Enterprise Workforce Management

**A Holistic Approach to Forecasting Workload and
Scheduling Resources across Different Functional Areas**

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Introduction

This paper discusses the requirements for a holistic enterprise workforce management (WFM) solution to address the challenges associated with forecasting workload and scheduling resources in different functional areas of the organization. Contact centers are focused on time management, relatively short one-to-one interactions, and rigorous response time requirements. Back-office operations are complex and backlog-driven, involving multiple steps, much longer completion times, and service-level goals measured in hours, days, and even weeks. Retail branch operations are largely focused on highly variable demand and resource allocation across multiple physical locations. Successfully solving forecasting and staffing problems in each environment requires specifically tailored algorithms and processes for each area. Enterprise WFM solutions can address these challenges across the entire organization by matching work to employee skills, creating schedules that fit employee preferences, and reducing the variances in work volume peaks and valleys.

Enterprise Workforce Management

The dynamics of customer service are changing. Customers are more demanding, using more channels, and their perception of service may go well beyond the "front office" contact center that organizations have historically relied upon to protect their brands. While the contact center continues to be the primary point of contact, it is tightly coupled with the back-office, where the product and service orders are executed, as well as with retail branch operations. This presents a new challenge for customer service executives and new threats to the brand images of enterprises. Now, they need to efficiently manage more connected and complex customer service processes across the organization to deliver the expected quality of service at the lowest possible cost, while maintaining customer and employee satisfaction and engagement.

Since customers interact with an organization's brand as a whole, it is irrational to manage functional units independently. To meet these new customer expectations, organizations need an enterprise-wide work planning and resource management solution, such as Verint® Enterprise Workforce Management™, to help ensure they have the right resources, at the right time, with the right skills to address the customer needs. In this way, the customer journey through the organization can be consistent, with minimal friction.

As this white paper will explain, Verint Enterprise Workforce Management *is* best-in-breed for *each* functional unit *and* for the enterprise, making it the best choice for customer-centric organizations.

Why Holistic Workforce Management?

On the surface, it would seem that the three operational environments—contact center, back office, and retail branch—are dissimilar enough that a unified, enterprise WFM solution would offer no advantage. Since each has unique forecasting and scheduling requirements, it would seem that individual solutions for each environment would be most practical.

There is a compelling reason why a single solution serving all three operations is not only desirable, but required: Customers do business with organizations holistically. Brands are enterprise-wide; they are not departmental. And customers assess the companies they do business with based on their entire experience with them. A WFM solution that provides a single view into all the customer touch points, all the employees, and all the work being performed can better enable organizations to deliver a consistent level of service across the enterprise.

Related to this is the evolutionary transformation of WFM from time management to activity management. The first generation of WFM focused on scheduling start times, breaks, lunches, and shift end times to efficiently match work demand with labor. The second generation of WFM software addressed the challenges of scheduling in a multi-skill environment. The third generation dealt with handling multimedia channels. The fourth, and current, generation of WFM adds a challenging, new complexity—directing employees to which activity, among many, they should turn their attention throughout the day.

This is no trivial problem. It is difficult enough to create schedules that meet the needs of the business and the employee. There is a magnitude order of difficulty attached to directing those employees at the activity level across the enterprise. This is another compelling reason why a holistic WFM solution is required.

In addition, a holistic WFM solution recognizes the interplay among the operational units. Demand in the contact center is affected by the performance of the back office and retail branches. Often, contact center calls are the result of issues or follow-up on back-office or branch interactions. There is a clear linkage among all the operational areas of the enterprise, demonstrating a greater need for a single WFM solution that provides visibility into all three environments.

Moreover, employee utilization in the three operational environments is uneven and asynchronous. There is a significant opportunity to gain labor efficiencies and reduce costs while improving customer satisfaction by cross-utilizing employees among the contact center, back office, and retail branch. Less obvious but still important is the added benefit that can be gained by providing employees the opportunity to perform work in other departments on a recurring basis, expanding their skills and giving them a variety of work to handle. Employee engagement has a strong correlation with higher revenues, greater profits, and happier customers. Exposing employees to different kinds of work is mentally stimulating and can help drive retention as well as engagement—and potentially enhance the customer experience those employees deliver.

