

Self Service of Cents and Sensibility

A 1% improvement in customer satisfaction in utilities is worth 4.6% in market value growth so says Claes Fornell of the University of Michigan, producers of the American Customer Satisfaction Index. So if good service pays such high dividends: why is there so much poor service around?

Most customers encounter loyalty-eroding problems and situations when they engage with customer service, according to the Harvard Business Review;

- 56% report having to re-explain an issue

- 57% report having to switch from the web to the phone

- 59% report expending moderate-to-high effort to resolve an issue

- 59% report being transferred

- 62% report having to repeatedly contact the company to resolve an issue

- After 2-3 self service attempt failures customers will not try it again

Service failures not only drive existing customers to defect—they also can repel prospective customers. Research shows:

- 25% of customers are likely to say something positive about their customer service experience

- 65% are likely to speak negatively

- 23% of customers who had a positive service interaction told 10 or more people about it

- 48% of customers who had negative experiences told 10 or more others

If this is the experience with live agents who have been hired and specifically trained to assist customers, why would any organization want to offer self service? So why do organizations want to employ self service? Traditional service with live agents or personnel is labour intensive. It costs a lot to deploy staff in a call center, in retail or even in a full service gas station. If we ever remembered the nostalgic service from multiple attendants we could find ourselves in a state of shock (as was the case in Back to the Future) or fear, as was the case in a recent CarMax television ad.

View the ad here. [CarMax TV Ad](#)

Costs Savings, Productivity & Technology

Having said that, fear is not a primary driver of self service. Self service is pursued for other reasons. It is cheaper to have customers serve themselves than to pay someone else to do this. The multiple attendants we saw in the CarMax video have been replaced by an intercom button to press if we have a problem pumping our own gas.

If we offer web based FAQ's and customers can find what they want by themselves, it eliminates a call and or a live retail transaction, along with the associated labor costs. In this situation agents can and should then deal with more important, complex or urgent issues improving overall productivity.

Of course we can all be guilty of wanting the latest, greatest technology, technology envy perhaps. I recently upgraded my BlackBerry. It wasn't that there was anything wrong with my old Blackberry, but the new one did have a faster internet connection and an upgraded keyboard. It was the also quite cool in my estimation. So I upgraded. In truth the main reason I did so was that it was cool. When asked why, I pointed to the internet speed and keyboard. In doing so I proved that old chestnut that people act upon emotion and rationalize with intellect. So if there is technology out there and we have read how it helped a similar organization, then we may want to try it in our shop.

So Self service can be less expensive, more productive and leverage cutting edge technologies. Cheaper, faster and sexier...what can go wrong?

Self Service almost 100 years Old

Before we go any further let's take a look back --- Self service as a concept is almost 95 years old. In 1917, the [US Patent Office](#) awarded [Clarence Saunders](#) a patent for a "self-serving store." Saunders invited his customers to collect the goods they wanted to buy from the store and present them to a cashier, rather than having the store employee consult a list presented by the customer, and collect the goods. Saunders licensed the business method to independent grocery stores, these operated under the memorable name "[Piggly Wiggly](#)."

In 1961, [Bell System](#) developed a new tone dialling methodology (touch tone or DTMF- Dual Tone Multiple Frequency). In doing so Bell created the technological basis for the IVR or Interactive Voice Response system. It would take until the mid 80's for the IVR to become commercially viable for call center applications. One of the first commercial uses in Canada was the Moosehead joke line that was created to support the launch of Moosehead beer in Ontario.

Invented by [IBM](#), the first ATM was introduced in December 1972 at [Lloyds Bank](#) in the UK. Again it wouldn't become a daily event for a decade.

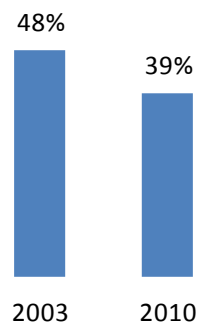
1979: [Michael Aldrich](#) invented [online shopping](#) by allowing people to purchase product from his computer store, via his Usenet site. This was many years before the worldwide web became a reality.

