

Enterprise Workforce Optimization/Workforce Engagement Management Product and Market Report Reprint

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1. Introduction

Enterprises are trying to figure out how to deliver a consistently excellent customer experience to establish strong relationships, keep customers engaged, and cultivate long-term brand loyalty. It's a fundamental issue that few enterprises have found a compelling way to address, and is the underlying reason WFO/WEM suites (or platforms) exist. The goal of a WFO/WEM suite is to capture and provide the insights, analytics, and automation that companies need to build and maintain outstanding and long-lasting relationships with their customers and employees. A major aspect of the challenge is that the definition or description of an outstanding customer relationship or experience is constantly evolving, making it a moving target. This means that any company that wants to provide an outstanding CX in each and every touch with their customers, prospects, and partners needs a flexible servicing infrastructure that adapts as quickly as their customers.

This is where AI, including predictive analytics, comes in. These technologies harness real-time capabilities that enable enterprises to deliver the responsive and fluid servicing experience that each customer/prospect/partner expects. The game changer is the ability to give agents or automated intelligent self-service solutions the customized answers and context-based information that enable them to meet and exceed the expectations of each individual who reaches out to their organization.

Contact centers, customer service operations, sales organizations, and all other customer-facing touchpoints should use predictive analytics, which is built on a variety of AI technologies, to come up with the right answer or information, discussion points, or sales opportunities to deliver a personalized experience to everyone who reaches out for assistance. The days of static scripts and standard procedures are quickly coming to an end, and it cannot happen fast enough. The emerging generation of AI-enabled, predictive analytics-based contact center and servicing technology and infrastructure will enable companies to achieve the essential goal of putting the customer first. In doing so, it will vastly improve the employee experience by giving them the right information and approach to handle each and every contact. This will drive radical and transformative changes throughout the customer journey, not just in contact centers and customer service organizations.

Where to Source the Technology?

WFO/WEM capabilities are instrumental for the transformation. They provide many of the automation, engagement, analytics, and optimization capabilities that enterprises need in order to deliver an outstanding and customized experience during every interaction. In the past, these capabilities were sold primarily by WFO/WEM suite vendors or best-of-breed application providers. Today, the majority of WFO/WEM applications are sold by the contact center as a service (CCaaS) vendors along with their routing, queuing, self-service, and other capabilities. This is happening because it simplifies the acquisition process by reducing the number



of vendors that an enterprise needs to deal with and gives the system user one contact when they need assistance. Another reason why this is proving to be a good approach is that a CCaaS vendor (possibly enabled by the WFO/WEM suite or applications) can function as a single source for the foundational AI technology and data repository required to power the servicing needs of the enterprise.

A Great EX Drives an Outstanding CX

WFO/WEM solutions sell well in both good and tough economic times. The reason is because these applications improve the CX and EX while enhancing productivity. While productivity improvements (such as a reduction in average handle (AHT) time or an increase in sales) are a side benefit of making it easier for employees to perform their jobs, the savings can be significant for contact centers, branches, and back-office operations. There are many ways that WFO/WEM applications improve the operating environment for customer-facing organizations. To begin with, they reduce callbacks, follow-up inquiries, and rework by helping employees provide correct information and perform their tasks right the first time. They reduce average handling and processing time by delivering real-time guidance directly to employees so that they do not need to spend their time searching for the optimal way to handle an inquiry. They lessen the pressure on agents and improve the quality of interactions by applying robotic process automation (RPA) to automate activities such as copying and pasting information from one system to another, processing orders, completing fulfillment activities, and many other increasingly complex functions. They reduce interaction volumes and improve the CX by identifying customer insights and needs with interaction (speech and text) analytics, enabling companies to resolve issues proactively before they become a public relations nightmare. They use WFM to enhance the CX and EX by making sure that a department is properly staffed with employees who have the right skills to perform the work. Giving employees, particularly contact center agents, tools that increase first contact resolution (FCR), reduce AHT, and decrease the burden of performing low-value tasks, frees them up to do what they signed up for: helping customers, which is very satisfying when it goes well.

Digital First or Finally Digital?