Finally, employees—regardless of the operational environment they work in—have similar needs with respect to their work/life balance. Verint Enterprise Workforce Management includes functionality that addresses time-off management and shift swapping. A holistic WFM solution that meets these needs in a transparent way can be another strong driver of employee engagement.

Verint Enterprise Workforce Management provides a unified platform that can enable organizations to optimize employee utilization and schedules to meet the escalating requirements of demanding customers and more effectively engage their employees. The solution is unique in that it has best-in-breed functionality for contact center, back-office, and branch environments. Let's take a closer look at each operational unit.

Contact Center Operations

Modern contact centers deal with two kinds of interactions: immediate and deferred. Examples of immediate interactions include phone calls, website chat, instant messaging, and emerging video channels. Examples of deferred interactions include email, call-back, social media, and fax. The manner in which WFM addresses these two classes of interactions is important, because the days when contact centers handled only one type of interaction are long over. Moreover, the days when contact center agents handled just one kind of interaction are also over. Today's contact center is likely to have blended interactions and multi-skilled agents who need to seamlessly shift between interaction types.

For example, an employee handling a non-customer facing request such as an email or address change request form may need to be able to take a live chat or call from a customer, resolve the inquiry, and then return to the previous work item, all while providing superior customer service. Today's contact centers need a WFM solution that manages all of these work types efficiently and effectively.

In simplistic terms, contact center WFM is about creating interaction forecasts, establishing service-level goals, and generating agent schedules that deliver upon those goals. Let's examine Verint's approach to forecasting and scheduling in the contact center.

Contact Center Forecasting

Having an accurate forecast is a prerequisite to generating effective schedules. If the forecast is inaccurate, it doesn't matter how good your organization's scheduling process is. Service-level goals won't be realized; customers will not have consistent experiences; and agents will alternately be over-worked or bored. Forecasts matter.

It is widely recognized that forecasting is part science and part art. The science part is easy to understand: Algorithms are created to analyze historical demand. But software algorithms don't factor in considerations that a good human forecaster can, such as marketing campaigns, industry shifts, economic events, and even regional weather conditions.

Verint Workforce Management enables the critical interplay between forecasting science and artistry by making no assumptions or incorporating any presumptive rules about how forecasts should be created. The solution provides the entire history of interaction demand to the human forecaster, with the flexibility that enables him or her to decide how best to use that history in a time-series, analysis-based projection.

For example, in a business that experiences consistent weekly variations within a month, it makes more sense for the forecaster to use similar weeks of prior months than to apply previous weeks within the current month. Similarly, when forecasting demand in a holiday week, using previous holiday weeks can yield better forecasts with greater accuracy than using previous weeks in the month.

Verint Workforce Management forecasting also takes advantage of Verint Strategic Planner™, a powerful long-range forecasting tool and capacity planning solution. Verint Strategic Planner considers full-time-equivalents (FTEs), rather than individual employees. It captures seasonal fluctuations in demand using sophisticated regression analyses to account for daily, weekly, monthly, quarterly, and annual trends. It goes well beyond answering basic "what if" questions regarding the impact of changes in handle time or work volume, to include recommendations about when to optimally hire employees, in which skills, and in what numbers. The outputs from Verint Strategic Planner can be used to further refine forecasting in Verint Enterprise Workforce Management.

Contact Center Scheduling

As mentioned earlier, contact centers typically handle two kinds of interactions: immediate and deferred. Many WFM vendors handle immediate transactions such as phone calls, website text chat, and instant messaging in a similar way.

Immediate Interactions

The generalized process starts with the demand forecast arranged into an array of time intervals, usually 15- or 30-minute increments. For each time interval, an Erlang or modified Erlang calculation is performed to determine the required number of agents necessary to deliver the desired service level. This approach worked in the past because early call centers typically had only one skill—any agent could handle any call. Those days are gone. Now, agents have multiple skills, and Erlang calculations are no longer sufficient to create schedules based on requirements.