The term "Web 2.0" was coined in January 1999 by Darcy DiNucci- denoting inter-operability. This is user centricity, and information sharing that gave birth to web self service. It took another 6 or 7 seven years to reach the masses.

More Volume and Less Success

So with self service existing for years and years what percentage of self service interactions are successful today? According TSIA only 39% of self service transactions were successful in 2010. But this is only half the story. The level of successful transactions has declined from 48% in 2003!

So we have a dichotomy here... people are more eager to deal with virtual agents according to Harvard Business Review, we are certainly more accustomed to interacting with technology than we were in 2003. Yet the success of self serve technology is declining. So why is this happening?



In part this is caused by attempts to implement more complex self service interaction opportunities and a frequent failure to properly plan and understand what the customer is willing and able to do.

In the past few decades we have seen a huge increase in self service transaction volumes even though fewer being deemed successful than we had in 2003, there are many, many more transactions today.

Airport Kiosk Check in introduced in 1995 and now represents 95% of all passenger check ins at Continental Airlines. It costs the airline less than 5% of the cost of a live ticket agent to process a

passenger at a kiosk¹. Forrester reports the costs at \$3.02 per live agent processing and \$0.14 to \$0.32 per kiosk processed check in.

Mobile airline check in, introduced in 2009 and ticket purchase are the new self service options on the horizon, with most airlines supporting this self service channel. 25% of airlines offer online check in today, rising to 81% within 3 years².

There are a number of Utilities employing self serve kiosks to deliver services to unbanked (those without bank accounts) and under banked (those that do not have access to online banking and therefore cannot employ other self service channels) customers. Some of these utilities include: Pacific Gas & Electric, Southern California Gas, San Antonio Water Systems, Arizona Power Service and Memphis Light, Gas, and Water.

The first self service gas station in North America was in Winnipeg MB in 1949³. Pay at Pump or prepay required by Law in BC. NJ and Oregon prohibit customers operating gas pumps...thereby making full service mandatory. Today there are 135,000 gas stations in North America, only 9% of these in Canada and more than 80% are self service.

Self service in the grocery industry was introduced almost a century ago. Yet true self service was much slower to evolve. Only 16% of supermarket transactions were completed via self-checkout in 2010 (down from 22% a year ago). Supermarket self-checkout being phased out by a number of US companies such as Albertsons and Big Y.

So why are adoption and utilization rates are declining for grocery self check out? As with most failures in self service, the problem isn't the self service itself. In the case of grocery self service, the problem isn't really self check out. It is coupons and bags. The systems are not well configured to support various sizes and shapes of coupons. Plus the location and method for placing the bags causes frequent problems. It is not the technology. It's the process! We need to focus on the "Why" before the 'How'

Customers accessing Web based content increased from 2.5 million in 2008 to more than 10 million in 2010. Interaction Volumes are growing annually by 20% or more according to TSIA. More than 60% of your customers who phone have tried to find the information on your website FIRST. More than a third will be on your website when they call!

According to Forrester Research, the cost of the average Web self-service session is just \$1 USD, compared to \$10 USD for an e-mail response and \$33 USD for a telephone call. Many utilities have expanded their Web-based menus to customers and include more services such as bill payment, bill presentment, eBill signup, view payment history, view energy usage and bank drafting signup. These six services are available on Web sites at least 70 percent of utility organizations across North America. For some utilities (PPL Electric- a Pennsylvania utility with 1.4 million customers) process more Web and IVR Self Service transactions than they do live calls – 630,000 Web self service, 400,000 IVR self service and 975,000 live calls over the same 5 month period of 2010.

¹ New York Times

² Airline Business

³ Wikipedia

Starbucks now has 3 million customers using mobile prepaid to pay for their coffee. Apple and Facebook are able to charge 30% commission vs. the 2-3% credit card players charge. 'Mobile money' is the second highest priority for Google.

