the contact center industry during the past 25 years,* ***but I strongly believe that the next 25 years will require even more radical and rapid change****. A new generation of consumers and workers will soon enter the marketplace. They are* ***dramatically different*** *than any generation that has preceded them. This new generation is extremely mobile and on-demand driven — they are very adept at using tools such as instant messenger and text messaging. This new generation* ***expects and demands immediate turnaround****.*" (Note 1)

But it is not just the 'in-coming' generation that expects high service quality--it is the populace at large. The 2011 Consumer Preference Report by Avaya revealed that only 26% of consumers responded positively when asked to assess call center service levels, compared to 49% who did not (Note 2):



The survey question asked was "*Please rate the level to which you agree or disagree with the following statement: Customer service centers always provide excellent customer service.*"

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Changes in market demands upon our call centers, contact centers, and even internal helpdesks are realities which must be recognized, responded to, and even exploited--in order to enhance customer service and improve brand value. There are a number of new technology options and shifts which have appeared and/or are emerging that may prove of value. And, as always, we will have to prioritize our investments and initiatives to create a best 'mix' of customer service, organizational efficiency, and overall financial value for our stakeholders.

Realities

Practitioners, industry specialists, and industry watch-groups all agree that the current realities of call center interactions with customers are mostly consequences of our more-connected world.

A typical list of these realities might include:

- ❑ Dissatisfaction with hold times are instantly broadcast to the web-world, through social media sites like *OnHoldWith* at Twitter.
- ❑ Automation may make our workflow 'look' more efficient, but automation almost never can calm an irate customer down.
- ❑ The use of multiple channels of communication (e.g. phone, smartphone, web, chat, SMS, video) actually increases call volume, *not* decreases it.
- ❑ Customer frustration with our call center systems spills over into the (eventual) interchange between agent and customer--leading to the call center industry having the highest personnel turnover rate (for agents)among all industries, and disproportionally higher training costs.
- ❑ In spite of the best attempts by some of the brightest technology firms in the industry, customers still hate having to navigate the complex phone menus, having to repeat their information at every 'transfer hop' within the support system, and--of course--the Hold Time abyss.

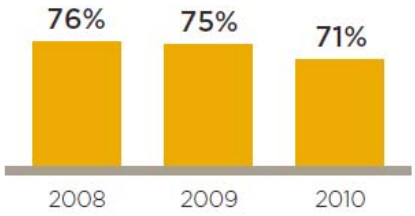
A Quick Note on Internal Call Centers (Helpdesks)

Internal PC helpdesks have one advantage over general public-facing call centers: they deal with a more restricted (although often more 'dense') domain of knowledge. The public-facing call center often has to help consumers with their *device* problems (e.g. 'your mobile app is not working on my smartphone') **as well as** their *specific company offerings* (e.g., 'this unit is spinning in the wrong direction'). In addition, the range of possible callers ('reach') of the public-facing call center has greatly expanded due to the mostly-connected nature of the customer base.

Since many of the issues facing call centers are related to the changing nature of the consumer (e.g. multi-device usage, instant communication with peers, new technology experimentation), it is instructive to note that corporate PC helpdesks are seeing a similar impact from 'consumerization' of employee access.

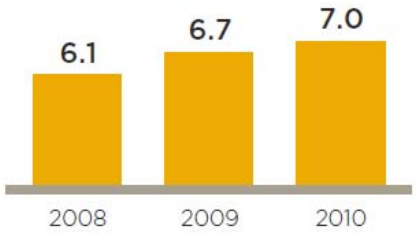
In a study performed by the Corporate Executive Board on enterprise helpdesks, call resolution was down, call times were up, and call complexity was increased (Note 3):

Figure 3: Average Help Desk Resolution Rate, Tier One and Tier Two Support
Percentage of Tickets Resolved



