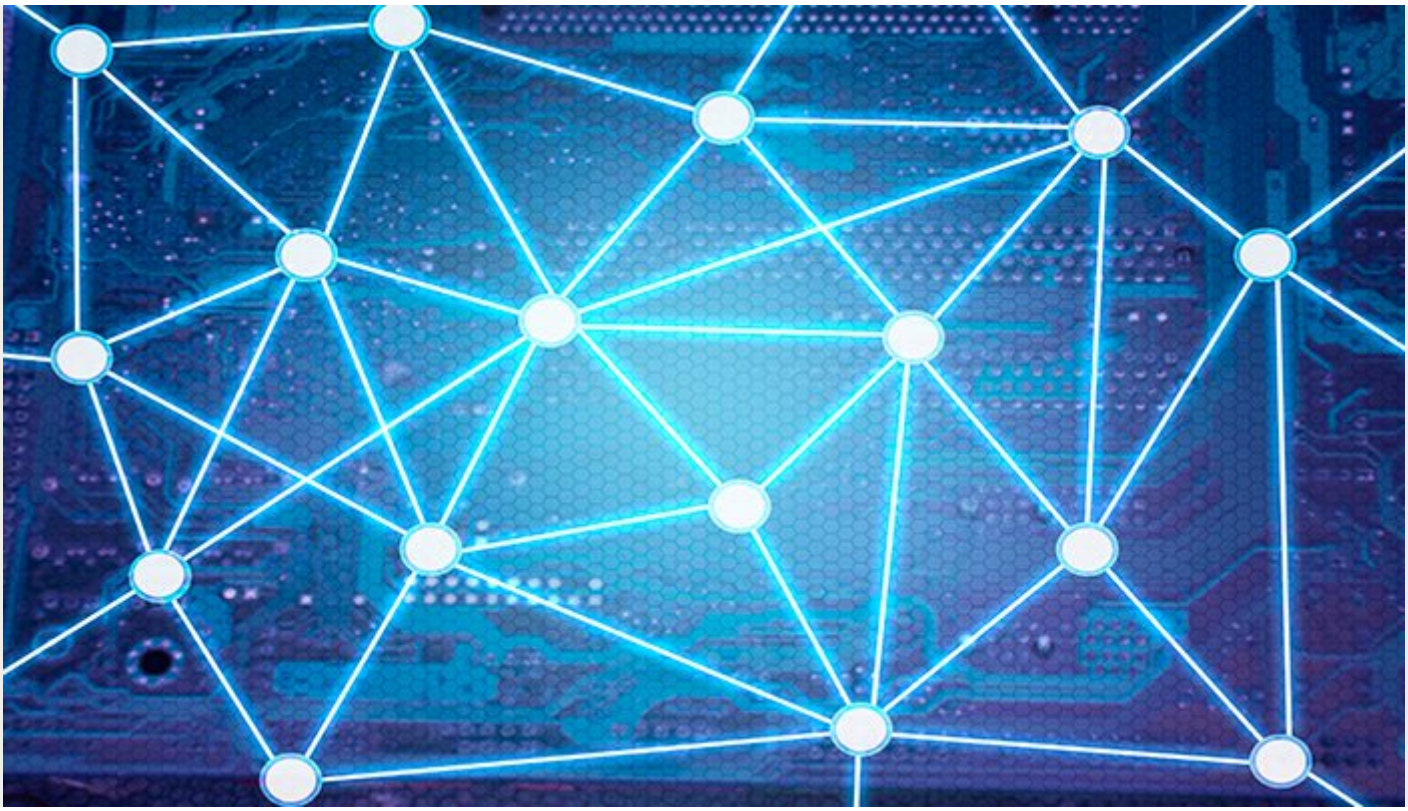
WILL ROBOTS REPLACE MY SERVICE DESK?



In December, I published Part 1 of this series that introduced cognitive technology and the benefits it can bring to your organization. That blog described how robotic functionality stands to dramatically improve customer service, staff productivity, and fundamentally change how service desks will operate in the future. I refer to this as the "shift-right" paradigm that changes the focus of service desk staff from lower value, repetitive tasks to higher value, business-oriented issues. This shifting right also extends to Level 2 resources by lifting their responsibilities within the organization while reducing the need to involve Level 3 staff.

With all this shifting, the prevailing question becomes "Where do I start?" In Part 2, I will go through the process of building your cognitive strategy and plans by addressing four key domains: People, Process, Technology and Data. These domains provide the supporting information required to define, design, maintain, and sustain the cognitive service management platform with each domain carrying equal weight in the success of this initiative.

People

There are two organizational roles involved with planning the cognitive service desk: Providers and Consumers. The consumer is your user--be it internal, external, or both. They will initiate the communication with the cognitive service desk. The providers are the developers, analysts, consultants, and other IT staff helping to build your new cognitive service by focusing on the consumer needs while providing them with a great experience.