Why can Apple and Facebook charge these exorbitant commissions and why is Mobile money # 2 on the Google 'To Do' List? – The combined market for all types of mobile payments is expected to reach more than \$600B globally by 2013.

Mobile operators worldwide have achieved an average customer **e-billing** adoption rate of 56.8 percent while traditional telcos lag at just 17.2 percent. In August 2011, EFMA (European Mobile Association) published a report after surveying 150 European banks with McKinsey on mobile banking. Their findings are that banks believe mobile will fundamentally change retail banking within five years (70%), and yet the majority have fewer than ten employees working on mobile and have yet to make any change in their operations to exploit this capability.

How do you begin to address Mobile solutions? First look at the web reporting and analytics. You must look beyond the overall mobile vs. non-mobile usage performance for the entire website. If you examine this you will likely see somewhere around 5% of your website visitors are coming from mobile devices. Look at My Account Login information, Pay a Bill and 'Contact Us' pages. Mobile Watch reports that mobile devices are accounting for 20-25% of all web visits during major utility outage events. Mobile devices can account for upwards of 50% of "Contact Us" page visits. And guess what? If your website isn't able to serve customers in a mobile-optimized and highly-usable way, 100% of those "Contact Us" visits through a mobile device will generate a phone call to your call center.

The second item to look at is, of course is your actual customers. If you use some kind of customer satisfaction survey, you can add a question or two about customer's mobile/communication preferences and willingness to complete transactions via mobile-optimized interfaces (mobile website, native downloadable 'smartphone' application or via SMS texting).

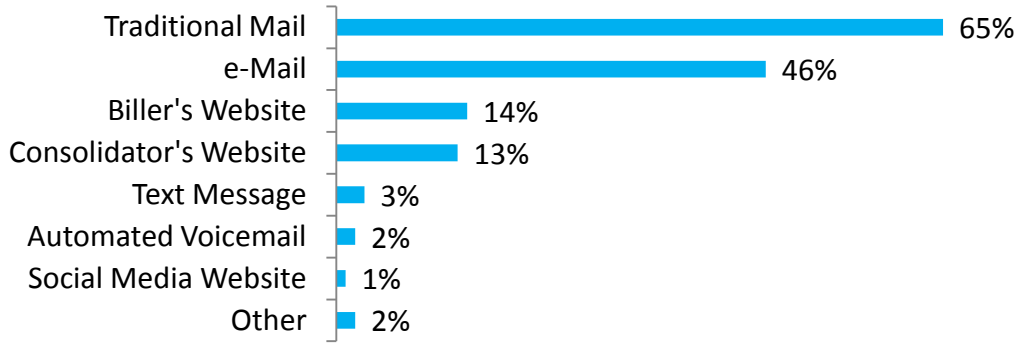
PG&E mobile bill payment application has seen double-digit growth month-over-month since its release, and the application is now one of the most downloaded free financial applications available through the Apple app store.

Forrester analysis found that 70% of online consumers are willing to replace paper bills and statements. Mobile operators worldwide have achieved an average customer **e-billing** adoption rate of 56.8 percent while telcos lag at just 17.2 percent. There are interesting attributes associated with eBilling customers...eBilling Customers are⁴;

- 22% more likely to pay on time when using online banking
- 6% more likely to pay on time if they use company payment website
- 64% less likely to phone call centre for online bankers
- 39% less likely to phone call centre for website payers

Numerous studies have identified the savings when compared to traditional paper bills: eBilling can save 40- 50 cents per bill instead of paper billing. eBilling can also ramp up quite quickly. A Whitby utility reached 15% penetration in 6 months. QuestarGas hit 50k paperless customers in just 6 weeks.

