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NICE Special Edition

Digital Channel Management for WFM

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Identify digital channels

Understand digital channel data for WFM

See the impact of digital channels on WFM

Compliments of

NICE®

NICE WFM team
with Chris Ward

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Introduction

With the evolution of technology and social media platforms, contact centers face a common challenge from their customers. The challenge is trying to determine which type of channel their customers will use and how to monitor, measure, and calculate staffing requirements to meet these demands. As these elements grow more intricate, contact centers without the right processes or technology will struggle to do this in an accurate and efficient way.

Since the early days of contact centers, the channels used by customers have changed very little. Traditional methods such as calls remain the most popular channel, and we have seen faxes and snail mail replaced with email. However, advancements of social media platforms and other new channels of technology such as chat, social media, and messenger are on the rise. This presents some exceedingly difficult challenges because these new digital channels don't conform to the traditional metrics and calculations that have been used for so many years. It also adds another layer of complexity in terms of skills and employees' abilities to adopt to these changes.

About This Book

Digital Channel Management for WFM For Dummies, NICE Special Edition, covers the challenges these new digital channels bring to workforce management (WFM) and how these could be managed. This book reviews the different concepts of digital channel management and discusses the possible impacts and approaches businesses will need to adopt to manage these changes. You get a detailed explanation of the complexities of digital channels and the things to consider when managing digital channels.

The book walks you through the importance of understanding the different types of data produced by digital channels and how these can impact your staffing calculations and scheduling approach.

Icons Used in This Book

In this book, we've included icons in the margins. These icons mark certain key paragraphs. Here's what those icons mean.


REMEMBER

This information gives you key things to remember about digital channel management for WFM.


TIP

Tips give you actionable insights and considerations for digital channel management.


WARNING

In order to make your processes run smoothly, take note of this cautionary content to avoid pitfalls.


TECHNICAL STUFF

We want to provide you as much detail as possible without getting lost in the weeds. But if you want to delve a little deeper into the techie details, here is a paragraph for you.


DEEPLY DIGITAL

Digital channel management can bring some new ideas and different ways of working, and we want to draw your attention to these thought-provoking concepts.

Beyond the Book

Despite all the words on these pages, there's only so much room, and you may want to know more. For additional insight, check out these resources:

- `www.nice.com/engage/white-papers/how-to-improve-productivity-and-customer-experience-172`: Learn more about how you can improve productivity and customer experience.
- `www.nice.com/engage/workforce-optimization`: Delve into the NICE WFM suite.
- `www.nice.com/engage/white-papers/wfm-for-dummies`: Discover the power of automation and simulation with WFM.

IN THIS CHAPTER

- Explaining digital channel management
- Looking at the roll of WFM
- Understanding the importance of digital channels
- Recognizing what drives digital channels

Chapter 1
Introducing Digital Channel Management

Meeting customer demand in any business relies on having good data to determine when your customers contact you, how your customers contact you, and how long those interactions take. With more and more customers now turning to digital channels, managing this data could be a difficult challenge.

Traditionally, contact centers handled inbound phone calls, and the technology that handles these calls provides solid data on how many and how long those calls take. This made it relatively straightforward for resource planners using workforce management (WFM) to plan and staff to these demands.

Because calls are continuous and span a relatively short time, you could use well-established mathematical equations such as Erlang to calculate staffing requirements and ultimately schedules for customer demand. So why would the introduction of digital channels impact the way you use WFM and the way you manage digital channel interactions?

Knowing What Is Meant by Digital Channel Management

REMEMBER

Digital technology is everywhere, and people use it every day to communicate with friends and family. So, it's only natural that these same consumers expect to have digital channel choices in contact centers, too. To win customers' loyalty, organizations must connect with them in the digital world they're already living in, providing engagement with the brand on their terms. In the contact center, this means adopting a digital-first philosophy and approach.

In the past, contact center interactions via fax, email, or snail mail have been seen as back-office functions with calls handled predominately by the front office. This terminology has changed in recent times because there's little difference between these two areas other than how the work is received into the business.

Organizations today handle interactions and transactions across a wider variety of communication channels than ever before. The adoption of digital channels, from email and chat to short message service (SMS) and social media channels, has skyrocketed over the last year, placing new demands on resource planning, support, and IT services.

Only now are we starting to realize the variety of different options customers can utilize to communicate with businesses. While these channels may not be new in your day-to-day life, using them to interact with businesses is growing at an exponential rate. There are over 20 different channel options, shown in Figure 1-1, customers can now use to contact their service providers.

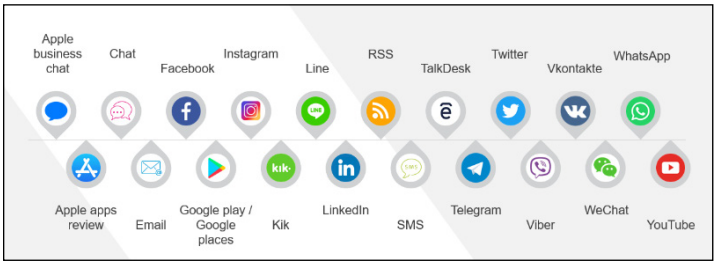

FIGURE 1-1: The options available for digital channels.

CONSUMERS' VOICES ARE LOUD AND CLEAR

Consumers like digital communication; they're using it 24/7 — and yes, they're demanding digital options for interacting with the brands they patronize. But contact centers aren't necessarily on board. While digital channels offer unique value to both brands and consumers, companies haven't yet embraced the digital channels their customers have welcomed into their lives. In fact, less than 10 percent of contact centers surveyed have a fully integrated channel strategy: Just 8.4 percent have all channels connected, while only 7.2 percent have an integrated omnichannel strategy that blends digital and voice.

REMEMBER

Digital channels have far-reaching implications not just for how organizations provide service today but also for how much more change is in the near future. Those who "win" customer service will need to reimagine it completely — and digital will be central to that.

Exploring the Role of WFM with Digital Channels

REMEMBER

WFM is a core component of any contact center or business that has a human resource to serve a customer demand. The aim of WFM isn't just to ensure that you have the right number of people at the right time but also have the ability to manage your resource at any given time, from anywhere, and to react to change when required.

Historically, WFM solutions were designed to forecast volumes and schedule contact center agents to handle inbound calls only. Forecasting and scheduling for the inbound call channel were relatively straightforward: Agents handled one interaction at a time, answered each phone call in real time, and completed contacts in an uninterrupted flow. Additionally, many months or, frequently, years of historical call volumes and handling times were often available. These data points enabled a mathematical formula, such as Erlang C algorithm, to generate reasonably accurate

forecasting and scheduling results. However, forecasting and scheduling requirements for digital channels — including chat, email, social media, and SMS/text — are different.


TECHNICAL STUFF

That isn't to say WFM isn't able to play the same role for digital channels as it does for voice, but the approach needs to be different. Digital channels can include deferred activities, backlog, and agents handling multiple interactions simultaneously (for example, four chats at the same time). Due to these inherent differences, Erlang C calculations aren't well suited for forecasting digital interactions. Forecasting modules for digital channels, including blended environments where agents move seamlessly between call and non-call channels, require updated WFM solutions that employ specialized mathematical algorithms, simulation methods, modeling techniques, or a combination of all three, to generate volume projections and staffing requirements for omnichannel contact center operations. See Chapter 3 for more information on simultaneous interactions and deferred work.

