

NICE

**HOW DIGITAL HAS
CHANGED THE
CUSTOMER JOURNEY**



WHY WORKFORCE MANAGEMENT NEEDS TO EVOLVE

Not long ago, consumers looking to contact the companies they did business with had to contain their outreach to the hours between 9 a.m. and 5 p.m., Monday through Friday. If they had an option other than the phone, such as email or chat, they likely had to provide their information anew on each channel. Companies tightly controlled where interactions between its agents and customers happened, and they frequently made it too difficult for consumers to get the level of help and service they needed, CX futurist Blake Morgan asserted in [Forbes](#).

Companies are no longer in control, though. Wave after wave of innovation, from ecommerce advances to mobile phones and the Internet of Things, have transformed consumers' demands. Consumers today expect content and service relative to what they're doing at any time, anywhere, and on the device of their choosing, and they – not companies – are driving the transformation upending customer-focused industries.

Today, the customer journey often begins long before a consumer interacts with a live employee. Customers frequently search online or visit apps to do research before they reach out

for help – and when they do reach out, they're doing it on multiple channels. Research by [McKinsey & Company](#) found that half of customers engage three to five channels during their journey, which isn't surprising given the proliferation of digital access around the globe: 4.66 billion people are active internet users, 4.32 billion are active mobile internet users, and 4.2 billion are active social media users, according to [Statista](#).

COVID-19 has only increased usage of digital channels – in fact, McKinsey estimates that [digital channel adoption fast-forwarded five years](#) in the first eight weeks of the pandemic, and [consumers expect to continue using digitally enabled services](#) that go far beyond voice, emails and chat to also encompass the internet, apps and more.

It's not just COVID, though; other underlying factors are also affecting the use and the proliferation of digital channels. The combination of instant and anywhere access and the growth of mobile devices that permit non-voice communication are a catalyst for more modes of interaction between the customer and the contact center.

Digital channels also level the playing field – you no longer necessarily have to invest in an expensive ACD to connect with your customers. You can simply connect with your customers through Facebook or other social media channels, and there are a handful of companies, especially young startups, that are doing exactly that. It gives them early access to support channels without the heavy investment associated with an ACD.

Another key benefit of digital channels is that they are generally cost-effective – being able to postpone or interrupt interactions in favor of other interactions, for example, can make for a very cost-effective, albeit challenging, mode of operation. For many other organizations, the move to digital is simply a matter of survival – as their customers go digital, they feel compelled to follow.

Gone are the days of customers – and businesses – confining their interactions with traditional voice, email or chat. As businesses adapt to the change in how customers communicate with them, they're also changing how they reach out to customers themselves.

Companies are increasingly providing personalized notifications and updates regarding service, running marketing campaigns via social media based on analytics of users, and creating touchpoints across many new digital channels.

And with customer experience on digital channels in the spotlight more than ever before, companies are investing heavily in digital: 70 percent of customer service and support leaders plan to dedicate the largest budget allocation to digital channels and capabilities in 2021, according to [Gartner](#).

This era of instant, anywhere, anyplace interactions can make or break the customer relationship, and contact centers play an increasingly crucial role – a missed interaction can mean the loss of a customer because competitor information is also instant, anywhere, anyplace.

In this ebook, we'll address why digital changes everything, dive into the unique nature of digital channels and the controls needed, and detail how WFM must evolve as a result.



WHY DIGITAL CHALLENGES LONG-HELD ASSUMPTIONS ABOUT **WORKFORCE MANAGEMENT**

Companies are investing heavily in digital, but as customers increasingly adopt digital channels to reach out to the businesses they frequent, the nature of those channels themselves is challenging long-standing assumptions about the workforce management (WFM) process.

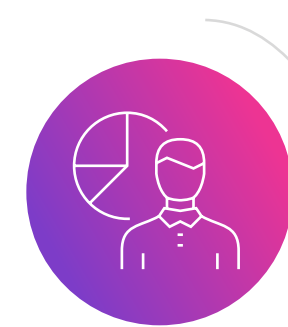
The WFM process traditionally involves a series of ongoing steps that follow a particular order:



DATA INTEGRITY AND ACQUISITION

This process assumes a sequential flow of work and that the work stream is contiguous. Consider, for example, the case of an employee who is talking to one customer on the phone while other customers are on hold waiting for help.