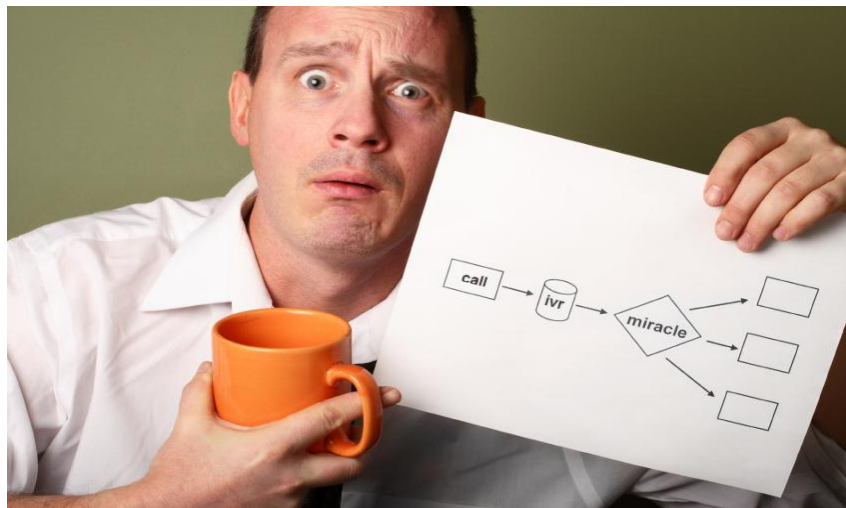
⁴ Source Fiserv/AccuData



Info Trends Research shows that the majority of customers still wish to receive traditional mail invoices,

However other channels are receiving increasing levels of interest- with 45% preferring email and 27% on website and 6% by text message/SMS, voice mail or social media. The totals here exceed 100% due to the ability to select more than one preferred channels. When Gen Y respondents are examined we find that 51% wish to receive their bill electronically versus 44% of the general population.

It's not just paying their bills on line, Gen Y respondents also want to receive their invoices electronically... by email, SMS, download or browser based.



Interactive Voice Response systems that tried and true tool for call streaming, processing and allocation can become Indifferent Voice Response when no matter what the customer enters (or says) the path and result all seem to keep them cycling over and over through IVR Hell.

Although intended to improve customer satisfaction, a survey taken by Amplicate in 2010 found that 88% of people hate IVR's . IVR's have changed over the years from simple call routing: press 1 for this and 2 for that and messaging, to a self service tool- listen to FAQ's, report an outage based on phone number, from purely touch tone to speech enabled and today to intelligent AI enabled virtual agents – think Emily for Bell or Ted for United Airlines. Speech enabled IVR's can create more customer alienation

than touch tone IVR's⁵. This is a result of the higher emotional involvement in yelling into a telephone versus pushing buttons harder and faster.

The most commonly reported problems with IVR are:

- 1) Menu options are either too short or too long
- 2) There is an imbalance between functionality and usability
- 3) Customers can't find a menu option that meets their needs
- 4) Menu options are focused on company needs rather than customer needs
- 5) The IVR menu options use jargon that is not readily understood by customers
- 6) There is no way for customers to start over if they make a mistake
- 7) Error messages blame the caller
- 8) Multiple language options may not be justified by the customer demographic profile
- 9) More than five seconds of dead air can cause users to hang up and call back

Yet in spite of the challenges experienced with some IVR applications the overall IVR market size now over \$2 billion. Customers are now more eager to have interactions with these virtual agents and more satisfied with the outcomes says HBR (Stop trying to delight your customers).

Customer Perceptions

What if we could peek inside the head of our customers and see what they really think about self service, what would we discover? Research completed by Paul Hudson found that customer perception is that self-service is associated with speed, convenience, simplicity.....and technology – but not associated with offering support, being caring, or personalised. However, the words 'customer service' is associated with care, support, personalised, but less associated with being fast and convenient.

Two out of three U.S. consumers surveyed want self-service options when shopping. Nearly half of U.S. shoppers surveyed under the age of 45 want stores to offer self-checkout. Almost 46 percent of U.S. consumers surveyed want stores to offer more self-service options, like self-checkout or kiosks, to improve their shopping experience.