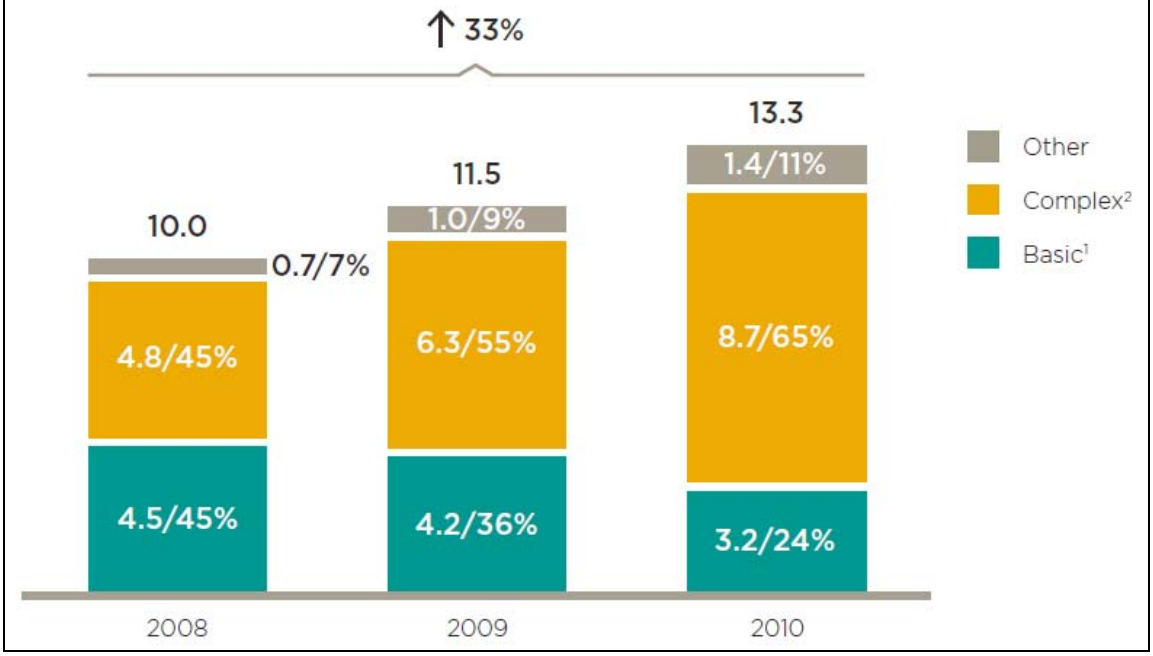
Source: Help Desk Benchmarking Assessment Database, IT Performance Benchmarking.

Figure 4: Average Tier-One Agent Talk Time, in Minutes,
Minutes of Talk Time



Source: Help Desk Benchmarking Assessment Database, IT Performance Benchmarking.