Understanding Why Digital Channel Management Is Important

The customer doesn't differentiate between traditional contact methods and digital channels. Digital customer experience (DCX) is inseparable from the all-encompassing customer experience (CX) — something all too familiar with voice channels. If CX is about showing empathy, building trust, and human connection, DCX is the online expression of these efforts. Customers expect the same level of service regardless of their chosen contact method. Managing digital channels and how you respond to the customer is vital for a successful contact center. The shift in emphasis from traditional contact methods to digital is changing the way we approach customer interactions. Contact center advisors will become "expert communicators," capable of delivering insight and substantive value to the customer experience across traditional and digital channels.


REMEMBER

With digital channels, your communication may be visible to a much wider audience when compared to traditional methods. With social media platforms providing views to millions of other customers, ensuring a swift and accurate response may stop your business "trending" for the wrong reasons. For these reasons,

it's imperative that businesses start to manage digital channels as part of the standard customer journey. Inconsistency in this area frustrates users and erodes loyalty, which *will* impact overall customer experience.

WARNING

Poor management of digital channels will only lead to those customers making contact in other ways, resulting in higher overall contact volumes and increased staffing levels. The first call resolution metric — the measure of how many times a customer must contact you to have their query resolved — must apply the same metrics to digital channels and monitor first contact resolution. This adds more complexity to this metric because you now need to track a single customer across multiple channels to avoid unnecessary contact volume. If your customer doesn't get a response via their social media channel, they may then decide to contact you via chat or voice (or both). Therefore, ensure that you're managing and monitoring your customers digital channel interactions and ensuring each channel is staffed correctly.

Seeing What Drives Digital Channels

Adoption of digital channels, from email and chat to SMS and social media channels, skyrocketed in 2020, placing new demands on support, service, and IT. The impacts of the Covid-19 pandemic brought the use of digital channels forward by five years and will continue to grow. Some industries have reported an increase in digital channel usage of 21 percent (see Figure 1-2), making digital channels their most common method of contact. Other industries such as the grocery industry have seen usage of digital channels double in 2020, and this growth is expected to continue over the next three to five years.

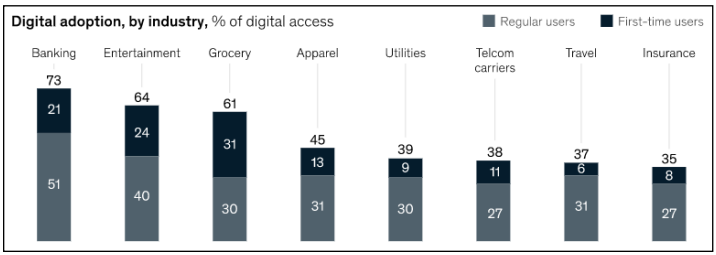

FIGURE 1-2: The adoption of digital channels for new users versus regular users.

This forced change in digital channel usage caused by the Covid-19 pandemic has now opened the flood gates for digital channel usage and has proved there are benefits of using these types of channels. Most companies who introduced digital channels during 2020 didn't see major impacts on customer satisfaction (CSAT) or Net Promotor Score (NPS) scores and were able to deploy these channels to employees working remotely from home. Unlike telephony, deploying digital channels to remote workers is a much easier task because it requires little infrastructure to support the delivery of customer queries to employees. Customers have also shown that by switching to digital channels they have more control over the "When and Where" and are using these channels to meet the demands of their lifestyle. With over 4 billion social media users, it's not surprising customers want to choose digital channels to interact with businesses.

IN THIS CHAPTER

- Recognizing data challenges
- Understanding digital complexities
- Seeing how digital impacts data acquisition

Chapter 2
Facing the Digital Challenge in Data Acquisition

Digital channels have become a mandate to serve customers and meet their rapidly evolving expectations. As digital channels proliferate, they bring new challenges for workforce management (WFM). The old ways of collecting data, calculating staffing needs, and generating schedules — then doing it all again as conditions change — no longer suffice when dealing with digital channels. You need to understand the nature of various digital channels, how those interactions occur from the customer, and how they're handled by your employees. These new channels require a different approach and should make you rethink the logic you may have come to understand for email or chat.

The addition of many other channel types such as social media, SMS, or direct messaging, and the possibility for an employee to handle multiple channel types, requires you to have an even greater understanding of the data behind these channels and how you acquire that data. In this chapter, we discuss some of the challenges with data acquisition and the key considerations for collecting data for digital channels.

Discovering Data Challenges

REMEMBER

You can obtain data for digital channels with many different approaches, so understanding what the data is and how it's measured is crucial. Your WFM system relies heavily on predicting interaction volume and handling times to determine staffing requirements. This data forms the foundations for all good WFM practices. To understand the challenges that come with digital channels, you must first digest the terminology used to describe these types of work. You also need to understand the role these channels play in conjunctions with other channels. Take a look at the following:

- **Immediate response channels** require an employee to handle that interaction type to prevent it from abandoning. These channels are usually associated with voice and chat and have a low response or answer time (normally measured in seconds).
- **Deferred response channels** won't abandon if not handled immediately. These channels include email, direct messages, or the use of Contact Us forms through your company website. These interaction types usually have response times in hours or days.

The handling time elements of these interactions are also measured in different ways. The way you calculate handling time impacts staffing requirements. There are two types of handling time measurements:

- **In-focus handling time** is the time when the employee is engaged actively with the customer only. For example, it's the time they spend typing on a chat and doesn't include the time waiting for a response.
- **Elapsed handling time** is the total span on the interaction regardless of the time the employee was active. This time is measured normally as the start to the end of the interaction.

Each channel type is handled differently and interacts differently with each other. Understanding the difference is important because this impacts how data is collected. They are

- **Simultaneous interaction types:** An employee engages in more than one interaction or channel at a time. For example, an employee could be doing two chat sessions with two different customers at the same time. This may also be known as *concurrency.*
- **Interruptible interaction types:** These types may be paused or put on hold to allow the employee to handle a different interaction or channel. These interactions tend to be deferred work and can be resumed at a later time.
- **Interrupt priorities:** These are used to decide what work may interrupt other work types. For example, you may decide a chat session can interrupt an email, but a voice call may not interrupt a chat.
- **Long asynchronous interactions:** These interactions have long gaps or pauses between them. An example includes an email conversation that starts on one day and can finish the next or even further into the future.
- **Elevated interactions:** These start on one channel type and transition to another. Consider the case of an interaction that starts as a chat before the employee elevates it to a phone call and then ultimately to email.

You must understand and consider all these elements when collecting data. Getting it wrong could result in incorrect staffing calculations. For more information on how these impact staffing calculations, see Chapter 3.

Understanding the Complexities

Employees handle both immediate response contacts, such as phone and chat, as well as deferred response contacts, like email and social media. Many WFM systems and processes assume that agents who aren't engaged in immediate response contacts are occupied with deferred work, up to a designated maximum occupancy level. Balancing immediate response and deferred response contacts on digital channels introduces a number of challenges in key WFM processes.