In looking at customer perceptions we have to realize that – 1-perceptions are not static, they can change over time –People who refused to pump their own gas or use an ATM when these SS technologies were introduced happily do so today. And 2-That perceptions are shaped by the customers environment and by their self interest and specifically is something is: A) Easier, B) Faster, C) Less Expensive

Self Service and the Call Center

According to ICMI, 79.5 of centres offer Self Service. Reasons for Implementation where headed up by : operating cost reductions (83.4%) and meeting customer demand for service options (74.3%). Over half (64%) of respondents don't know if or when a customer has tried to self-serve but then opted for a live representative.

Among the tools contact centers use to support Web self-service channels, in particular, leaders emerged: issue tracking (53%), knowledge management (44.6%) and service management tools (42.3%).

⁵ Gartner

A troubling 43.6%, almost half of respondents, don't measure customer feedback on their centers' self-service channels.

Regardless of the self service channels employed in the call center, each center still has to determine what to do with:

- The 13% that opt out of the IVR?
- The 40% who are still on your website?
- The 2/3 that have already tried to find the answer?
- Silo distance between call centre and 'owners' of the web?

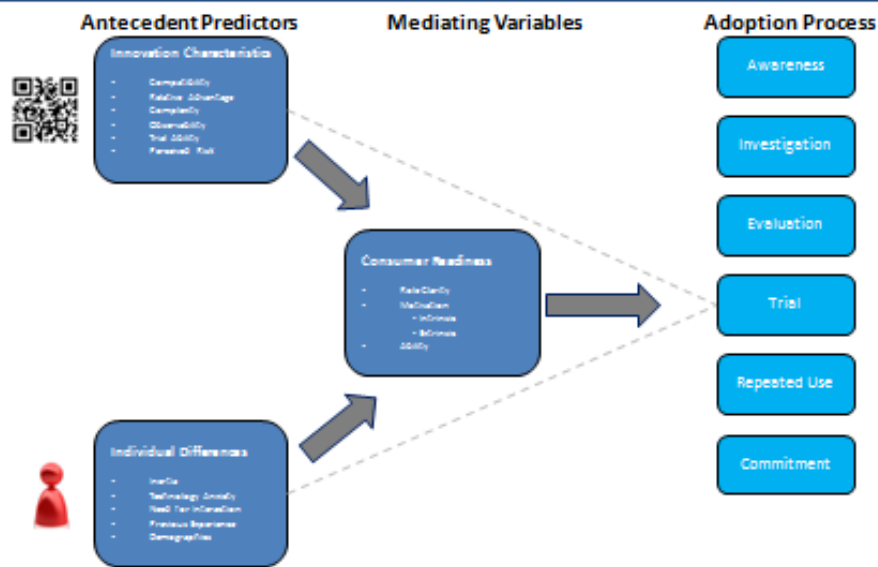
Frequently Asked Questions or FAQ's are often one of the first self service tools adopted. If questions can be self contained and completely answer the question they are well suited for web service. 80% of questions can generally be answered by FAQ's⁶. Yet FAQ's are near the bottom of the self service tools employed by customers

1. Shopping carts (for products/services)
2. Order confirmation
3. Order tracking
4. Appointment setting/rescheduling
5. Bill pay and funds transfer
6. Personal account access, set up and management
7. Site search
8. FAQ's
9. Opening and checking tickets

So how do we implement and drive self service adoption? The graphic below illustrates the considerations that need to be addressed and aligned.

⁶ Kate Leggett- Forresters

Key Predictors of Consumer Trial of Self Service Technologies



Consumer must be ready, they must understand their role (89% of employees are confused by new products or services)⁷ and what is expected of them, they must be motivated; either by themselves or someone else and they must have the Ability- skills, competency, knowledge or pre-requisite technology (i.e. internet).