To solve the multi-skill scheduling problem, many WFM vendors use simulations. In essence, agent schedules are constructed according to the requirements, and the scheduling algorithm makes some simple assumptions about how they will allocate their time to various queues in a first pass. In subsequent passes, calls from the various queues are simulated, as are agent sign-ons, call engagements, and log-offs for breaks and lunches.

Agent call-handling data is accumulated during each simulation pass. After each pass, the scheduling algorithm "examines" the array of requirements, noting where over-staffing and under-staffing exist, as well as individual agent idle time by interval. This analysis results in a "score" that denotes how well the set of individual agent schedules performed against demand in terms of service-level realization. Adjustments are made by the scheduling algorithm to reflect how much of an agent's time can be allocated to various skill-oriented queues. Then, another simulation is run and the process repeats itself over and over.

Within this scheduling process for immediate transactions, there are some important differences that set Verint Workforce Management apart from competitors. First, agents have individual skill definitions, as opposed to belonging to skill groups. This is important, because maintaining skill groups is administratively cumbersome and time-consuming. Although this might be manageable if organizations

keep the number of agent skill groups as low as possible, it's increasingly difficult in today's contact centers, where the number of skills needed continues to escalate.

Second—and more important—the skill-group concept assumes that every agent within that group has the same productivity and is interchangeable. Some WFM solution vendors concede that an agent skill-group spanning different geographic contact centers will exhibit different performance characteristics, but that still falls short of reality. In fact, it is a fatal simplification, much like simplifying the game of chess so that all the pieces move the same way, essentially reducing it to checkers.

WFM systems are models of reality, and the closer the model conforms to that reality, the better the outcomes that will be realized. The simple reality of agent performance is that no two agents with the same skill set perform identically. Unlike other WFM solutions, Verint Workforce Management recognizes this by providing a "proficiency rating" for each agent in each skill.

The result is that Verint agent schedules produce outcomes that exhibit less volatility in service-level realization from interval to interval.

Deferred Interactions

Now, let's examine scheduling for deferred transactions. The most prominent is email, but the group also includes outbound calling, social media monitoring, and fax handling. Again, it is no longer the case that a dedicated group of agents exclusively handles deferred interactions. Rather, it is more often the case that agents handle both immediate and deferred transactions. This "new normal" is a much more complex scheduling problem.
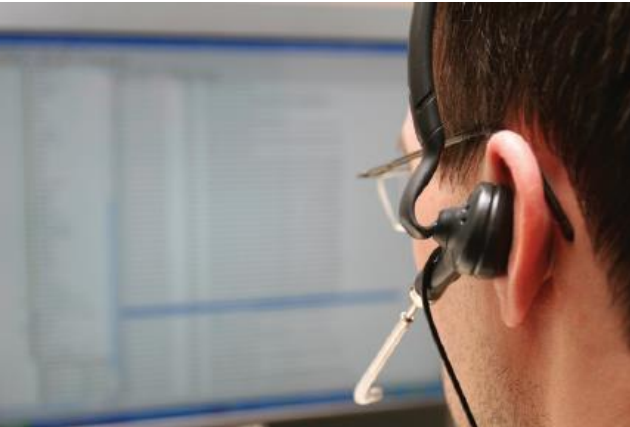
Some WFM solutions approach deferred transactions in an overly simplistic manner by scheduling agents to handle them when there are lulls in immediate workload. The problem with this approach is that there is no guarantee that there will be enough slack in immediate demand to satisfy service-level goals for email, social media, or outbound calling.

Other WFM solutions approach email, outbound calling, social media, and fax handling similar to handling incoming calls. They use an Erlang or modified Erlang calculation to determine the number of required staff necessary to meet the service-level goal. While this appears reasonable, it is a suboptimal approach to solving the scheduling problem, because the Erlang function was never designed to deal with interruptible tasks (like email) or service levels that can be expressed in hours or days. Even more critical, the notion of "agent requirements" for deferred transactions isn't practical and limits the contact center's flexibility in dealing with deferred interactions.