REMEMBER

Most folks know the basic methods for collecting data for voice, a single channel. These channels are immediate response and continuous. That process is shown in Figure 2-1.

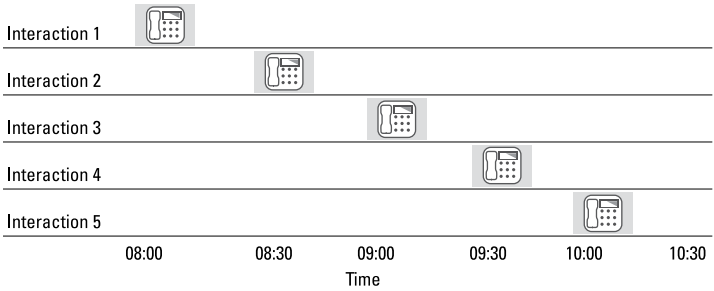

FIGURE 2-1: The basic process for collecting data for voice.

To better understand some of the complexities, take a look at Figure 2-2, which is an example of a *multichannel* employee's day and how these interactions can occur.

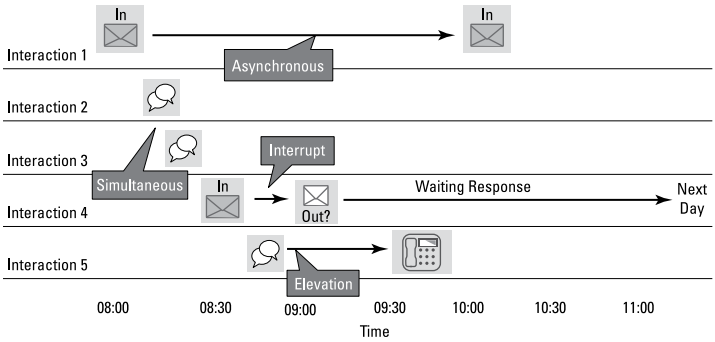

FIGURE 2-2: An employee's work day using multichannel.

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Think about the images in Figure 2-2. The interactions and notions they may derive are explained below:

- **Interaction 1** is **asynchronous** and **deferred** because the email is started at 08:00, but the employee doesn't return to that interaction until 10:00. It doesn't require an immediate response.

  Notion: You could see this as **one** interaction that lasts **two** hours (elapsed time) or as **two** interactions that last 15 minutes each (focused time). How you calculate this impacts your forecasting and staffing requirements.

- **Interactions 2 and 3** are simultaneous with each one spanning a 15-minute period (elapsed time); however, the employee is engaged only with each customer for around 7.5 minutes (focus time).

  Notion: You could consider these **two** interactions lasting 15 minutes (elapsed time) and factor in concurrency or measure the focused time (7.5 minutes) and not use concurrency. This depends on how your chat platforms manage average handling time (AHT).

- **Interaction 4** is both interruptible (because it's interrupted by Interaction 5) and long asynchronous because the employee has responded to the customer with a question and is waiting a reply.

  Notion: How you measure this impacts your staffing requirements. You could count it as one interaction with a long AHT or multiple interactions with focused AHT. You should also consider how you calculate the service level for long asynchronous interactions.

- **Interaction 5** is an elevated interaction because the original interaction was a chat, which resulted in a phone call. So, now there are two interactions to account for.

  Notion: You must consider how you would measure the service level if the actual interaction is resolved via a different channel. You should also consider how you would forecast for the elevated work item.

These examples show the complexities that digital channels can have on the integrity and acquisition of the data used to calculate staffing requirements. Getting this wrong can impact the number of people you need to staff your business.

Realizing the Impacts for Data Acquisition

REMEMBER

When you have multiple interactions happening simultaneously or interactions that overlap, understanding AHT and utilization becomes a much more complex undertaking. Your WFM system also needs to be able to understand how each employee copes when handling multiple interactions concurrently — what one agent can accommodate with ease can overwhelm another.

WARNING

In key WFM processes, simultaneous interactions on digital channels introduce the following challenges:

- **How you report service objectives for deferred work:** This differs from how you report service levels for immediate response contacts, which affects historical data reporting.
- **How you interpret AHT (in focus versus elapsed) and handle intra-interaction utilizations:** This challenge is new compared to voice AHT because contacts are no longer continued. How you measure this impacts your forecasting and staffing calculations.
- **How you define interruptibility:** How interruptions affect the AHT for different types of interactions depends on what AHT is reported historically (total elapsed versus parked AHT).
- **How you define AHT for long asynchronous interactions:** How do you account for the gaps within a customer interaction? Your approach will have different outcomes for staffing and scheduling.

WARNING

Elevated interactions pose significant challenges to the data integrity and acquisition process. You may, for example, track the average interaction duration for the entire series of transactions within the end-to-end interaction. How are chat escalations to calls handled? How you link and interpret time has different outcomes for staffing and scheduling.

IN THIS CHAPTER

- Operating with your currently known methods
- Looking at different digital channel scenarios
- Revealing methods you don't know
- Identifying the new staffing calculation methods

Chapter 3
Handling Digital Challenges and Staffing Calculations

Getting the right number of employees is a fundamental part of any workforce management solution (WFM). The process of calculating how many people you need is not only complex but also requires a number of key inputs and assumptions, and these differ depending on the type of channel you're staffing. In order to achieve key performance indicators (KPIs), employee satisfaction (ESAT), and customer satisfaction (CSAT), it all starts with having the right number of people.

WARNING

Not having the right number of staff can be challenging and result in your employees becoming overworked and stressed. Having overworked employees can lead to high after-call work times (the time employees need to finish their notes after a call), higher absences, and an increased number of employees leaving the job. Your customers may start to complain about long wait times, which increases average handling time (AHT). Employees can start to "cut corners" to get the work done quicker, which results in poor quality scores, CSAT, and low first contact resolution.

But what happens if you have too many employees? That can lead to poor employee satisfaction, boredom, and increased attrition. Not to mention that having too many staff members is also not cost affective.

In this chapter, we explain the methods we have come to know when calculating staffing requirements and review some of the considerations for digital channels.

Working with the Current Methods You Know

When calculating staffing requirements, there are some key metrics you know to track, such as

- Interaction volume
- AHT
- Service level or target answer time
- Concurrency

Most folks who work in the WFM world have heard of Erlang and use this calculation, shown in Figure 3-1, to calculate staffing requirements.

$$P_w = \frac{\frac{A^N}{N!}\frac{N}{N-A}}{\left(\sum_{i=0}^{N-1}\frac{A^i}{i!}\right) + \frac{A^N}{N!}\frac{N}{N-A}}$$

FIGURE 3-1: The Erlang C formula.

The Erlang formula is a mathematical equation for calculating the number of employees that you need in a contact center, given the number of calls and the service level that you want to achieve. This formula is used traditionally for channels that are immediate response and aren't sequential in the way they arrive into your business. This can be voice or chat channels because both usually fall into this category.