The product must have appeal, be compatible with the target audience, provide a tangible advantage over previous methods etc. In addition the product must overcome inertia, technology anxiety etc.

Drilling down to look at eBilling this chart illustrates a logical process to implement eBilling.

⁷ Englewood

eBilling Best Practices



The following best practice tips can significantly improve the speed of implementation as well as the success achieved;

1. Sign up all new customers for your ebill program. Do it automatically and with no action required from the customer.
2. Use an e-mail matching service append up to 20 percent of your customer database with customer's email addresses at very low cost.
3. Initiate an automated welcome e-mail telling the customer what to expect.
4. Then just begin delivering the bill electronically. A small percentage will opt-out, but the vast majority will accept it. Adoption therefore becomes equal to the number of email addresses you have available.
5. Offer simple bill presentment via secure email as the first step. It's not necessary to try and 'pull' the customer to your website to achieve successful ebill presentment.
6. Take it one step at a time. Achieve bill presentment and paper truncation first. Then drive payment as the next step.
7. Replicate your paper bill truly in a digital format – familiarity drives acceptance. You can add additional functionality later.
8. Use opt-out rather than opt-in strategies. Customers expect you to bill them.
9. Automatic paper truncation with the ability to revert to the paper option. When your customers are familiar with the ebill, turn off the paper automatically – you will be surprised how few requests you will get to reinstitute their paper bill (on average, less than three percent).

On the topic of best practices lets look at some related to the use of IVR's

1. Menu options no more than 4
2. No more than 4 layers
3. Zero Out option at any time

4. Allow corrections at each menu level (consider routing to live agent after 1)
5. Allow to back up or re start at each menu level (consider routing to live agent after 1)
6. No Jargon
7. Make sure the customer can actually do things they want to do:
 1. Account balance
 2. Report a payment
 3. Open a Ticket
 4. Track a shipment
8. Test Speech Recognition and Virtual agents before you deploy.
9. Use IVR for outbound calls⁸-
 1. Outage notifications,
 2. Pre-collection,
 3. Planned Maintenance/Outages

Share knowledge across multiple channels to make it available when and where needed:

Knowledge base for web, can be employed by live agents for calls, chats, email

FAQ's- make sure they are the same ones regardless of the channel they are viewed

Blog- If you have one promote it and link it to your website and help pages if it offers service and self service tips.

Video/YouTube channel- This can be a great resource for showing 'How to' and, 'where to find' information.

You must measure all users who employ self service...those that enter and those who leave early. Only by understanding what calls, contacts you are actually deflecting successfully can you determine the ROI. And only by knowing where customers are 'jumping out' of self service can you identify where you need to improve.

A Caveat to the trend to self-service has been raised by William J. McEwen, Ph.D., the author of [*Married to the Brand*](#). Bill cited industries that have trended towards commodity status have often been strong proponents of Self Service...such as the gasoline retail business. 40 years ago when each retailer tried to show the superiority of their product, but by 2007 only 9% of consumers surveyed by Gallup believed there was any difference between brands.

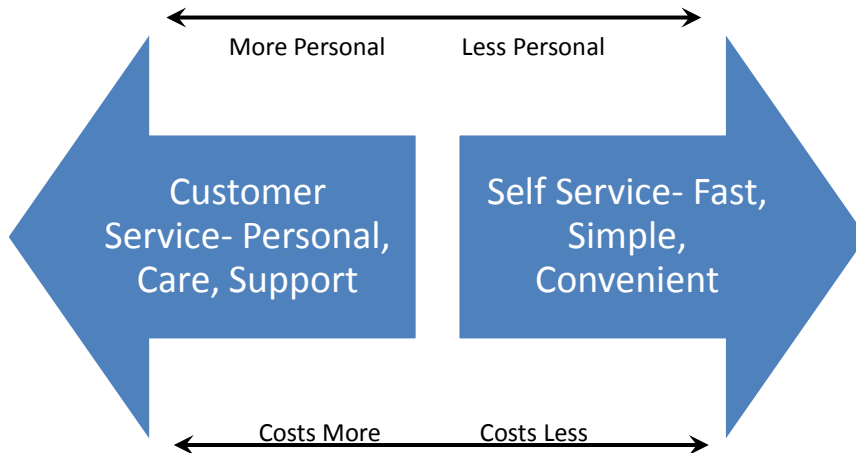
McEwen feels that a key to maintaining a strong brand is maintaining contact and interaction with customers. Organizations like the JetBlue, Southwest and Ritz Carleton have long since identified that their staff are the key to a success and positive guest experience. Similarly we can all think of positive service experiences where it was the individual that we interacted with that made the experience so great.