For example, consider a contact center that is open from 8 a.m. to 8 p.m. Upon arriving in the morning, the center management team finds that 100 emails have arrived during their closed hours and need replies today. How many agents will be required to do this? There isn't a single correct answer. Management could assign a single agent to answer all 100 messages within the day or assign 100 agents to answer all the messages in the first 10 minutes of the day. WFM vendors that insist on creating agent requirements for deferred transactions impose unnecessary and suboptimal constraints on the scheduling algorithms they use.

This example also exposes the flaw in deferring responding to email to a time when incoming calls are in a lull: There is no certainty that all 100 emails will be handled in a timely fashion, because there is no

certainty that sufficient slack time in the agent schedules will actually be realized. Incoming call demand may be greater than forecasted, or some scheduled agents may not report for work.

The Verint Workforce Management approach recognizes that there are no foolproof/infallible methods for effectively computing staffing requirements for email, chat, web callback, and other new media, given defined service-level goals and contact arrival rates. Instead, Verint's scheduling algorithm generates a set of potential schedules for both immediate and deferred queues. An analysis is performed on the potential schedules for the immediate queues as described in the section above. In addition, an analysis is performed on the potential schedules for the deferred queues.

These analyses produce estimated service levels expressed in interchangeable units, and a score is produced. The scheduling algorithm renders adjustments to the potential schedules, another simulation is run, and analyses are performed in iterative fashion. In so doing, the solution provides a set of schedules that are optimized for both immediate and deferred queues.

The advantage of this approach is that a much wider range of potential schedules can be analyzed because no presumptive constraints or staffing requirements limit the scheduling engine. The beneficial result is the potential for realizing service-level goals for both immediate and deferred queues at the lowest labor cost.

Back-Office Operations

The term "back office" refers to operations performed by employees who execute the product and service requests received in the contact center, branch, or self-service channels. Back-office operations are found in nearly all organizations and perform a variety of tasks, such as claims adjudication, loan processing, customer administration, financial accounting, payment processing, data entry, and document and case management.

Each back office is different and typically consists of multiple teams and functions handling a variety of work types, often with their own systems, processes, handle times, and service goals. For example, there may be groups performing high-volume transaction work running imaging machines or check processing machines, where the work that comes in must be completed before the end of the day. Other groups may process payments, perform order entry, enter new account information, and render account maintenance where longer service-level goals and backlogs exist.

Recent technology advances have enabled straight-through processing for many traditional back-office tasks. This has resulted in a growing number of "knowledge" or "exception workers" that are more highly skilled to handle complex, non-standard processes and able to make decisions based on their experience.

In aggregate, back-office processes can be simple, in/out steps (e.g., posting a payment) or complex, multi-step, multi-touch processes that span days, weeks, or even months (i.e., processing commercial loan applications). Individuals involved in the processing of the work can range from data entry clerks to auditors, account, and case managers. But regardless the function, the business objectives remain

essentially the same—to process the work as quickly and accurately as possible, at the lowest cost, meeting service delivery deadlines and ensuring customer satisfaction.

Some WFM vendors suggest that their contact center solutions can be deployed in what they call the "middle office," a term used to describe operations where employees service immediate queues but also do off-phone processing or "paperwork." Their approach to staffing the middle office is similar to the overly simplified approaches to staffing deferred queues: Schedules are generated to service the immediate (phone) queues, and slack time is allocated to doing deferred (non-phone) work.

This approach in the middle office suffers the same problems as for deferred work in the contact center. There is no certainty that there will be enough slack time to complete the off-phone processing work in a timely manner. Worse, there is no predictive ability to guide managers in allocating resources to off-phone work that may be at risk of missing desired service-level goals. Moreover, this approach offers no guidance about what skills are over-resourced or under-resourced. Forecasting, scheduling, and managing tasks for off-phone processing work is much more complex and requires specialized functionality, which we will explore in the following sections.