For those channels that are non-immediate response, such as email or direct message, you can use the workload calculation to determine the number of employees required. Figure 3-2 shows this calculation.

$$WorkloadRequirements = \frac{ContactsHandled \times AHT}{SecondsInStatsPeriod}$$

FIGURE 3-2: The basic workload calculation.

While these formulas do have their limitations, incorporating digital channels adds further complexity to how these formulas are used. Consider some of the additional challenges digital channels have on these well-established methods and identify how these influence your staffing requirements. See Chapter 6 for more information on how WFM calculates staffing requirements.

Exploring Digital Channel Scenarios

When you look at digital channels and the differences in how these interactions are handled and measured, you need to think about the new staffing paradigm. Understanding the complexities that digital channels bring helps you realize how to change the approach to staffing calculations.

Simultaneous interactions and handling times

One example of these challenges can be seen in simultaneous interactions. This is when an employee can handle multiple interactions at the same time — for example, three different chats with three different customers all at the same time, spanning 15 minutes. Figure 3-3 shows these simultaneous interactions.

How you treat these interactions and handling times determine the staffing numbers required; however, it may yield different results. You can get three different handling times depending on the method you use:

- The **elapsed** time (the time from the start to end of each chat) is 18 minutes

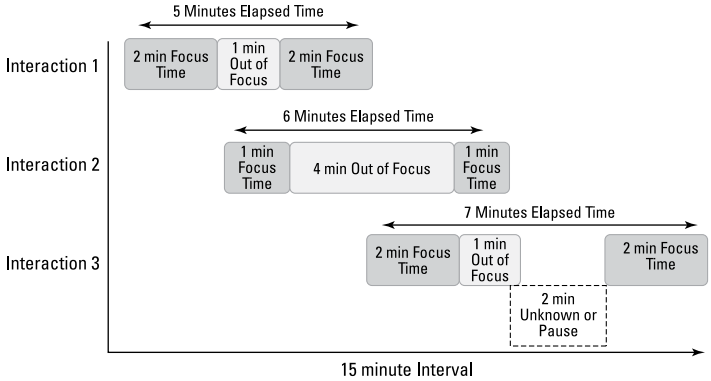

FIGURE 3-3: An example of simultaneous interactions.

- The **in-focus** time (the time the employee spends interacting with the customer) is 10 minutes
- The **window** of time (the entire 15-minute interval)

How you calculate the interaction times determines if concurrency should be used. You should also consider if concurrency should be calculated at the channel level, employee level, or both. So how do you calculate employee utilization in these scenarios due to the fact that the handling times are so different, and in some cases, the total handling time is longer than the period length? Utilization can be calculated as total work time/total staffed time, and each of the calculations would yield a different result.

Long asynchronous interactions

Another example of how digital channels can impact staffing calculations can be seen with deferred work and asynchronous interaction types. These are usually associated with email channels or Contact Us type interactions from your website. They don't require an immediate response and may have several touch points by a single employee. Figure 3-4 shows this process.

You can view this interaction and calculate handling times in different ways:

- A single interaction that lasts 70 minutes (elapsed time)
- A single interaction that lasts 10 minutes (focused time)
- Three interactions with an AHT of 320 seconds

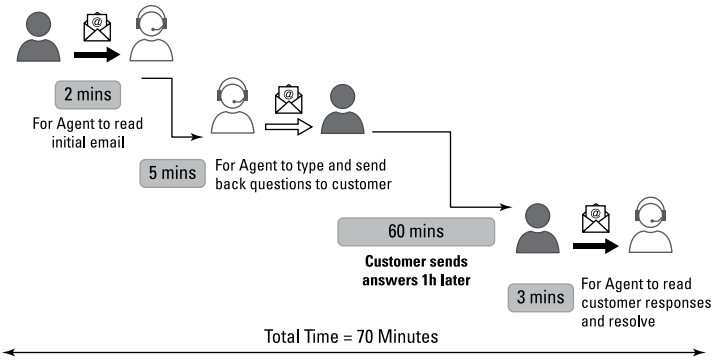

FIGURE 3-4: An example of long asynchronous interaction.

REMEMBER

Each interaction volume and handling time could result in a different staffing calculation especially at the interval level. When determining staffing calculations, you must understand what data you have and how it measures interactions, volumes, and handling times.

Exposing the Methods You Don't Know

When calculating staffing requirements, you can refer to the methods that you do know (see the earlier section "Working with the Current Methods You Know"), but what if you based your staffing requirements on the individual capabilities of the employees? For example, you may decide that for a particular channel concurrency can be set to five (meaning employees can handle five interactions at the same time), but that assumes each employee has the same capabilities. If you look across your employee spectrum, you may find that some employees are better at handling certain channel types than others.

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What if you were to consider employee channel efficiency and calculate staffing requirements based on these? For example,

- **Employee A** is able to handle **six voice** interactions per interval as well as **three concurrent chats** or **three deferred** interactions.
- **Employee B** is able to handle **four voice** interactions as well as **five concurrent** chats or **four deferred** interactions.

REMEMBER

Also consider employee occupancy when calculating your staffing requirements. You may think your employees can handle five concurrent chats while also taking voice and emails, but if this results in a 99 percent occupancy level, you could be underestimating your staffing requirements. Most employees can work effectively when occupancy is between 85 and 90 percent; any more than this could overload them.

Identifying the Impacts to Staffing Calculations

Understanding how different calculations impact your staffing levels is an important step to getting the right number of people for each of your channel types. How you view and calculate these interactions could yield different AHT, but take a look at Figure 3-5 — an example of how this can impact your staffing calculation.

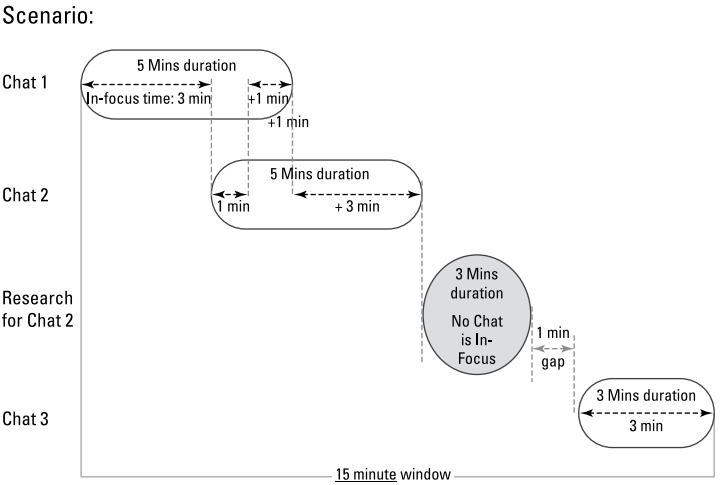

FIGURE 3-5: An example of different staffing requirements.

If you analyze this single interval, you can get multiple different handling times, which will impact the staffing requirements, shown in Figure 3-6.