So from McEwens' perspective if we eliminate personal service interactions we are driving our organization towards commoditization. If we take McEwen at face value a move toward cost reduction through self service is less personal, less connected and less likely to create raving fans or similarly happy customers.

⁸ 63.7% of 102 responding utilities will use integrated voice response (IVR) for inbound calls during a major outage, but only 16.7% will send notices proactively via e-mail- Chartwell

But more personal service costs more. Is there no way of improving service quality without increasing the costs?

Customer Service vs. Self Service



Multi Channel Contact Center

Somewhere between the higher cost of live phone service and lower cost self service exists Multi-channel contact centres. Lower costs than live agents, through matching of unique effort to availability, Higher service quality than self service as a human being is still a party to the process. Multi-channel centers can serve Voice calls, Chat, Email management, and self service.

A couple of these terms may require a definition;

Email management may seem self evident...we all use email every day. But in a contact center, where email is one of the primary communications channels, we can't, or at least don't want to manage email as we manage our own mailboxes. Too many emails, a broad range of topics, confusing subject lines, no reporting and limited workflows are all reason why simply employing Outlook doesn't make a lot of sense for a contact center.

Robust email management applications can better manage incoming emails through a much more sophisticated set of features and functionality. Many of the applications available today can send auto acknowledgement emails; confirming receipt, setting our response times, and providing a ticket number for future reference, stream emails from the website, allow the use of templates for common topics and even some possess self-learning systems that suggest what the correct template should be based upon key words in the email. When this is combined with reporting, we can deliver a significantly better experience than was possible with Outlook and do so at a cost which is one half to a third less than that of a live call.

Chat is one of the fastest growing applications in contact centres today. Now everyone has likely employed Instant Messenger or a similar application and that technology is really the basis for chat. Chat allows a customer on your website (which is where 40% would be when they call) to open a

dialogue box and interact with an agent in the call centre. Through this interaction the customer can pose questions and the agent can provide answers, push pages and templated content etc. In large part because the agent employs 'canned' content, the agent is required to do significantly less typing – this results in the ability to complete 2, 3 or even 5 simultaneous chats, with the expected cost saving per interaction.

Multi Channel services (chat email, voice, IVR, SMS etc. can reduce costs versus live agents and improve service quality versus self service. An eCommerce retailer we worked with had traditionally operated a voice only call centre. Budget pressures forced them to reconsider their strategy and they elected to deploy, email management and chat solutions all of which was delivered through the call centre...or contact centre.

The result was a 54% improvement in agent productivity and an associated 46% reduction in cost per transaction within the first 12 months of deployment.

Of course for self service applications to be effective you must communicate their availability. This can be done on the website, through billing inserts and advertising of course, but one of the most effective approaches to drive adoption is to ensure that the call or contact centre agent is well versed in what can be done and how through self service. This knowledge and familiarity allows the agent to describe and walk through how a customer can interact with the company through self service and the benefits that they the customer will gain from doing so...24 hour access, no queues etc.

British Gas created a wonderful video to educate their contact center staff on the self service options and choices available to the customer. View [the video here](#).