Enterprises are finally making progress with their digital transformation initiatives, which include opening up a variety of digital channels such as chat, short message service (SMS), messaging apps (e.g., WhatsApp, Telegram, Viber, etc.), and social media, for service and sales activities. As these channels are new in many organizations, they are just beginning to apply quality management (QM) to them and do not yet have the necessary oversight. Companies are also finding it challenging to forecast accurately for asynchronous digital channels and work activities that take a long time, as erlang, the standard forecasting algorithm used by WFM solutions, was not designed for these purposes. Companies are asking WFM vendors to enhance their forecasting capabilities so that they can properly staff their front- and back-office servicing organizations.



The Next Chapter

The need for WFO/WEM suites and applications is growing throughout enterprises due to the increasing complexity of contact centers and other front- and back-office operations. These solutions are critical because they provide timely and actionable insights into customer and employee experiences and engagement and deliver real-time guidance to front-line workers. However, as times change, so must these applications. It's time for the WFO/WEM suite vendors to open up their solutions and convert them to flexible platforms that easily accommodate third-party integrations. They should be enhanced to accurately support the handling of asynchronous channels and tasks that take a long time to complete. They need new intraday management capabilities that more fully automate the reshuffling of schedules and resources throughout each day. They also require enhancements to help organizations improve employee engagement and empowerment by enabling them to use self-service capabilities to select and change their own schedules, lunches, and breaks. The cloud and AI are the driving forces behind most of the innovation occurring in this market, including enhancements that will improve WFO/WEM usability and effectiveness and position companies to deliver a great CX.



2. Workforce Optimization/Workforce Engagement Management Trends and Challenges

WFO/WEM applications continue to be in great demand by enterprises; what's changing is from whom companies are buying them. For more than 40 years, WFO/WEM suites were primarily sold by best-of-breed vendors dedicated to this market. An enterprise would purchase an inbound or outbound contact center infrastructure solution (automatic call distributor (ACD) or dialer) and then make a separate decision about which WFO/WEM solution to buy. These days, the vast majority of sales of WFO/WEM suites and applications are from the CCaaS vendors, as this is what enterprise customers want. This trend is driving partnerships between WFO/WEM suite providers and CCaaS vendors and is also motivating the CCaaS vendors to either acquire a WFO/WEM suite provider, build their own offering, or a combination of the two approaches.

The cloud is now the primary acquisition and delivery model for WFO/WEM capabilities, and the vendors are encouraging customers still using premise-based solutions to move to the cloud. The vast majority of innovation in the market is dedicated to the cloud-based offerings, which are increasingly more feature-rich than the premise-based solutions from the same vendors.

WFO/WEM solutions have always been unique in their ability to sell in both good and tough economic times. This is because these solutions improve productivity and reduce operating costs while improving the CX and enhancing the EX. When budgets are tight, enterprises look to WFM, QM/AQM, and IA to help them optimize their agents' performance by "doing more with less." In good times, contact centers apply these solutions to enhance department performance and improve the perception of their brand.

DMG Consulting expects enterprises to continue to acquire the 13 applications that comprise WFO/WEM suites to enhance their contact centers. Furthermore, we predict that a few of these applications will start to experience broader adoption in other enterprise operating departments. As these suites provide oversight and transparency for both managers and employees, they are positioned to be extremely helpful and beneficial for companies.



2.1 Workforce Optimization/Workforce Engagement Management Trends

2022 was an excellent year for sales of WFO/WEM-related systems and applications. This allowed the vendors to invest heavily in their solutions and deliver a great deal of innovation to the market. The investments are primarily in the following categories: Al, automation, analytics, and the user interface (UI)/user experience (UX). What makes this round of enhancements so powerful is that the vendors have taken into account both the need for new capabilities and the importance of making them easy to use. As these new features are being delivered from the cloud, they are getting into the hands of users more rapidly, which allows vendors to monetize them quickly. The cloud is a game-changer for both enterprises and vendors, due to its proven benefits to both groups.

Artificial intelligence has found its way into all of the applications that comprise WFO/WEM suites, greatly enhancing the capabilities of these solutions. However, this is just the beginning of what is going to become a total revamp of most of the 13 applications that comprise these suites. All has gone from being a system addon to a foundational component of most of these applications. WFM, IA, AQM, surveying, coaching, CJA, and more are either built on All technology or depend upon it to provide increasingly useful and actionable findings and intelligence for users. As effective as All is today, we are just seeing the beginning of its potential uses and benefits.