	If				Then		
	Scenario	# of Chats	Total Time for Chats	AHT	Staff Required to handle 3 chats in 15min interval	Staff Required to handle 500 chats in 15min interval	Staff Utilization
Ideal →	1	3	(sum In-focus + Research) 14 min	280 secs	.31	156	93%
	2	3	(sum In-focus) 11 min	220 secs	.24	122	73%
	3	3	(sum Chat Durations) 13 min	260 secs	.29	144	87%
	4	3	(sum Chat and Research Durations) 16 min*	320 secs	.36	178	107%
	5	3	(window of time) 15 min	300 secs	.33	167	100%

** This method calculates 16 minutes of activity in 15 minutes of time*

FIGURE 3-6: The different staffing requirements based on different calculations.

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If you analyze these examples, you have a number of questions to answer before you can understand the true requirement:

- What is the correct AHT as it ranges from 220 to 330 seconds?
- Do you include the non-focus time and where would this be captured?
- What would be the correct concurrency?
- How do you calculate employee occupancy because this could be greater than 100 percent?

If you extrapolate this example into 500 chats, you get different staffing requirements. Depending on how you calculate the AHT, the full-time equivalent (FTE) can range from 122 to 178.

REMEMBER

If you calculate staffing requirements based on focus time, there's no need to adjust the requirements for concurrency; this should only be factored in if using elapsed time for AHT.

IN THIS CHAPTER

- Exploring how digital channels influence scheduling
- Keeping considerations in mind for digital channel scheduling

Chapter 4
Working with the Digital Challenges in Scheduling

Scheduling your employees to meet the demands of your customers is already a complex process. You need to apply a number of considerations and rules in order to maximize your employees' time, while also maintaining a healthy work-life balance and following local labor laws.

REMEMBER

With more and more focus being placed on employee engagement and the evolution of working from home, the focus has switched to be in favor of the employee and less so on the business needs. That said, you must always consider your customers when creating your schedules. This consideration has contributed to the introduction of digital channels within the contact center industry.

By offering customers a multitude of different channel types to contact you, they have the freedom of doing this at any time from anywhere, and it's now your job to ensure these channels are staffed correctly.

In this chapter, we cover some of the considerations for staffing digital channels and the consequences these can have on the way you manage schedules going forward.

Looking at the Effects of Digital Channel Scheduling

Scheduling has been seen as the process of simply matching customer demand with employee supply. But with the introduction of digital channels, the effects these have on employees' utilization and mental capacity should change the way you schedule your employees. Start thinking a little bit deeper about how your employees' time is divided and what's realistic when scheduling for digital channels.

REMEMBER

One of the most common concepts when scheduling for multiple interaction types is to schedule large portions of an employee's day to one specific channel (for example voice), before moving part way through the day to another channel type. This concept of *block scheduling* has been around for some time and is used to reduce the amount of switching between different channels by employees throughout the day. But as more and more channel types are introduced, the law of diminishing returns means those blocks will become smaller, which means more switching between channel types.

DEEPLY DIGITAL

With the introduction of interruptible channels (channels that can pause one interaction to handle another), the idea of block scheduling an employee to handle a certain channel type becomes unusable. This raises the same questions over concurrency: How do you schedule an employee who can handle multiple channel types at the same time, and does your WFM solution support this concept of cross channel concurrency?

The alternative to block scheduling is *fully blended*, which assumes employees can handle any channel type at any given time. This solution sounds ideal when working with digital channels, but you must understand a couple of things when working in this way:

- Employee burnout is driven by the always-on digital workplace, too many priorities, and the expectation that employees can use their digital tools to multitask and power through their workloads.
- Digital channels also bring a new scheduling paradigm — those channel types that have long asynchronous handling times may be spread across multiple periods or even days. If

these interactions need to be routed to the same employee, you need the ability to connect a specific interaction to an employee and ensure they're scheduled in order to continue to work on that specific interaction. Scheduling to interval-based demand for these channel types is no longer a practice and should cause you to think in a different way.

Making Considerations for Digital Channel Scheduling

When scheduling, it's important to understand the limits of the employees not only at the channel level but also as individuals because not everyone will be able to work at the same level. This means having the ability to set concurrency limits by channel type and at employee level. This adds more complexity to the scheduling process because you'll need to factor in the correct employee mix to provide the right schedule coverage based on their individual skills, concurrency, and interaction limits. For example, take a single 30-minute interval, shown in Figure 4-1, that has a total of 23 interactions and 3 channel types.

Interval	Voice	Chat	Email
08:00–08:30	4	12	7

FIGURE 4-1: The breakdown of the channel types for a single 30-minute interval.

The total required employees to handle these interactions is 4. You can see that breakdown in Figure 4-2.

Max Tasks	Voice	Chat	Email
Employee A	1	4	2
Employee B	1	2	3
Employee C	1	2	2
Employee D	1	2	2
Total	4	10	9

FIGURE 4-2: The employee breakdown from maximum interaction by channel.

While you may have the correct number of employees who can handle the total number of interactions, the channel mix means some channels don't have enough staffed time because of the varying limits of the employees. These limits are called *cognitive load limits* and should be considered when scheduling for multiple channel types because not everyone can work each channel at the same level.

DEEPLY DIGITAL

Another consideration of digital channel scheduling is when interaction handling time spans more than a single interval. For example, an email that lasts 30 minutes spans two 15-minute intervals. From a scheduling perspective, you need to understand that the single piece of work can't be shared between two employees and ensure that the same employee is scheduled across both 15-minute intervals.

Having employees with different interaction limits and concurrency settings when scheduling will impact the staffing requirements throughout the day. This means that two intervals with the exact same interaction volume and handling times could have a different staffing requirement based on the mix of employees that are scheduled during those intervals.

For example, if you have an interval where you have 20 interactions forecasted and the 4 employees you have scheduled for that interval have a combined interaction handling capacity of 21 interactions, then for that interval the requirement will be less than 4.

But in another interval, the 4 employees you have scheduled only have a combined interaction handling capacity of 16, then the requirement for that interval will be greater than 4. Therefore, you need to schedule more employees in that interval than you would the first interval. Figure 4-3 breaks this down.

Max Tasks	Voice	Chat	Email	Total Interaction	Max Tasks	Voice	Chat	Email	Total Interaction
Employee A	1	4	2	7	Employee W	1	2	2	5
Employee B	1	2	3	6	Employee X	1	2	2	5
Employee C	1	1	1	3	Employee Y	1	1	1	3
Employee D	1	2	2	5	Employee Z	1	1	1	3
Total	4	9	8	21	Total	4	6	6	16

FIGURE 4-3: How employee interaction limits can influence staffing requirements and schedules.

IN THIS CHAPTER

- Looking at digital change management metrics
- Monitoring digital channels

Chapter 5
Handling Digital Challenges with Change Management

REMEMBER

Change management is a process of monitoring employee and business performance and reacting to change when required. Change within your contact center is inevitable, whether it be higher/lower interaction volumes or changes in planned/unplanned absence. In multiskilled environments, the impacts of change can be felt across multiple departments that aren't linked directly but do share some skills or channels. This process is complex and requires workforce management (WFM) to assess and understand the impacts of change.

The change management process is made even more complex when you introduce digital channels and especially if those employees are skilled across multiple channel types. In this chapter, you look at how to manage digital channels within the change management process and some considerations for doing this.