The challenges WFM faces in back-office operations are quite different from those found in the contact center. Typically, there is no single source of data that enables you to view, distribute, track, and balance all the work types performed. In the contact center, the automatic call distributor or email delivery system routes work to employees using rules and priorities. In addition, automatic call distributors provide rich performance data that informs management whether service-level goals are being met, what the workload is by time interval, how individual employees are spending time, and what level of productivity they are providing.

The way work is performed in the back office is fundamentally different from the way it is performed in the contact center. Instead of one-to-one interactions, back-office work usually involves multiple employees, in different functional groups, and possibly different locations and time zones, performing steps in an overall process. Let's examine Verint's approach to workforce management in the back office.

Back Office Forecasting

As in the contact center, back office workload forecasting is critical to successful WFM because forecasting drives staffing requirements. But there are two significant problems that must be addressed: obtaining good data and modeling complex back office processes.

Data Capture

Given that there is no certainty that an electronic feed is available to provide workload information by time interval, Verint Enterprise Workforce Management features several different ways to obtain the needed data. First, if an electronic feed is available from the applications being used in the back office, interfaces can be made to automatically populate the forecast historical database. Second, if no electronic feed is available, Verint can deploy its Desktop Process and Analytics™ application, which resides on the employee desktop and unobtrusively captures performance data that can be used to drive forecasting and schedule adherence. Third, Verint offers a Volume Capture Tool, which provides a manual data entry interface and electronically logs volumes and activities into the system for non-electronic, paper-based

work. These tools enable data to be captured to facilitate the management of the different types of work and work queues.

When volume data is available on less frequent intervals, such as daily or weekly, data transformation and filtering capabilities can restructure that data into more realistic interval volumes. In this way, processes that report only at the end of the day or week will still be allocated across the entire time period in an appropriate manner. Lastly, unlike the contact center, the back office typically has a backlog of work that carries over form one day to the next, or even week over week. The forecasting application keeps track of backlog by work queue, which is critical for balancing workloads and meeting service goals.
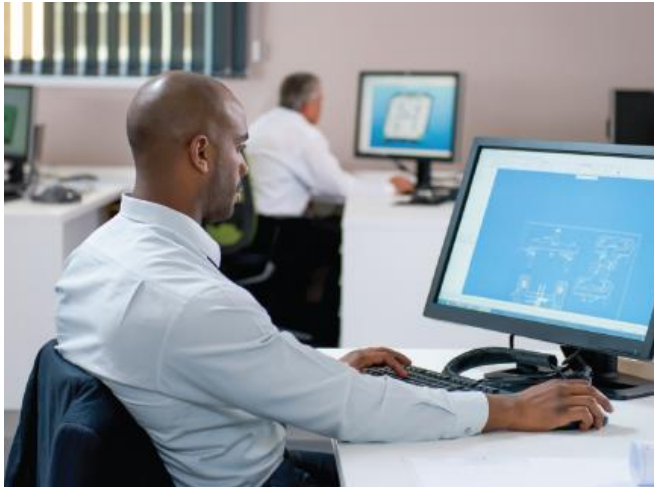
Process Modeling

Modeling back-office operations requires functionality that is simply not found in contact center workforce management systems. First, service-level goals in the back office are typically longer than those found in the contact center and vary by work type. Back-office service-level goals are expressed in days, weeks, and even months (for commercial loans or an insurance claim, for example). Service-level goals can also be expressed in terms of deadlines, where work that arrives before 9 a.m. must be completed by 5 p.m.

Beyond service levels, operations in the back office are complex, with multi-step, multi-touch processes. Work items can even be put on hold for a period of time, pending receiving information or a supporting action that must occur before they can be completed. Often, employees must wait for one team or department to complete a task before they can begin theirs. In addition, work items are, at times, processed by small "cells," "pods," or stations of employees who work as a group to execute a particular process step. Enterprise WFM supports both fixed and dynamic teams. Team 1 may be composed of specific employees who always work as a part of that team. Team 2 may be dynamic, where various employees may only spend some time working as a part of the group.