When the employee wraps up the call with the first customer, he starts talking to the next customer in line. It's a straightforward, linear process. It's clear when the call began and ended, and how long the employee spent resolving the customer's issue.



STAFF REQUIREMENT CALCULATION



SCHEDULE OPTIMIZATION



CHANGE MANAGEMENT

With digital channels, however, it's not quite so simple. Channels like SMS, chat and social media are better understood as a series of transactions where the interactions may not necessarily be sequential or contiguous.

In the digital world, employees may begin a customer interaction with one customer and have that interaction interrupted by a higher priority interaction with another customer. They may be interacting with multiple customers simultaneously.



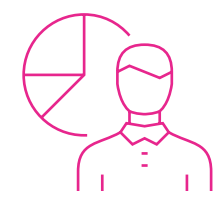
There are often also delays between responses to digital interactions — the customer could be waiting on a response from the agent, or vice versa. Lastly, some interactions may change modes of communication or escalate — for example, when the back-and-forth involved in a chat exchange prompts the agent to move the conversation to the phone for quicker resolution.

This noncontiguous, nonsequential workflow complicates the traditional WFM process, including:



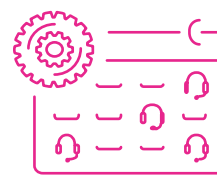
DATA:

Determining the appropriate AHT can be difficult depending upon whether you look at interactions in terms of total duration or in focus.



STAFFING:

These different interpretations of AHT can have a significant impact on requirements calculations and various objectives (e.g., service level, speed of answer and speed of response).



SCHEDULING:

After you develop your staffing requirements, then you move into a schedule optimization phase where you try to match your employees to your business need. You could be dozens of people over what you think would be the ideal number or dozens of people under, and it all depends on how you choose to calculate AHT.



CHANGE MANAGEMENT

And then once that's done, you enter into a change management phase where you're monitoring the need to change schedules and forecasts.

That's just a quick glimpse into how digital channels are changing everything we thought we knew about workforce management. WFM processes in a digital world are very much intertwined, and they require a different approach to overcoming the new challenges digital channels have introduced.

We'll go more into depth about those challenges — and the tools you can use to mitigate them — in this ebook.



HOW SIMULTANEOUS INTERACTIONS AFFECT STAFFING REQUIREMENTS

Before the widespread proliferation of digital sales, service and support channels, organizations planned WFM processes around a queue of voice calls that logically followed the assumption of sequential and contiguous work streams. An agent handled the first call in the queue from beginning to end, then moved on to the next call only after concluding the first call in the queue.

A unique feature of many digital channels, however, is that they permit agents and employees to handle more than one customer interaction simultaneously. Chats are one example of this, though certainly not the only one: An agent may shift between several different customer chats concurrently, and this simultaneous capability can bring substantial benefit to the contact center by adding an additional dimension to efficiency.

Fully realizing these efficiencies, however, requires resolving some open questions that aren't fully answered by the traditional WFM process:

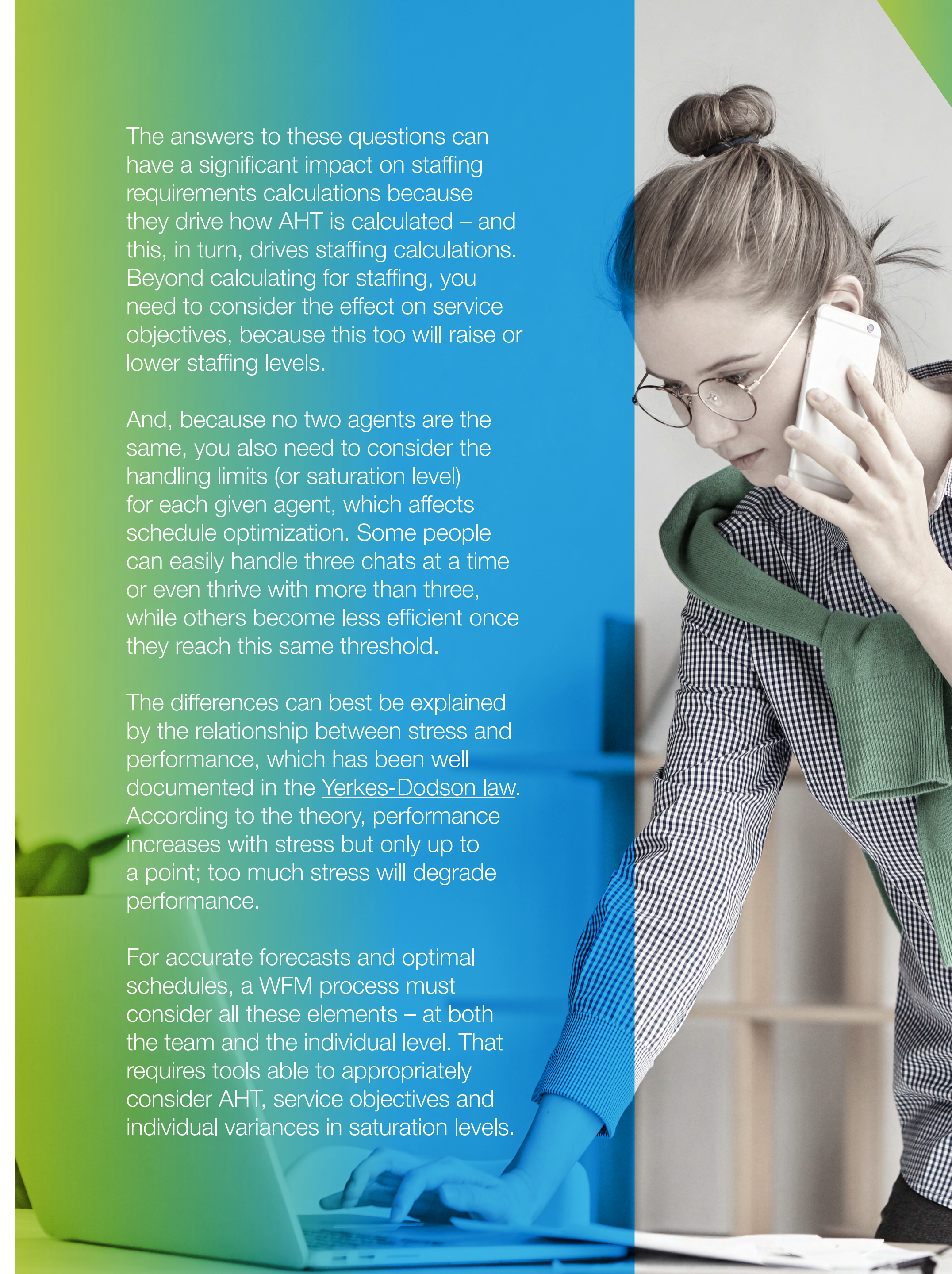
- *How should AHT be defined? You can take into account either the full elapsed time of an interaction or only time that a given interaction is in focus.*
- *How much wait time should be accounted for an agent/employee?*
- *How should speed of response be considered?*
- *How many concurrent interactions should an agent/employee handle?*

The answers to these questions can have a significant impact on staffing requirements calculations because they drive how AHT is calculated – and this, in turn, drives staffing calculations. Beyond calculating for staffing, you need to consider the effect on service objectives, because this too will raise or lower staffing levels.

And, because no two agents are the same, you also need to consider the handling limits (or saturation level) for each given agent, which affects schedule optimization. Some people can easily handle three chats at a time or even thrive with more than three, while others become less efficient once they reach this same threshold.

The differences can best be explained by the relationship between stress and performance, which has been well documented in the [Yerkes-Dodson law](#). According to the theory, performance increases with stress but only up to a point; too much stress will degrade performance.

For accurate forecasts and optimal schedules, a WFM process must consider all these elements – at both the team and the individual level. That requires tools able to appropriately consider AHT, service objectives and individual variances in saturation levels.



WHY ASYNCHRONOUS INTERACTIONS ARE SO COMPLEX

As consumers increasingly choose digital channels, agents find themselves not only handling multiple customer interactions simultaneously but also dealing with a closely related phenomenon – asynchronous interactions.