Identifying the Right Metrics for Digital Channel Management

REMEMBER

Traditionally, the change management process has focused on interval delivery of service level or speed to answer and filling any staffing gaps that may cause you to fail these key performance indicators (KPIs). Monitoring employee adherence and ensuring employees are doing the correct work they've been assigned are also key steps. But with the introduction of digital channels, you need to consider how these metrics may change and if you need to consider other things in this process, such as the following:

- **Employee occupancy** is a metric to consider when introducing digital channels, especially when concurrency is used. It's quite easy for an employee to become overworked if you give them too many channels to manage or give them a high concurrency value. While it may be possible to handle five concurrent chats, you need to consider the impact on your employees.
- **Capacity to handle** is another possible metric you could introduce. This allows you to measure if you have enough capacity to handle those deferred interaction types that do not need to be handled immediately. If your email service level agreement (SLA) is 24 hours, knowing you have enough capacity in that day to handle the work could help you with change management.
- **Backlog** that relates to deferred interactions should be a consideration for change management metrics. Knowing what your limit is for backlog helps you manage future resource and identify opportunity.
- **Intraday reforecasting** could be another metric when dealing with long asynchronous interactions. Understanding how some channel types may be spread over multiple intervals or even days helps get a better understanding of demand.

Knowing What to Consider when Monitoring Digital Channels

One metric to consider is how you monitor the actual concurrency of your employees. If you're using concurrency for your digital channels, you need to ensure that the level of concurrency you've defined for your channel or employees is being achieved.

Figure 5-1 gives you an example of how chat concurrency can impact change management and full-time equivalent (FTE) requirements.

Interval	Forecast Chat	Chat AHT	Target Concurrency	Required FTE	Actual Concurrency	Actual Required FTE	FTE Var (+/–)
08:00	50	300	3	3.03	1.70	5.35	–2.32
08:30	60	300	3	3.64	2.00	5.45	–1.82
09:00	70	300	3	4.24	2.50	5.09	–0.85

FIGURE 5-1: An example of the impact of concurrency on FTE requirements.

TECHNICAL STUFF

In the example in Figure 5-1, the actual FTE required is higher than planned because concurrency is used to calculate staffing requirements at the interval level. Through change management you need to ensure the actual concurrency matches your assumption. Without this view, you may on the surface appear to have enough employees, but if concurrency is running lower than planned, you'll be understaffed. If this was a channel that didn't allow concurrency (for example, voice), you'd be able to use the average handling time (AHT) to identify if performance was below expected levels, resulting in a missed KPI. But when you introduce concurrency, you need more visibility to determine the reasons for failure.

DEEPLY DIGITAL

For those channels that are long asynchronous, also consider how you measure service levels and how these interactions are planned. If an email spans two days, at what point do you measure the SLA of this interaction? Is it on the first response or when the interaction is closed? Also, because you aren't staffing to an interval-based demand, what should you use to track performance and staffing against this demand? Knowing your capacity to handle is a key metric for digital change management when it comes to making proactive decisions for long asynchronous channels.

Channel priorities can also impact change management because they can steal hours from other channels that have a lower priority. For example, your voice channels take priority over your email channels. You have staffed both channels correctly; however, on that day, you get more voice calls than expected. The impact of having voice set to a higher priority means lower channels can "lose" hours causing them to be understaffed, shown in Figure 5-2.

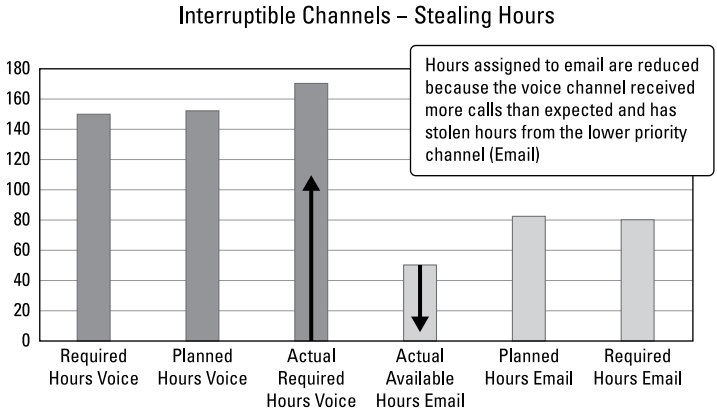

FIGURE 5-2: Interruptible channels can steal hours from other channels.

The impact channel priorities can have on change management is that channels that were staffed correctly may now have a shortfall because the hours have been used by other higher priority channels. These channel priorities need to be considered when managing digital change and should be a decision made by the change management team so the full impacts can be assessed.

Employee interaction limits is also something that needs to be understood. When managing staffing shortfalls, it may no longer be a case of sliding a shift to a later/earlier start time if the employee you're moving has already reached their interaction limits.

IN THIS CHAPTER

- Exploring the channel types interpreted by WFM
- Facing digital channel challenges
- Discovering your WFM solution
- Looking at workloads and flexibility

Chapter 6
Rising to the Challenges of Digital Channels with WFM

The evolution of the contact center and the technology customers use to interact with their supplies or service providers means your workforce management (WFM) solutions and processes need to adapt to these changes. Contact centers (previously known as *call centers*) allow customers to use a multitude of digital channels such as social media, short message service (SMS), chat, or direct messaging to communicate with them, along with more traditional methods such as voice or email.

REMEMBER

With your workforce now spread across an even wider range than ever before due to the global rollout of working from home, your WFM solution needs to provide much more functionality than ever before. Using digital channels not only helps your customers connect with your business from anywhere at any time, but also it allows your employees to respond to these customers from anywhere and at any time.

Managing all this is part of your WFM processes, and ensuring you have the right data to predict customer demand across all your channels and staff demands in the most efficient way requires your WFM system to handle digital channels.

In this chapter, you discover how WFM can help manage your digital channels and provide some thoughts and ideas around the complexities that digital channels bring.

Identifying the Channels

When we talk about digital channels, one thing that must be understood is what these channels mean to your staffing and scheduling calculations and how they're interpreted by your WFM system. While there are many different types of digital channels, most will fall into two categories:

- **Immediate response:** Normally associated with voice and chat channels, immediate response digital channels can abandon if not answered and have a typically short service level or answer time.
- **Deferred response:** These are typically emails, social media, SMS, or direct messaging. These channel types won't abandon if not answered and have service levels or answer times in hours or days.

Your WFM solution should provide the ability to forecast, schedule, and manage these channel types.


REMEMBER

Which channels you choose to incorporate into your business depends on your customer demand. If your company has little or no presence on social media platforms, there's no reason to think your customers will choose this method to contact you. Consider your audience and choose the channels that your customers will use regularly.

Considering the Challenges


REMEMBER

Digital channels offer a wealth of opportunity for sales, service, and support organizations to better meet the needs of their customers — and often in a much more cost-effective manner than non-digital channels. At the same time, however, they introduce a new range of complexities in data integrity and acquisition, staff requirement calculation, schedule optimization, and change management.

By understanding how each of these WFM processes is affected by the unique characteristics of digital channels — from immediate and deferred response contacts to deferred work, simultaneous interactions, and more — you can position your organization to meet the needs of your customers and break new ground on the digital frontier.