Multi-step, multi-touch processing brings yet another complexity to back-office forecasting requirements. Sometimes, work items are handed off to a half-dozen work units or more. While it is useful from a management standpoint to have staffing requirements and service-level goals associated with each process step, what is also important is a service-level goal for the *entire process*. Verint Enterprise Workforce Management supports this concept with an end-to-end resolution goal feature. This capability includes a Graphical Work Flow Queue Editor, a powerful workflow process mapping tool that can make modeling complex workflows across multiple teams easy. Linked work queues as well as complex branching workflow processes can be easily mapped. A key element of the tool is the ability to use historical production data to forecast the allocation of work streams into their respective channels.

The result is a robust forecasting system that drives the scheduling process, as well as enables capacity planning with reliable staffing requirements.

Back Office Scheduling

Schedules in the back office are relatively fixed. Employee start times, breaks, lunches, and departure times are customarily established and seldom change. Although creating schedules in this environment might seem a simple task, it is not. In the back-office, schedules are created based on the activities that need to be executed within the scheduling period.

A typical back-office employee may service many work queues and have differing proficiencies for each. The schedules need to factor in employee availability, skills, and skill proficiency. Each work type or queue has its own arrival pattern, handle time, and service goal. Work can arrive in a continuous stream throughout the day, but more often arrives in bulk or batches one or two times a day. For example, claim forms may arrive with postal deliveries, once in the morning and again in the afternoon, or orders could arrive as a batch of overnight electronic submissions. In addition to having different service goals or turnaround times by work queue, there may also be contractual obligations or service-level agreements that may require back-office operations to manage work queues with different levels of priority. One example is tiered services—Platinum, Gold, and Silver—where work related to Platinum clients must be completed in less time than work connected with Gold and Silver clients.

Two capabilities in Verint Enterprise Workforce Management help solve the unique problems in back office scheduling: Resource sharing between work queues and Work Item Tracking.

Resource Sharing

The Verint Enterprise Workforce Management back-office scheduling algorithm considers forecasted staffing requirements, employee skills, proficiency within each skill, and permissible work patterns to produce individual employee schedules. A key capability is the notion of "queue hopping," where employees move between different work queues or perform different tasks. The queue-hopping feature within the solution allocates employees where they are needed, essentially directing each employee to work queues they are qualified to handle based on work volume, priorities, and service-level goals.

This can be visualized as follows: Assume there are two activities—billing and collections—for which employees must be scheduled, with billing being the primary, higher priority activity. Queue hopping enables collections, a flexible-duration activity, to be scheduled on top of the time-sensitive base activity (billing). The solution's scheduling algorithm determines how many hours of collections activity to schedule, as well as when they should occur during the shift.

The ability to shift workers from one queue to another is a key advantage of Verint Enterprise Workforce Management, since it reflects the realities of the environment: Work item forecasts are sometimes affected by external events, resulting in more or less work than was expected, and employees scheduled to work on various queues don't always follow their schedules—and sometimes don't show up at all.

Work Item Tracking

Because service goals in the back office can be lengthy (weeks or even months) and vary by work type or priority customer, it is essential that an enterprise WFM solution be able to track how individual pieces of work flow through the back office, and how they "age" in the system. Back-office work items such as claims, orders, and checks usually have a unique case or item ID number associated with them. In their absence, case numbers or item tracking numbers can be appended to work items. As these work items wend their way through various processes and employees, Verint Enterprise Workforce Management can keep track of their progress.

This capability is called Work Item Tracking. Even without case or item ID numbers, a back-office queue will typically have a backlog of work to do and new work items arriving at least daily, if not more frequently. Tracking the volume of backlog is not enough. What the Verint back-office algorithm does is associate the service goal or turnaround time for a work item and track the aging of backlogged work items. This capability enables predictive analytics within Work Item Tracking. By understanding the age of items in the backlog, the number of new work items arriving, and the amount of employee time scheduled to work the queue, Work Item Tracking places work items into one of four categories:

1. Already Out of Service Goal
2. Well within Service Goal
3. Predicted to Miss Service Goal
4. Likely to Miss Service Goal

Alert rules are used to notify appropriate employees and managers by calling out details of work items that require attention. Dashboards display work item status against Deadline Service Goals associated with each employee and queue.