Asynchronous interactions are customer contacts that are characterized by any or all of the following:

- *They may occur at different times; they aren't necessarily a real-time exchange between the employee and the customer.*
- *They often experience significant delays (time lapses) between each party's response.*
- *The employee involved in the interaction may change.*
- *The interaction can shift from one channel to another (e.g., from chat to a voice call or phone to email).*

As such, they raise interesting questions around how to calculate average handle time (AHT) and the number of interactions. Let's consider how an email exchange between a customer and an employee might unfold. After the customer sends the email (the first email of the interaction), it takes two minutes for the agent to read it, then another five minutes to compose a reply with some follow-up questions (the second email).

In the meantime, however, the customer has moved on to something else, and it takes him 60 minutes to respond to the email (the third email). It then takes the employee three minutes to read the response and close the transaction.





In this simple example, AHT is clearly open to interpretation. Was this one contact that lasted 10 minutes, one contact that lasted 70 minutes, or three contacts with an AHT of 3:20? You may need a different approach for different behaviors.

Similar questions related to handling time and number of interactions can also arise when the interaction moves between channels – for example, when a chat moves to a call or a call moves to email. While it's fairly straightforward to calculate handling time of a call, you need to determine whether to include the handling time of the chat or email as well.

And, regardless of channel, you also need to consider how to account for the elapsed time when an interaction has been interrupted. Yet another consideration is whether interactions that change channels remain with the same agent or are transferred to another queue.

How you decide to handle these common situations will have a significant impact on staffing and planning.

As you move through the workforce management process – including the key workstreams associated with data integrity and acquisition, staff requirement calculation, schedule optimization and change management – you must consider the complexities inherent in the asynchronous interactions that are so prevalent on digital channels.

Employees won't always be able to immediately answer chats, emails and SMS messages, and some digital channels, such as social media or emails, tend to have significant time lapses between exchanges – in many cases, the interaction can stretch out over a day or more.

To enable contact centers to staff and plan effectively in this type of environment, the WFM process must be able to solve these challenges. That requires tools that help users appropriately configure and manage the nature of these channels and provide access to KPIs that align with the chosen approach (otherwise, the KPIs won't be meaningful).

THE RIGHT WAY TO FORECAST AND SCHEDULE IN A DIGITAL WORLD

With agents handling a variety of channels, from chat and social channels to Apple business chat, WhatsApp, Talkdesk, Kik, Viber and more, these interactions add a layer of complexity to the WFM process that can impact AHT and requirements calculations.

Much of the complexity is rooted in the nature of the interactions – we’ve already discussed how digital interactions are often simultaneous, interrupted or asynchronous, for example.

The sheer number of digital channels alone, however, also adds to the complexity, raising questions around forecasting and scheduling. For many years, contact centers focused mostly on calls and emails. Chats did take place, but at a volume that had minimal impact on staffing. Prioritization was straightforward, with only two categories: immediate response and deferrable work. And agents rarely if ever moved a customer from one channel to another.

The proliferation of digital channels – which increased in velocity due to the pandemic – turned all that on its head. In the digital world, contact centers often handle interactions on significantly more channels and with enough volume to impact staffing requirements and complicate prioritization. Among the key questions to consider:

- *When should one chat interrupt another?*
- *When should one channel interrupt another?*
- *What happens when an interaction changes modes (an escalation), such as going from a chat to a call or face-to-face video?*

To solve these challenges – and the impact they have on the contact center – organizations often take a few common approaches to forecasting and scheduling:

- *By the type of interaction (e.g., calls, email or chats).*
- *By customer experience (e.g., customer A, B or C).*
- *Using a hybrid approach (e.g., emails, calls and chats in the same customer interaction and social media separately).*

Note that this is not an exhaustive list — there are many other ways contact centers approach forecasting and scheduling with digital channels. None of these approaches are wrong; the best approach depends on your contact center’s unique needs. You need to consider the volumes and KPIs along each channel customers interact with to decide on an approach for your organization. The right way to schedule and forecast in a digital world, then, is the one that works for you.