DEEPLY DIGITAL

When introducing digital channels and understanding what challenges you may face if your WFM system is unable to accommodate these complexities, consider the following:

- Can you define different channel types, and does your WFM system accommodate multiple staffing calculations?
- Does your WFM system accommodate concurrency at both the channel and employee levels?
- Does your WFM system consider employee limits to prevent them from being overworked?
- Can your WFM system prioritize channel types and simulate how contacts will be handled based on the set priorities?
- How does your WFM system manage average handling time (AHT) when channels are interrupted?

Tailoring the Solution

Having the ability to tailor your WFM solution to accommodate the differences in digital channels is crucial for getting good forecasts and schedules. As digital channels bring more diversity compared to traditional methods, you need to be able to decide how each channel is configured so your WFM system can provide the most optimal results — for example, deciding if a channel is an immediate or deferred response type, what the maximum concurrency is for that channel. You can also configure things like auto-park, which stops the AHT clock when the channel is interrupted and parks the AHT until that channel is resumed.

The contact type settings in NICE WFM, shown in Figure 6-1, configures each channel type and provides users with options to tailor that channel based on business logic.

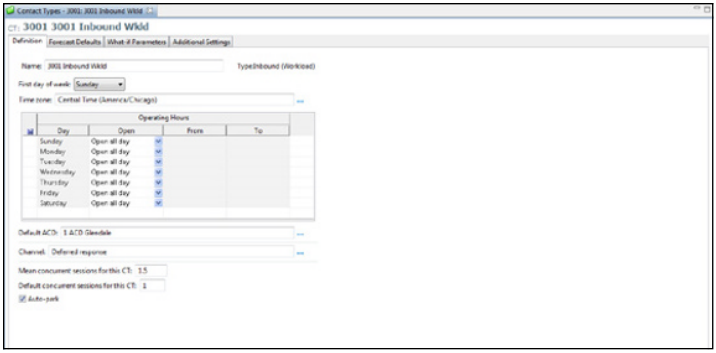

FIGURE 6-1: The contact type settings in NICE WFM.

Prioritizing the Workload

One of the key concepts digital channels can bring to your contact center is allowing interruptible interactions. These are interactions that can be stopped or paused to allow another interaction to take place.

An interruptible channel could be a deferred channel type that may be interrupted by an immediate response channel type. For example, an employee is working an email, when a chat interaction comes in. The email channel is "paused" because it's a deferred channel type, and that allows the chat interaction, and immediate response channel, to be answered.

As a user, you should be able to decide which channels take priority over other channels so your WFM system can simulate the impacts of staffing and schedules. In NICE WFM, you have the ability to decide which channels can interrupt other channels based on their priority. Channels with a priority of 1 interrupt channels with a value of 2 or higher (see Figure 6-2).

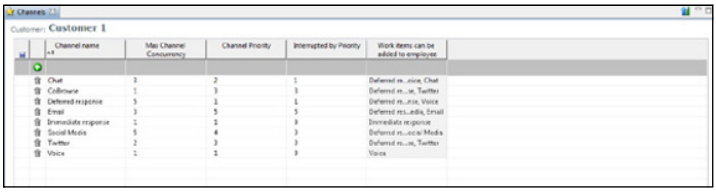

FIGURE 6-2: How channel priorities can be set and which channels can interrupt other channels.

Providing Flexibility

Having a WFM solution that allows you to apply different methodologies to different channel types and employees allows you to get a much higher degree of accuracy when it comes to determining staffing requirements and schedules. In your contact center, the approach of one-size-fits-all may not work when you consider the multitude of different digital channel types and the skills required to manage these.

The skills of the employees and their abilities to switch between different channels must be considered; otherwise, you could end up with lower staffing requirements or too few employees scheduled. In more traditional environments where there are only one or two channels in play, it's relatively easy to cross skill employees and maintain a high level of consistency in employee productivity. But as you introduce more and more channel types, the skills of your employees and their cognitive load limits will be impacted as they switch between multiple channels and handle concurrent interactions.

Your WFM solution should provide you the flexibility to tailor by employee what their maximum concurrency or maximum interactions are to prevent employee burnout and provide a more realistic view of staffing requirements. In Figure 6-3, you can see how each employee has their own concurrency setting per channel. This allows for NICE WFM to have a greater understanding on how concurrency is being used and considers this to get a more accurate view of staffing requirements.

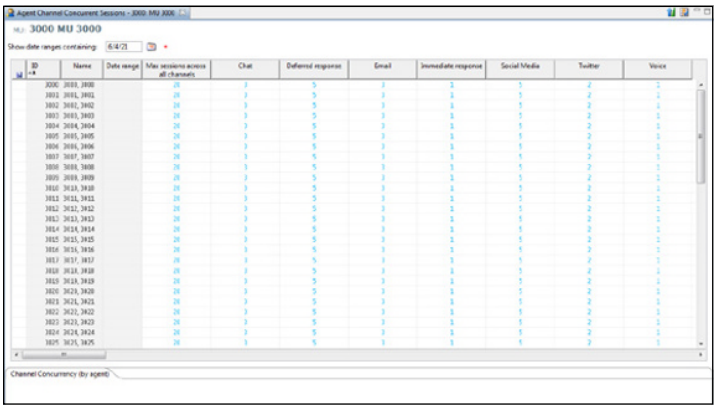

FIGURE 6-3: How employee concurrency and maximum interaction can be set.

As your employees become more versatile or comfortable in switching between different channels, these settings can be adjusted while still maintaining a realistic maximum interaction limit to prevent burnout.

IN THIS CHAPTER

- Understanding your limitations
- Looking at the future of work allocation
- Defining your goals

Chapter 7
Seeing into the Future of Digital Channel Management and WFM

As the contact center world evolves to incorporate new digital channels, you must be wary of the new concepts and methodologies that you could see in the near future.

REMEMBER

Some of the concepts used today have been around for many years, but only now are we starting to re-evaluate the way we measure success. The faithful service level has long been seen as the singular measure for determining customer success, and if you meet that target, you meet your customer expectations. But many people rarely consider the impacts these demands have on their employees and how the introduction of digital channels could put even more stress on them.

But what if you were to rethink how you set your key performance indicators (KPIs) and redefine what measures you used as you introduced digital channels into the contact center? In this chapter, we introduce you to the alternative metrics to consider when introducing digital channels and how this could be handled in the future.

Understanding the Limits of Digital Channels on Employees

Cognitive load theory builds on the widely accepted model of human information processing and describes the process as having three main parts: sensory memory, working memory and long-term memory. In the contact center world, cognitive load can refer to employees' abilities to juggle contacts and responsibilities. Some employees are able to multitask and handle X number of interactions concurrently, while other employees can handle Y number of interactions before being overwhelmed.

Overload can lead to frustration or poor decision making, and generally speaking, the more you throw at an employee, the harder they find it to switch between channels and conversations. Even though an employee can theoretically handle work up to a certain level, you start seeing diminishing returns in terms of efficiency.

The impacts on cognitive load can be seen when

- Employees are doing more than two tasks at once.
- Employees are shifting focus from one thing to another.
- Employees are executing different tasks in rapid succession.