The visibility provided is unprecedented, not only telling managers what has happened or is happening to individual work items, but also showing what is expected to happen based on Verint Enterprise Workforce Management's insight into the work and the employees' skills, schedules, and adherence to those schedules. Verint believes that these capabilities make this solution the most robust, fully featured solution specifically designed to meet the challenges in modeling back-office operations.

Retail Branch Operations

For years, selling goods and services often required enterprises to build retail branch networks of stores that provided easy, local access for consumers. With stores expensive to build and operate, contact centers emerged as a cost-effective way to convey goods and services over the telephone to geographically dispersed customers. With the emergence of the Internet, websites became, in effect, electronic stores in ways that contact centers could never achieve by incorporating self-service. For a time, it was thought that the Internet, the quintessential disintermediation and disruption engine, would relegate brick-and-mortar stores to the dustbin of history. Instead, customer contact points have expanded to include retail branch stores, contact centers, smartphone applications, and the Internet.

While many industries use branch stores—technology, telecommunications, office supplies, clothing, furniture, drug, and food companies, among others—one of the biggest users of branch stores is the financial industry.

Globally, financial companies seek greater market share, higher revenues, and profits through geographic expansion fueled by brick-and-mortar branches, contact centers, and the Internet. Conceptually, contact centers and branch banks are very much alike. Beyond the obvious—both feature customers interacting in real-time with employees—there are queues to manage and skill positions to staff in both environments. Customers wait in line for tellers and in sitting areas for financial advisors. Time in queue matters. From a practical standpoint, contact

centers and branch operational goals are so closely aligned, it seems odd that the two channels aren't managed together.

That said, there are also significant differences. Apart from sheer scale and the fact that queues are visible in branches and invisible in contact centers, the single biggest difference lies in the availability of good data on customer demand and employee performance data by interval. Traffic into a branch is sporadic, resulting in periods during the day when no customers may be present, and other periods when many customers arrive around the same time. Many transactions are of a routine nature: cashing or depositing checks, selling money orders or traveler's checks, and accepting payments for loans and other accounts.

Conversely, many specialized skills are also required in a branch. Sales associates and customer service representatives answer questions from customers, help them open and close accounts, and fill out forms (often on a computer or tablet today, rather than on paper) to apply for banking services. Branch employees might also assemble and prepare paperwork, process applications, and complete the documentation after a loan or line of credit has been approved. Additionally, there are many other routine and administrative activities that need to be completed each day, such as refreshing ATMs and performing cash management activities. Let's examine Verint's approach to workforce management in the branch.

Branch Forecasting

Similar to the back-office environment, branch forecasting suffers from the lack of good demand data by time interval, especially for non-teller transactions. More often, the branch manager develops a "sense" for customer demand based on tick sheets maintained by tellers and the customer sign-in book for sales-related services provided by bankers. Frequently, customer demand depends on the demographics and composition of the neighborhood in which the branch is located, and clear patterns become discernible. It is not unusual for a branch to experience heavier transaction volumes when it opens, then a lull in mid-morning, followed by a ramp-up to a noon-time peak, a quieter early afternoon, and a late-afternoon increase. In addition, transaction volume tends to rise and fall depending on the day of the week and the week of the month.

The customer demand profile for each branch can be entered into Verint Enterprise Workforce Management based on historical transaction data. Of particular importance is the identification of "special days" where customer demand will deviate from the norm. Special days typically include major holidays; however, local events can also affect branch transaction volume.

Unlike in the contact center and back office, enterprise WFM branch forecasting algorithms factor in the following parameters:

- Maximum amount of time customers wait before they are considered dissatisfied

- "Percent satisfied," which is the minimum percentage of customers served within the defined wait time

- Different types of transactions processed in the branch

- Different types of positions that are employed in the branch

- Unique attributes of each branch (e.g., demographic characteristics such as foreign language support, drive-up windows, operating schedule, market characteristics, rural vs. urban, etc.)
- Staff mix

The output of the branch forecasting engine is the required staffing for tellers, sales associates, universal bankers, and other employee roles within the branch. The roles required to staff each branch can vary significantly to support the needs of the customer base or as part of the bank's overall delivery strategy.