2022 will also be known as the year of the partner for WFO/WEM providers. While some of the CCaaS vendors sell their own WFO/WEM solutions, the majority of sales of these applications are being made through a partnership. In some cases, it's an original equipment manufacturer (OEM) arrangement where a CCaaS vendor white-labels third-party applications and brands them as their own. In other instances, a CCaaS provider will bring a WFO/WEM vendor into a deal to deliver functionality that they do not offer. DMG Consulting expects to see the partnership model expand, as it is highly beneficial for enterprises that want to purchase their solutions from one provider, as well as the CCaaS and WFO/WEM vendors.

The WFO/WEM providers are investing heavily in making their solutions more open and easier to integrate, after decades of keeping them closed. This is in large part a response to their enterprise customers who have asked the vendors for years to open up their solutions so that they could interoperate with users' other systems and applications, particularly customer relationship management (CRM) solutions. This trend will prove to be highly beneficial for the WFO/WEM vendors, as it will position their solutions to be more easily implemented in other enterprise functions.

The headwinds are strong for IT investments, as the economy is slowing down. This will impact the WFO/WEM market, although this sector is expected to outperform most of the contact center sectors. Helping it along will be the tailwinds



pushing large enterprises to migrate from their premise-based ACDs and dialers to the cloud. Figure 1 provides a list of trends driving the WFO/WEM sector.

Figure 1: WFO/WEM Trends for 2022

A growing majority of WFO/WEM sales are made by CCaaS vendors, a trend driven by the demands of enterprise customers.

Vendors are making a strong push to move on-premise clients to cloud solutions.

Partner ecosystems are gaining importance, both expanding relationships with current partners and establishing new partnerships, especially with CCaaS vendors and providers of collaboration solutions (e.g., MS Teams).

WFO/WEM vendors are trying to make their suites more open, to enable easier integration with third-party systems and applications.

Vendors are inviting customers to "start anywhere," using a "land and expand" sales strategy with a long-term outlook of selling their entire suite.

WFO/WEM vendors are looking for new sales opportunities, both in the contact center and in other operating departments (e.g., back-office and branch).

Artificial intelligence is permeating WFO/WEM applications, including enhancements to: WFM (additional algorithms, best-fit algorithm selection, automated shrinkage calculations, workspace allocation); AQM (ability to auto-score more and different types of evaluation criteria); personalized real-time guidance based on agent skill proficiency; and increased automation of employee tasks.

The realization that an excellent EX is key to delivering an outstanding CX is starting to influence how contact centers and other customer-facing service organizations treat their workers.

Vendors are delivering new and enhanced coaching capabilities that can automatically identify areas of opportunity, by employee, and schedule personalized coaching and/or elearning sessions. They also assess the effectiveness of coaching on agent performance (e.g., automated comparisons of pre- and post-coaching results) and evaluate the efficacy of coaches, including identification of their strengths and opportunities.

Gamification applications are increasingly being acquired to improve the EX. Vendors are enhancing their solutions to gamify more than productivity and QM KPIs, including interaction sentiment, customer satisfaction results, and KM usage.

The WFO/WEM vendors are enhancing their surveying capabilities to provide more data regarding the voice of the employee (VoE). More work is underway to share insights about candidates, to optimize the hiring process.

AQM is gaining traction as vendors enhance these applications with easier-to-use form development environments, increased digital channel capabilities, and support for additional types of questions.

WFO/WEM suites are being enhanced to include advanced reporting; some now perform business intelligence (BI) functions.

Enhancements to WFO/WEM applications are increasingly being driven by client requests.

Mobile capabilities are being enhanced for all roles: agents, supervisors, and administrators.

Source: DMG Consulting LLC, December 2022





2.2 Workforce Optimization/Workforce Engagement Management Challenges

The WFO/WEM market is mature, and while its future outlook appears strong, it's not without challenges. The applications sold by WFO/WEM suite providers are needed more today than in the past, due to the complexity of contact centers. However, market dynamics, driven by the cloud, have changed how these solutions are sourced by enterprises. DMG Consulting research shows that 60% - 70% of the WFO/WEM applications acquired by contact centers are sold on an indirect basis or through a CCaaS vendor, if they offer these capabilities. This sales model presents both benefits and challenges for WFO/WEM suite providers. On the positive side, it greatly expands sales, as their solutions are being sold by dozens of third-party providers, particularly CCaaS vendors. The downside is that it could limit the WFO/WEM vendors' direct access to enterprise buyers and reduce their sales margins.