Figure 2: Annual Number of Tickets per User, by Ticket Complexity, 2008–2010

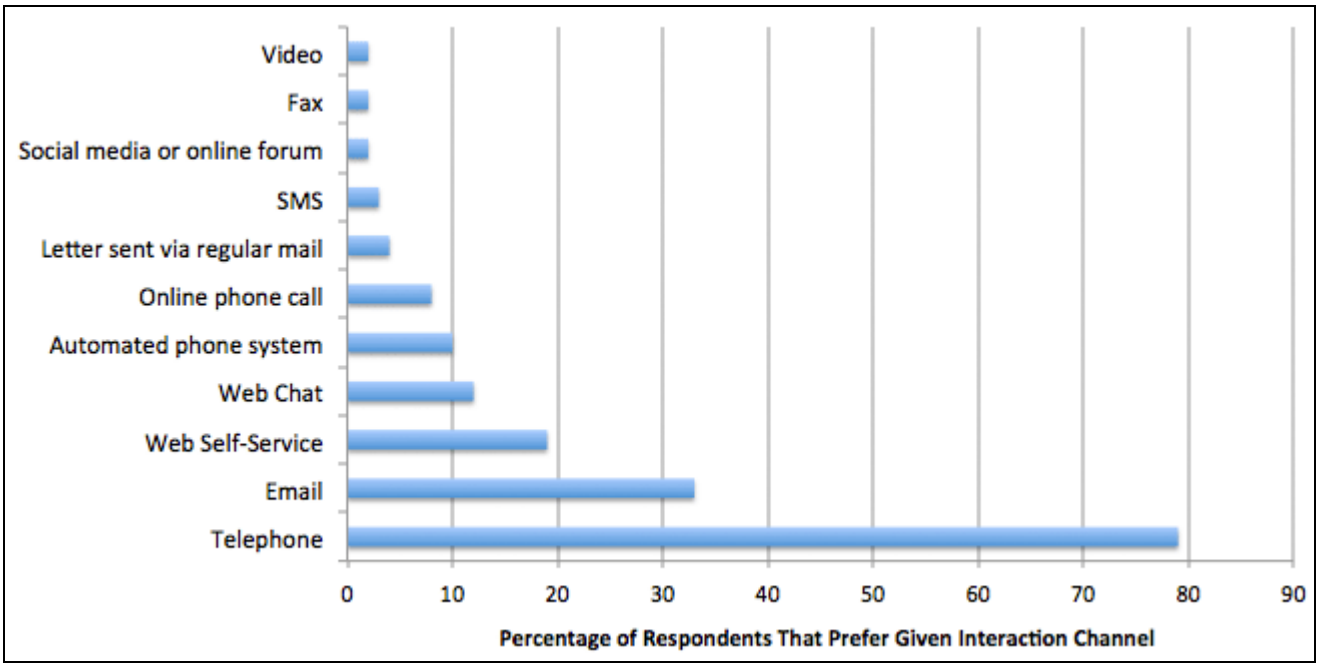


As the study notes:

> "***Growing Ticket Volume and Complexity Erodes Help Desk Quality****: The growing number of end users conducting business with personally provisioned devices causes help desk agents to struggle to keep pace with the increasing demand for service. As a result, ticket resolution performance has declined.*" (page 1).

And the **ultimate reality for call centers**--in spite of our significant investments in AI, IVR, and speech recognition--is that customers still want to talk live with a human over the phone. Modern call centers recognize this, and use these technologies **to facilitate improved human interaction** (this was the impulse that created the original CTI -- Computer Telephony Integration -- technologies decades ago).

The Avaya study showed an overwhelming preference for telephone contact:



This channel of communication is both the most expensive, the most desired, and (if equipped well) the most successful of the interaction channels.

This reality will always keep labor costs prominent in the call center budgets. We will have to find ways to streamline or amortize other costs (e.g. equipment, bandwidth) while protecting our trained agent base from defecting.

These realities drive innovation on the part of industry product and service providers, and several important new options are already proving their worth.

Options

Some of the challenges that arise from the realities above also afford opportunities for progress. The mostly-connected customer has some attributes that could be useful in providing them with better support.

- ❑ The multi-channel issue is also a potential option for improvement. The **use of smartphones**, for example, could facilitate **improved service via context-passing**, and/or **visual navigation of call center phone menus** (often multi-tiered and complex to understand on an audio-basis only).

- The use of **voice biometrics for authentication** and entitlement could greatly reduce service set-up time, removing the often cumbersome 'secret questions' process and even bypassing menu options that would be irrelevant to that specific customer or problem.

- **Natural speech recognition** has come a long way in the past five years, due to advances in the algorithms and in server price-performance improvements. As this capability improves--and is wedded to call center analytics capabilities--we should see improvements in time-to-resolution.

- **Call center analytics**, which will factor in social media inputs, voice of the customer (VoC) initiatives, service history trends, and post-call automated surveys will give us important information at point-of-delivery as well as in making design decisions.

- **Co-browsing** with a customer uses the multi-device aspect of many clients, and allows service personnel to quickly direct the customer to the appropriate resource or to quickly see the problem as seen by the customer (i.e. virtual over-the-shoulder support).

- **Interactive video and animation** capabilities are being used to assist the customer during hold-times, but also to connect the customer to appropriate resources or knowledge bases.

- Closely related to the above is **video self-service**, which is a form of support commonly accepted by the 'YouTube' generation.

- **Customer-to-customer service** uses company-specific social networks to allow customers to help one another--while under the important purview of the company (instead of in unofficial 'gripe forums'!)