Pleasing the consumer is about how she or he will effectively interact with the service desk. Critical

to the success of transitioning to cognitive technology is that IT must pay special attention to creating a meaningful experience for the consumer. Consumers should be presented with natural, human-like interactions and not technical jargon-based requests. To create this experience, begin by identifying those most frequent consumer requests from across the business that are simple to fill out, easy to understand, and deliver immediate value. Then, begin to build out the chat-bot interactions using the statement-response database information aligned to those issues, but in a more conversational way like: "What would you like to do?" or "When would you like it?" Natural language, social colloquial phrases, and feedback loops are critical to the design and testing prior to releasing them to the consumer. When in production, ensure user feedback is captured via surveys to improve and learn what works and most importantly what doesn't. Course correct quickly and when satisfied with the first chat-bot experience, begin the process of adding additional chat-bot interactions from other business units. By doing this, you are keeping the consumer at the forefront of your attention during the design and implementation of your cognitive strategy and service catalog. Failing to do so can result in a bad chat-bot experience, often leading to waning consumer satisfaction scores and inhibiting the cognitive technology's adoption.

The providers play a crucial behind-the-scenes role in building the cognitive catalog and delivering the end-user chat-bot experiences. There are several roles that are key providers in this new paradigm: senior analysts, developers, and chat-bot experts. The primary provider role responsible for the planning and development of these chat-bots should be senior analysts from your existing service desk. The ideal senior analyst for this transition is someone with the experience and history of end-user support that understands how the business functions. Her or his background will help lead the design of relevant, human-like exchanges for the most frequently requested use cases that support the business. The senior analyst becomes the advisor to developers who are working on the cognitive learning tool used to actuate the chat-bot and ensure the exchanges become easily relatable to consumers. That said, finding the right advisor is critical to design, deployment, and evolution of the cognitive experience, which will expand and grow as the business gains confidence through incremental success. Next, come the developers who will need to educate themselves on the power of cognitive technology and how best to exploit its artificial intelligence capability. While chat-bots are being delivered, management needs to prepare to address the change to the analyst role and evolve the career path and skill requirements of the Level 1 and Level 2 staff, as they turn over many of their current tasks to the chat-bots. This will create a virtuous cycle of growth for your support professionals triggering the "shift-right" of competency while improving service delivery to the business.

Process

Cognitive technology will best achieve comprehensive adoption by incorporating and enforcing well-structured processes supporting the long-term transition to a new way of operating and interacting with the service desk. There are three key sets of processes to be developed, communicated, and implemented for an organization to successfully deliver cognitive technology: provider, consumer, and data management processes.

Provider processes will outline the new ways of executing tasks for the different roles aligned to the service desk. Clarifying the new processes for each role will help in driving the necessary training, enablement and adoption of the new roles, ensuring the "shift-right" of responsibilities happens successfully. The service management processes are the core to the backend fulfillment of requests and it is imperative they are consistently and reliably executed by the roles assigned to define and support them. For example, a request for a cellular phone will follow the work order

process or a request for a laptop will follow the asset lifecycle process. The request for IT help or support will follow the incident or knowledge management process to help capture and provide the end user the information they are looking for. All of these processes require roles that are not only responsible, but accountable, for those processes and if they fail, then delivering a successful end-user experience fails.

Consumer processes will guide how to interact in new ways with the service desk assuming it changes significantly from what they were used to. However, well-developed interactions that are simple and intuitive require no training; a goal that should be pursued for all interaction development given its fundamental value to the effort. Additionally, internal communications about new features and opportunities will prepare consumers to change and help drive user adoption. By shaping the desired steps and required training, the user community will experience a seamless transition to the new solution. While the chat-bot experience should be life-like, the consumer will need an introduction of what to expect and clarity on any personal process changes that would allow them to better benefit from the evolution of the service desk.

Lastly, is a strong data management process. This area of focus is very critical and covered in a section all its own later in this blog. However, I cannot highlight early enough that providers must be diligent and consistent in collecting and analyzing the data around the effects of cognitive processing to look for positive trends and drive the effectiveness of cognitive processing and growth.

IT management is not without responsibility in this journey. They are vital to providing leadership and support to the service management organization and ensure best practices are understood and accepted enterprise-wide. Good cognitive processing places emphasis on the use of consistent and proper language. The process needs to define an effective catalog of keywords, titles, descriptions, and summaries to be used and be understood by all involved. The greater the use as well as the quality of fields and values, the greater the cognitive engine's ability to build a functional database of patterns to correlate this information to deliver substantive chat-bot responses. It is never too late to improve a process. In fact, it should be a part of a continuous improvement program to prevent the potential for stagnation and insure its continued use.

Technology

This subject area is generally the most appealing and comfortable for IT departments because it deals with the bits and bytes of application deployment. After all, IT has been delivering technology for decades, so rolling out new solutions is a familiar and comfortable activity.