REMEMBER

While it may be possible to conduct concurrent interactions and switch between multiple channels, be mindful of doing this over a prolonged period. Having the ability to factor concurrency and interruptible channels is key to getting the right staffing requirements. However, if you don't factor in the human side that not everyone can work at the same level, or consider that there are limitations as to how many times a person can switch between channels, this will not only impact your staffing requirements but also your employees.

Uncovering the Possibilities of Workload Allocation with Digital Channels

A concept that has recently been emerging with digital channels is self-select work items. Most automated call distribution (ACD) systems are based on the concept of pushing work to

employees — the ACD keeps track of the work coming in, queues depth, service objectives and routing rules, and connects the best employee with the work. In some organizations, however, employees are allowed to choose the type of contacts they'll work on during their shifts.

Employees self-selecting work items on digital channels can introduce some additional complexities into your contact center:

- How do you understand and anticipate which work items a given employee will choose and use it to generate schedules accordingly?
- How do you manage and understand any backlog?
- How do you make intraday reforecasts and analyze supply capacity changes when employees are able to self-select work items?

Effective planning in that kind of an environment requires artificial intelligence (AI) that's able to interpret and predict employee behavior.

Reconsidering Your KPIs

With digital channels there may be a need to reassess or introduce new KPIs and measurements to monitor both your employees and customer success.

DEEPLY DIGITAL

The traditional metrics you're using today are used to calculate and identify staffing requirements, but you may need to overlay additional measures to help with digital channels. For example, take the following into consideration:

- **Introduce employee occupancy or cognitive load limits to prevent employees being overworked.** This impacts staffing requirement calculations because it's based on individual employee limits. Different staffing mixes result in different staffing requirements.
- **Use capacity to handle to staff those deferred channel types rather than service level.** This utilizes the employee schedules, channel priorities, and workloads to determine how quick work can be handled and provides a predicted speed-to-answer target.

- **Determine if concurrency is an employee target along with average handling time (AHT) and contact per hour (CPH).** Employees will be measured on their actual concurrency targets, but remember employees are different in their abilities to handle concurrent workloads.
- **Channel measurements could be something you monitor to measure how many different channels an employee used to resolve a customer query.** This drives better channel response targets and helps you understand the true customer journey. It could also lead to training and coaching for employees if they're always having to switch between channels.
- **Decide if you need to replace AHT targets with correct response metrics.** Regardless of how long an interaction takes, the result of the interaction is what matters. What will this do to your staffing calculations?

IN THIS CHAPTER

- Identifying and understanding data
- Reviewing your goals
- Understanding the possible
- Being open to change

Chapter 8
Ten Considerations for Digital Channel Management and WFM

It's a tradition that *For Dummies* books end with a Part of Tens chapter. To keep that tradition going, this chapter gives you ten considerations for digital channel management and workforce management (WFM).

Identify Your Capabilities

The first step for success with digital channel management and WFM is to know what you can do. Why explore digital channels if your business doesn't have the capabilities to offer, manage, and report on digital interactions?


TIP

Form a project or steering group to assess all your digital offerings to customers, how you track and respond to these channels, and if indeed there's an appetite for digital across all your channels.

Understand the Data

The data you use is integral to getting good results from your WFM system. Forecasts and schedules are driven by the data you collect, and getting it wrong will result in failure. The data should provide insight into customer behavior and help drive proactive communication across digital channels.

REMEMBER

Just because you have data doesn't mean it's good data. You need to understand how that data is derived (for example, focused or elapsed handling times) and how this data meets the demand of your current WFM practices.

Review KPIs

The key performance indicators (KPIs) you have now may not be appropriate when you are looking at digital channels. You may need to introduce new metrics to ensure you can manage your digital channels in line with employee and business expectations.

TIP

For example, an average speed to answer of 60 seconds may be okay for voice, but you may find customers aren't willing to wait that long for chat. Also, consider if you can measure your KPIs — there's no point defining these targets if you're unable to measure them.

Set Realistic Expectations

We know that digital channels bring new metrics into your business such as concurrency or interruptible channels. However, when setting these, you need to be realistic with what you can achieve. Setting a concurrency of five chats may be possible, but is it realistic in your business? Do your systems allow employees to switch quickly and easily between different channels if they're interruptible?

Consider Your Employees

Employees are the heart of digital service delivery because they're the ones who interact with customers on these digital channels.

REMEMBER

Consider the impact digital channels have on your employees. Regularly switching between different channel types may impact the quality and performance of your employees. Setting too high concurrency or interruptible channels could cause issues with cognitive load limits and cause employees to become stressed. Ensure you set maximum occupancy levels to prevent employees being overworked which will lead to fatigue and impact absence.

Understand Ambition versus Reality

Investment in low-cost digital channels is redundant if the customer doesn't engage with the business through them. Migration of the right demand to digital channels is essential to delivering a digital strategy and remaining comparative. Without an ability to target the "right" channels, payoff from digital adoption may be limited.

Review Training Practices

The role of contact center advisors will continue to change as you adopt digital channels. This means your employees will need to have the right knowledge, customer interaction tools, and integrated systems that enable them to meet the demands of the digital customer.

TIP

Agents need to have specific training for every new channel that you introduce in order to get the best out of each channel. For example, the language and style needed for web chat isn't the same as email or talking on the phone. Also, remember that hiring the right people with the right skills to handle digital channels is something you should consider.

Know Your Technical Limits

Implementation of digital channels and having the ability to manage these relies heavily on the technology of your business. You should understand how you can track a single customer journey from one channel to another (for example, chat to voice). Technology such as omnichannel routing allows you to track all the data for all the channels you support from a single platform. Ensure your WFM solution can handle the complexities that come with digital channels.

REMEMBER

Ensure you have the same visibility and capability for digital channels as you do for more traditional voice channels.

Review Your Processes

Customers will use multiple channels — from voice, chat, and social media — to interact with your business. When customers move from one channel to another, opportunities can be missed, and customers may fall between the cracks. When adopting digital channels, make sure you can tie multiple customer interaction types into a single customer journey and manage them accordingly.

Adapt When Required

One of the most important things to remember is that the adoption of digital channels doesn't happen in isolation — it is one part of the digital transformation of an entire business. You should continually review your customer journey to ensure the adoption of digital channels isn't driving additional volume because the solution is no longer in tune with your business.

TIP

The primary function of customer service departments is to help improve the customer experience and journey, so this concept needs to be at the heart of your decision about what new digital channel to integrate. If the channel doesn't allow you to operate in an efficient and effective way, there's a good chance this will lead to a poor customer journey and drive additional volume into your business.

Discover digital channel management with WFM

The use of digital channels by customers as a means to contact your business is on the increase. Customers are choosing digital channels as their preferred contact method over voice. In this book, you discover what digital channels are and how the data for these differs from traditional voice data. You gain an understanding of the complexities digital channels place on staffing calculations and how digital channels may change your WFM processes.

Inside...

- Introducing digital channels
- Digital channel data acquisition
- Understanding staffing calculations
- Digital channels and WFM processes
- The future of digital channel management
- Ten considerations for digital channels

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