Branch Scheduling

In some respects, branch scheduling is both less and more complicated than in contact centers. While contact centers typically have full-time employees, retail branches tend to have several different types of employees for both the time worked and their skills-based role. For the former, the status of a branch employee depends on the number of hours per week they are hired to work. As an example, a "peak time" employee typically works between 12 and 19 hours per week; a "part time" employee typically works between 20 and 34 hours per week; and a full-time employee typically works between 35 and 40 hours per week.

The branch scheduling challenge is creating the right mix of these employees so that the variable demand experienced on the days and weeks is met with acceptable service levels. While this is difficult enough, there are the added complexities of role/skills for each employee, as well as geography.

A retail branch doesn't exist in a vacuum; it is usually the case that a regional manager will supervise many branches within a geographic area. As with contact centers, employees sometimes call in sick or simply cannot adhere to published schedules. Occasionally, an external event will affect demand in one or more branches. To manage these often last-minute staffing fluctuations, many retail banks have adopted the concept of a "float pool"—a small team of people who can go to any branch in the region on short notice to cover absences and respond to demand shifts.

Although forecasting is typically performed centrally and overseen by a branch operations group, Verint Enterprise Workforce Management can enable banks to generate branch schedules centrally but give branch managers the ability to make minor changes as needed—or to have each branch manager create his or her own branch schedule while providing the central branch operations group visibility to those schedules.

In either case, the solution produces individual, monthly branch schedules making optimized use of peak time, part time, and full time workers and creates an individual schedule for each employee. With a relatively small number of employees for each branch, retail branch schedules are less about when to take breaks and lunches, and more about what activities need to be performed at specific times. There are numerous, non-customer facing tasks and activities to be completed, but these are handled either ad hoc when employees are not actively engaged with customers, or specifically scheduled to more effectively use employee capacity to help achieve revenue and other branch goals. The vast number of untracked activities can make it extremely difficult to operate each location within a large number of branches as efficiently as possible. Verint Enterprise Workforce Management helps solve these problems.

Conclusion

Contact centers are focused on time management, relatively short one-to-one interactions, and rigorous response time requirements. Back-office operations are complex and backlog-driven, involving multiple steps, much longer completion times, and service-level goals measured in hours, days, and even weeks. Retail branch operations are largely focused on highly variable demand and resource allocation across multiple physical locations.

Successfully solving the forecasting and staffing problem in each environment requires algorithms and processes tailored specifically for that area. Verint believes solutions that focus on the needs of only one functional unit will fail to deliver the experiences that today's customers expect from enterprises, regardless of the interaction point or channel.

As the dynamics of customer service change and consumers grow more demanding, organizations face increased challenges with meeting their expectations across a growing number of channels. Customers' perceptions of service can go well beyond the "front office" contact center that organizations have historically relied upon to protect their brands, presenting a new challenge for delivering service and maintaining a positive brand image. Verint Enterprise Workforce Management can help organizations address these challenges by efficiently managing more connected and complex customer service processes across the organization to deliver the expected quality of service at the lowest possible cost—while maintaining customer and employee satisfaction and engagement.

Verint. Powering Actionable Intelligence.®

Verint® (NASDAQ: VRNT) is a global leader in Actionable Intelligence® solutions. Actionable Intelligence is a necessity in a dynamic world of massive information growth because it empowers organizations with crucial insights and enables decision makers to anticipate, respond and take action. Verint Actionable Intelligence solutions help organizations address three important challenges: customer engagement optimization; security intelligence; and fraud, risk, and compliance. Today, more than 10,000 organizations in over 180 countries, including over 80 percent of the Fortune 100, use Verint solutions to improve enterprise performance and make the world a safer place. Learn more at www.verint.com.