- **Integrating service information sets with social media applications** (e.g. FaceBook, LinkedIn, Twitter) will allow some solutions to be delivered to customers without a rapid context-switch on their part (i.e., they do not have to exist an application and logon to a customer service site, or they do not have to disconnect from the problematic mobile application to use the phone to call the call center).

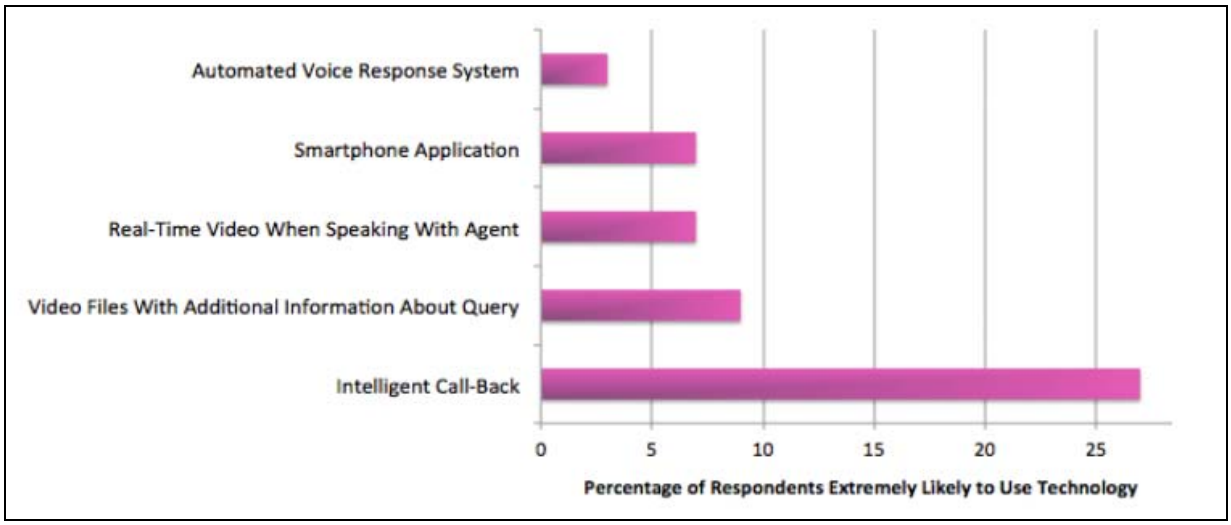
- Solution content will be **delivered over non-traditional networked devices such as TVs and road vehicle systems**, allowing more solutions to be accessed at point of need and time of need, rather than later--after the irritation grows.

- **Call center simulation systems** are being used for capacity planning and service level commitments. Using time-proven models from a wide range of disciplines (e.g. game theory, queuing theory, logistics, signal processing) workflow and load-balancing processes can be improved.

- **Presence-based systems** and other forms of unified communications (UC) will be used to create a 'virtual call center' which goes beyond the physical boundaries of the physical call center. These technologies will allow individuals elsewhere in the organization or teleworkers to be a point of call intercept, call escalation, and/or call management. This will allow resources to be integrated into the call handling processes, regardless of their geographical location.

- **Intelligent call-back** is arguably the most promising of the new options, with it being the preferred alternative method available. Intelligent call-back includes *scheduled* call-back (e.g. 'leave your number and a time you would like us to call you back') and *first-available* call-back (e.g. 'leave your number and the first available agent will call you back').

This latter technology is the preferred method of interaction, as selected by the Avaya study respondents:



All of the above options are currently available, currently in use, but are not widely deployed yet--often due to cost, change management challenges, and legacy systems.

Priorities

Our choice of which technologies and approaches to implement--and to what degree--will be affected by our service priorities. Several such priorities have become urgent in today's competitive business environment, and many are directly related to the dominant sources of customer dissatisfaction with our call center interactions (i.e., hold times, difficult phone menus, having to repeat information).

A list of high priorities for today would include:

- **Identification of high-risk calls**. We need to identify calls that carry legal risk with them (e.g. SLA guarantees, emergency situations).
- **360 customer views.** Agents need to be able to see the entire customer/product history at point of call, and call-intercept technologies need to be able to route and/or broker incoming calls 'closer to' the predicted solution source. Integrated information is essential to make this happen.
- **Intelligent call-back processes.** This is essential to reducing hold times and improving customer emotional tone at point of interaction with the agent. The trickle-down values of improvements in this area are enormous, and include improved agent morale, better customer retention, and less brand 'defensive maneuvers' required.