There are, however, a few WFM requirements that are consistent across contact centers. The WFM solution in use needs to be flexible enough to offer choices that enable businesses to decide on the right approach. It should serve as a tool to solve a problem rather than restricting businesses to a single approach to managing digital channels. And just as a WFM solution should offer ways to address the characteristics of a digital channel, it should also offer ways to forecast and schedule in a digital environment.



YOU DON'T HAVE TO CHOOSE BETWEEN SIMULATION AND DIGITAL CHANNEL SUPPORT


A customer service agent doesn't simply go to work and pick up the phone in today's digital world; he or she is just as likely to be chatting with a customer or two while responding to a social media post from someone else concurrently.

It's not just chat or social, either – many of the digital channels customers use to communicate with the businesses they do business with enable agents to handle multiple interactions concurrently, and session concurrency offers an efficiency benefit to contact centers.

If this sounds familiar, it's because it's not unlike the benefit offered by skills-based routing, which also helps optimize resources across the enterprise. Just as digital channels require a WFM solution able to meet new complexities, skills-based routing can be difficult to manage without the appropriate tools.

In short, skills-based routing involves dynamic routing that creates an interdependency between employee requirements and schedule creation. This interdependency is problematic for formula-based solutions that are only able to represent dependent and independent variables based on past experience.

Simulation, however, can overcome those challenges with a framework designed to model the ever-changing interrelationships between customers, employees, skills, contact routing algorithms and management techniques. NICE's Discrete Event Simulation is one solution that has proven itself to be able to mimic this complexity with superior results.



The question, then, for workforce managers, is whether they have to choose between efficiency with simulation and support for digital channels. Simulation can allow a contact center to optimize employees with multiple skills, while digital channel support enables the contact center to optimize the number of concurrent sessions in which those multi-skilled employees interact.

True optimization for the contact center should consider both; choosing simulation over digital channel support, or vice versa, will result in lost efficiency. The good news is that not all WFM solutions require workforce managers to choose between simulation and digital channel support.

WFM CONTROLS TO MEET THE CHALLENGES POSED BY A DIGITAL WORLD

The purpose of any solution is to solve a challenge; in workforce management, a WFM system needs the appropriate controls to solve the challenges associated with data integrity and acquisition, staff requirement calculation, schedule optimization and change management.

Today, those challenges are both taking place in and being driven by a digital world.

The digital world added multiple layers of complexity to workforce management due to:

- *The emergence of many new channels businesses can use to interact with customers.*
- *The capability of these channels to enable employees to interact with multiple customers simultaneously*
- *The characteristic for some of these channels to have delayed responses between employees and customers.*
- *The possibility that the channel may change over the course of the interaction.*
- *The difficulty in interpreting traditional KPIs against digital channel interactions.*

In this new digital landscape, WFM solutions that for years have offered workforce managers the ability to plan, hire, forecast, schedule, manage and automate daily processes must be able to flex and expand to handle these new complexities. To do so effectively, a WFM solution needs to offer:

A WAY TO IDENTIFY AND DEFINE DIGITAL CHANNELS:

The traditional model of differentiating between immediate response and deferred response, while a step in the right direction, may not be specific enough.

Voice, chat, SMS and face-to-face interactions (e.g., Zoom, Microsoft Teams and WebEx) all fall into the immediate response domain, but there are enough differences between them that they likely require further categorization.

AFFORDANCES TO HANDLE SIMULTANEOUS INTERACTIONS:

Such affordances should consider concurrent sessions both within and between different channels.

For example, agents may be handling several simultaneous chats concurrently (within-channel concurrency) or handling a chat and an SMS or social media interaction concurrently (between-channel concurrency).

THE ABILITY TO TAILOR SESSION CONCURRENCY BASED ON THE TYPE OF INTERACTION OR EVEN THE EMPLOYEE:

Some customer interactions – even within the same channel – may require different session concurrency limits. Technical support chats, for example, may require that agents handle fewer concurrent sessions than sales chats do due to the nature of the interaction and the focus required of the employee.

Likewise, not all employees can handle the same level of concurrency; some employees may be able to handle more chats/SMS/social media interactions concurrently than others. Affordances should allow workforce managers to configure workloads to the individual employee's ability.