The Future of Self Service

When we consider the future of self service in supporting our customers, a number of questions come to mind:

- How much technology is too much?
- Which technologies are appropriate for our customers?
- How do we balance the desire for personal interaction vs. cost savings?
- How do we differentiate offerings to different customers and different service levels?
- How do we connect the business? To Marketing, sales, to the Desired Customer Experience and from the perspective of Customer Relationship management

The Answers course will be different for each organization, but the list of bullets below give us some valuable points for consideration as well examine self service options in the future.

- Balance
- Avoid the 'Bleeding Edge'
- Customize solutions
- Join the Dots

We need to balance the needs of the customer with the needs of the company. This desire for balance should manifest itself in implementing self service only where it is a 'win-win'. If there are no benefits for the customer or to the organization with any given self service approach, why would we want to do it?

Life on the 'bleeding edge' is expensive and often unproven. The risks to the organization to undertake expensive and unproven technologies are great. The fact that they have not been proven can also mean that your customers are guinea pigs and the likelihood of a negative experience increases dramatically in this scenario.

Regardless of the solutions employed, we must realize that one size almost never fits all. We will need to customize any solution to our business, our customers, our processes, policies and way of doing things. If we neglect this step, we will create more problems, and dissatisfaction for our customers.

Lastly, as we saw with grocery self check out, it is critically important that we understand the Why we are creating this tools before we worry about the How. If we do not have a valid rationale for why a customer would want to use this we are defeated before we start. Also we must in defining the How; follow the process through to its natural conclusion to ensure that expected steps in the process don't erode or eliminate the value of the self service process in the first place.

So what can we expect to see in the future of self service? Well predicting the future is never easy and your chance of being wrong is huge. Having said that, and having been wrong on many, many occasions, let me pontificate on what I think we all see in the coming years.

1. Kiosks- these can be valuable tools to extend self service to portions of the population that may no have it otherwise. These have traditionally been fairly expensive to roll out and support. With the ieverything revolution created by Apple and specifically with the iPad, a Kiosk can now be on a tablet. The entire interface and back office process integration can be a simple as "there's an app for that."
2. IVR's – If they only had a brain- to paraphrase the Wizard of Oz Tin Man- well IVR's with a brain are called virtual agents and they exist today – Emily from Bell, Ted from United airlines etc. These virtual agents assist customers to get what they want done without the aid of a live individual and work well within narrow parameters. A Pizza company has over 98% success when you call from your home number and order the same pizza that you ordered last time, Ted can tell you when United flight 9645 is landing or taking off and Emily can direct you to on-line resources. But this is still menu driven. A tight 'one to a few' relationship (for each question there are only 3-4 answers the virtual agent will understand and can process). The result is often in a much lower success rate.
3. Today we are beginning to see Virtual Agents that are employing Artificial Intelligence (AI), specifically Artificial General Intelligence (AGI) a learning and thinking engine that has skills, knowledge, and memory and improves over time. Today some of these virtual agents are achieving more than 85% success rates. One of the keys to the success of these AGI virtual agents is the 'automation of conversation'. This is a big deal, it means that the virtual agent can recognize natural speech and context in a conversation; it also means the end of menus of choices.
4. With the existence and capabilities of virtual agents there is no need for them to be bound to your telephone system- virtual agents can and in some ways are being linked to holograms and projections to create the illusion of a human being providing the information. This can be delivered through an avatar on your website, on your kiosk or through projections into virtually any space. Here is a [link to a news video](#) showing the use of holograms at Orly airport.
5. Of course the future is not just holograms, it is also more boring areas such of payment processing and platforms such as the Google wallet. The payment and processing future will continue to expand the range and options beyond the traditional company website payment

and traditional on-line banking payment- The environment will continue to shift and change with Google wallet, PayPro, PayPal, the banks and credit card companies all looking for their share.

Regardless of which of the above predictions come true or how quickly one thing is certain, in living and working in the self service space today we can appreciate the dual edge of the Chinese blessing or curse "May you live in Interesting Times".