- **Cross-channel information sharing**. Using speech-to-text, IP/SIP-related integration, new CTI features, and emerging network roaming capabilities, the probability of a customer having to repeat the problem statement and authorization/entitlement information at every escalation/transfer hop is reduced. Not only will this reduce customer frustration, but it will also obviously reduce call times for the agents. We might be pretty far from 'point your smartphone camera at the error code LCD on the back panel and I will wirelessly deliver any available patches to it', but this level of integration is what we are moving toward--for business reasons.
- **Emotion detection**. Though not always a good predictor of risk, emotional tone of a caller (if discernible from voice patterns or language) is becoming increasingly a first-factor in call routing and prioritization. Commercially available systems are beginning to reach high levels of success in identification of such events.
- **Live chat.** This is almost a staple for online businesses today, but it is being enhanced with many of the other technologies mentioned above.
- **System availability.** Gone are the days when the customer will accept delays due to 'the system is slow today' or 'our systems are down right now'. Customers will simply reduce your brand value in their estimation and will consider alternatives.

Conclusion: Rapid Change requires Flexible Architecture, Processes, and Financing

Many of these options and priorities would not have been anticipated as recently as 5-6 years ago, and we really have no idea of what the next 5-6 years might bring. For the call center, there may never be a 'business as usual' to go back to someday.

The risks of poor service are high. In the 2009 survey by YouGov (of UK and US customers), **76 of adults surveyed said that it only takes one unpleasant contact center experience for them to take their business elsewhere** (Note 4).

One thing in common, though, between all of the above options is that they will all require more processing power, more bandwidth, more storage, and better software!

Call centers are about information exchange and knowledge transfer (and transactional affirmation, in some cases), and the continuing explosion of media-centric technologies will continue to force change, adoption, integration, and retirement of legacy systems. **Today's leading edge technology will have a much shorter life span than the leading edge technology of ten years ago**.

To adopt current technologies and to refresh them quickly as business needs change will require a level of agility and flexibility on the part of call center designers and executives that was **not** required in earlier telephony-only centers.

Flexibility will be required in three main areas:

- **Architecture**: Hardware, software, and networks will need to be more standards-compliant and more open "at the edges". Proprietary designs will still be important parts of our footprint, but we will need to push the manufacturers and software firms to implement more open-edged products. We will have to resist the urge to exploit "proprietary extensions" to standards.

- **Processes**: Our acquisition processes, asset management practices, and lifecycle cost policies will need to be revamped to support faster refresh of core technologies. Faster adoption, faster upgrades, faster scale-outs, and faster retirement will require operational and management processes which can efficiently support such change.

- **Financing**: Of course, one of the challenges to implementing faster refresh is the need to acquire new technology and to update that technology frequently—all with minimal capital investment. The acquiring of a new technology footprint initially can be done with good capital sources, but the upgrading of this technology on a continuing basis will require financial vehicles similar to those used for PC technology in large organizations: shorter-term, equity-based FMV (Fair Market Value) leases which allow flexibility for early returns, easy extensions, substitution of units, and financially simple upgrades.

We at Macquarie Equipment Finance look forward to working with you and your premier financial and technology partners, in creating financial structures to assist you in your pursuit of call center excellence.

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Notes:

(1) "The Contact Center Industry: Where We've Been And Where We're Going Next", By Gary Barnett, Chief Technology Officer; cited from http://www.tmcnet.com/call-center/0606/cis-contact-center-technology-0606.htm

(2) Avaya Consumer Preference Report 2011, cited in "5 Important Customer Service Statistics for Call Centers", at http://fonolo.com/blog/2012/05/customer-service-statistics/

(3) Preparing the Help Desk for the Rise of Consumerization, Information Technology Practice, IT Performance Benchmarking by Corporate Executive Board.

(4) See http://www.callcentreclinic.com/call-centre-clinic/