A WAY TO DYNAMICALLY PRIORITIZE CHANNELS:

If the WFM solution permits more than two broad categories of channels (immediate response and deferred response), the WFM solution must also have a way for workforce managers to set priorities that specify which channels are handled first. Just as important is the ability to define and manage interruptibility – which channels can interrupt others.

FLEXIBILITY IN FORECASTING AND SCHEDULING:

There are many approaches to forecasting and scheduling with digital channels (e.g., by type of interaction, customer experience or a hybrid method). The WFM solution should offer enough flexibility to forecast and schedule based on the unique needs of the contact center while addressing instances when the customer changes channels over the course of the interaction.

A MECHANISM TO HELP THE BUSINESS MAKE SENSE OF THE DATA:

Data acquisition and integrity are more complex with digital channels, and this can have a significant impact on AHT and other metrics. KPIs can be misleading unless the WFM solution provides ways to help workforce managers understand and interpret them appropriately. Ideally, the solution can take it a step forward with an engine that is sufficiently sophisticated to process data and produce results that make sense in a digital world.

Workforce management, while never a simple undertaking, has become infinitely more complex with the increase in digital channels, and the WFM solution you employ must evolve accordingly.

TRYING IT ALL TOGETHER: HOW TO CHOOSE A DIGITAL-READY WFM SOLUTION

Digital channels have changed the landscape of the contact center irrevocably, giving workforce managers a lot to think about in the process.

From SMS to chat and social media, digital channels challenge traditional WFM assumptions that contacts are contiguous and sequential while raising questions about how to account for AHT and interpret KPIs.

At the same time, they create exciting new possibilities for forecasting and scheduling approaches; true workforce optimization requires optimizing for digital and as well as for skills-based-routing.

To handle these new complexities, WFM solutions must be able to flex and expand to handle these new complexities.

To do so effectively, a WFM solution needs to offer the ability to:


- *Define and prioritize new digital channels dynamically.*
- *Handle simultaneous interactions.*

- *Tailor session concurrency limits for individual employees.*
- *Forecast and schedule based on the approach that makes the most sense for your business.*
- *Do the heavy lifting on data interpretation to help users understand the decisions they need to make in managing the workforce.*

While these controls are essential for any WFM solution operating in a digital environment, they're just the beginning – much more can be done to effectively collect data, calculate staffing needs, generate schedules and manage change in a digital world.

Reimagining service handling in a world in which consumers expect anytime, anywhere access to customer support and service requires true innovation, not just product enhancements.





This means a redesign (not just an update) of:



New data to extract, transform and load, which provides exacting details on issues like handle times, in-focus activities and employee performance.



Purpose-built engines designed to calculate requirements, conduct simulations and generate schedules in environments with many new simultaneous, interruptible, asynchronous and elevating contacts.



Solutions that consider how self-service and bots affect the schedules of human counterparts.



Tools to monitor and calculate individual cognitive load limits for various channels, so WFM managers and supervisors don't have to guesstimate how many simultaneous interactions an individual employee can handle. The ability to account for cognitive load is a true leap forward, as was skill-based routing.



What workforce managers in the modern contact center fundamentally need is a WFM partner who sees the challenges of digital as part of an ongoing design philosophy, rather than a minor issue to work around. That digital design philosophy should be a central component of the WFM provider's strategy.

A WFM solution that is ready for digital enables businesses to do more than just get by – it enables them to truly create greater value for the business. To stay competitive, businesses need a WFM solution ready for interactions that can go beyond the traditional – and a partner focused on helping businesses excel in the digital world.

A person is holding a silver tablet. The background is a blurred image of a person in a blue shirt. A large, colorful geometric overlay is present, consisting of a purple triangle on the left, a pink triangle on the right, and a blue triangle at the bottom right. The text is overlaid on the pink and blue areas.

ABOUT NICE WFM

Traditional workforce management isn't up to the task of solving the problems today's contact centers face. That's why many are turning to the NICE Workforce Management (WFM) Suite to automate operations, overcome complexity, adapt rapidly and achieve more effective workforce planning, scheduling and optimization – all in a single, cloud-powered platform.

NICE WFM is the only platform that enables a multi-pronged approach to increasing engagement and unlocking highly accurate planning.

[Learn more](#) about NICE WFM with machine learning 2.0 for digital channel management.