However, cognitive technology is a departure from most automation tools and something that forward-thinking developers and administrators will need to embrace. Cognitive technology is delivered in two parts: the backend database – indexed with a vast amount of information gathered from millions of fields and records; and the frontend – which is the user-facing interface. As referenced earlier, the power of cognitive technology lies in its dependence upon accurate, consistent, and quality responses derived from the indexing of information expressed in those millions of historical records and fields. An immature implementation of the backend will lead to poor cognitive responses, thus negatively affecting end-user adoption. Abandonment is our enemy here. Hence, if users cannot trust the technology, they will not use it and the organization will fail in achieving the goals and benefits of the shift-right paradigm.

To prevent this from occurring, cognitive technology must be taught how to search and respond (i.e., machine learn). The backend processing needs to align to the correctly categorized responses that

are relevant to the end user's request. To ensure this is done effectively and efficiently, this alignment should be done by an experienced person. The front end of a chat-bot contains the interface that mimics human conversation and makes the experience easy to use. This essentially is a catalog of keywords and text patterns triggered during the chat-bot session. These triggers open the path to numerous decision branches of user statements, executing the back and forth interaction between the user and the chat-bot, leading to an eventual conclusion. With today's younger and more distributed user base, the trends are moving from web-based interfaces and shifting towards the use of a mobile device running a native application. These applications need to accommodate both text-based and voice activated inputs like Siri and Alexa, given their growing popularity. That said, I will reiterate that a strong, positive user experience stems from both successful backend and front-end processing that also accommodates the user culture and includes the preferred primary interface of your present-day user base.

Data

When it comes to cognitive data processing, data collection should be correlated and reported in two categories. The first category is the need to understand the effectiveness and traffic of the cognitive technology. This data is like most service management measurements and essentially covers the analytics around time and volume. Just like typical service desk metrics, initial cognitive measurements begin with how often are chat-bots used and how long those interactions last. This data should be used to validate the initial justification for transitioning to cognitive technology and provide the impetus for the shifting-right of personnel from lower value processing to higher value processing as user adoption grows.

The second category collects data for the governance process. All good processes should contain some level of governance focused on understanding trends and drive continuous improvement. Therefore, where service management metrics focus on quantity, governance measures the quality. Cognitive technology mines thousands if not millions of historical records to search for data that it can instantiate into responses and conclusions. So, what does this mean?

As the solution matures, the measurements then evolve to begin mining the volume data to assess session quality. Qualitative measurements involve conducting an analysis on the quality of the chat-bot session and must answer questions such as: How many branches did the session take before reaching a conclusion? How effected was the use of keywords in its search? How many messages resulted in a chat session? How many sessions resulted in no conclusion? How many sessions resulted in the wrong conclusion, the initiation of another chat-bot session, or an online request? This type of focus should be part of a governance program to maintain, sustain, and improve the data management processes going forward. This data will also help drive the momentum of the cognitive service desk and aid in the expansion of newer and better chat-bots—and again as stated previously, lead to the organization's ability to shift-right those high-value human resources.

The journey ahead

Ensuring a successful move to the cognitive service desk requires a significant amount of planning and a broad perspective on the four domains discussed above. No one domain (people, process, technology or data) is more important than the other since they all play a strategic, integrated, and collaborative role in transforming to cognitive service management. It cannot be emphasized enough that proper planning will pave the pathway for success. Get your people involved early and often, as their skills are critical to successfully integrating all four domains. Additionally, their intellectual and practical experience will inform as well as shape your first set of chat-bot use cases.

Be thoughtful when establishing the processes around how you will support this new cognitive service approach and the collection, documentation and processing of chat-bots. Train people on the proper implementation of the technology and design both your back-end and front-end to handle use cases that the business will appreciate. Take a hard look at your data and how it's categorized and classified, as this will influence the quality of processing. Lastly create some measurements of success for delivering, maintaining, and sustaining the cognitive service desk.

Will this happen overnight? The simple answer is no. The cognitive service desk will still contain all the aspects of the traditional service desk; however, it also presents new features and opportunities that can be slowly introduced in a methodical manner with no disruption and little change to the end-user means of communicating with IT. Cognitive technology is not a singular activity, but a journey that will change the face of IT and provide new pathways for endless opportunities. It is the future that surrounds us; it is helping to improve travel with smart cars and navigation. It is used to command and control robots in manufacturing. It is used to help improve personal home security, electronics use, cooking and even cleaning. Cognitive is helping all industries to lower the cost of operations while enabling new ways to deliver services into new markets. By utilizing cognitive technology, IT has the opportunity to conceive and deliver new ideas to supports its user base and open up doors to innovation in areas not yet conceived.

If your company needs help in navigating this evolution, please fill out our form to speak to one of our experts to help you get started.