Enterprises are struggling to deliver a service experience that satisfies their customers. They have invested heavily during the past few years in new systems and applications, but many seem to be falling behind in their digital transformation. This is negatively impacting contact centers in many ways. Few are able to dedicate adequate resources to monitor and evaluate how their agents handle digital interactions, leaving them with little insight into customer satisfaction in these essential channels. Even fewer are applying interaction analytics to their digital channels, further limiting their access to highly valuable information insights into what their customers are saying about them and their feelings regarding the service experience. The WFO/WEM vendors need to up their game in this area and figure out how to convince enterprises to apply their solutions in these channels.

Enterprise challenges are often opportunities for vendors, and that is the case when it comes to the items identified in Figure 2 below. Although budgets are being tightened, vendors who can show that their offerings reduce costs while improving the CX and EX will be able to sell their solutions.



Figure 2: WFO/WEM Challenges

The challenging economy, specifically, high inflation and the strong risk of a recession in the US and the impact of the war in Ukraine, are driving a slowdown in IT investments, including WFO/WEM applications.

Enterprises are struggling to deliver the service experience that their customers expect, despite making major investments to enhance their customer service organizations and contact centers.

Service employees, including contact center agents, need the right tools, training, and coaching to protect and advance the brand.

Enterprises are caught between customer demands for a consistently outstanding CX and employee expectations for a vastly improved EX – and both constituencies are willing to walk away if their needs are not met.

The shrinking availability of viable candidates for contact center agent openings and the growing cost to replace employees mean that contact centers have to do a better job of retaining their existing workforce.

"Work from anywhere" is here to stay. Although contact centers have successfully "made do" with existing solutions, contact center technology providers, including WFO/WEM vendors, need to emphasize making enhancements to support fully remote and hybrid workers and to enable supervisors/managers to better identify their needs, performance opportunities, etc.

Use of digital channels is accelerating rapidly, and contact centers increasingly want to operate with a digital-first approach.

Contact centers continue to lag in performing QM on digital interactions, limiting their visibility into the performance of their agents in all channels.

Customer conversations are non-linear – they cross channels, modalities, and intents. Contact center technology has to be able to follow multi-turn/multi-intent interactions for both agent and agentless transactions.

WFO/WEM vendors need to provide new KPIs for agent and agentless interactions, particularly in digital channels.

Source: DMG Consulting LLC, December 2022



3. Workforce Optimization/Workforce Engagement Management Projections

The contact center WFO/WEM suite market has a long history of executing well in both good and challenging economic times because of its ability to improve employee productivity and efficiency and the customer experience. This remains the case, but market results are less clear-cut because sales of WFO/WEM applications have become distributed across a diverse group of vendors, many of whom sell only a couple of applications, not entire suites. As a result, their revenue is not included as part of the WFO/WEM suite sector.

WFO/WEM suites can be comprised of up to 13 applications, all of which are needed by contact centers and other departments involved in CX activities. Increasingly, demand for some of these capabilities, such as recording, quality management, interaction analytics, knowledge management, robotic process automation and workforce management, is extending to other departments within enterprises, expanding the total addressable market (TAM). The opportunity is attracting new vendors to the WFO/WEM market, some of whom are competing under new IT categories. For example, Medallia and Qualtrics, two vendors that started as surveying providers, have added many WFO/WEM applications and refer to themselves as CX vendors. The name is appropriate, as these solutions are geared toward enhancing the customer experience and journey while providing internal analytics to improve the performance of the department and their employees. This reflects the broader nature, contributions, and benefits provided by many of the WFO/WEM applications.

In addition to the CX providers, CCaaS and CRM vendors have incorporated some of the WFO/WEM capabilities into their suites. These providers are responding to the needs of their customers who are asking them to offer broader suites of applications. It's standard for a CCaaS vendor to offer recording, although not as common for the solution to come with advanced filtering and search capabilities. Quality management functionality is expected by CCaaS users, even if it's basic and the more sophisticated features require an integration to a WFO/WEM suite provider. Interaction analytics is another module that enterprises expect to be provided by CCaaS vendors, as is workforce management. CCaaS vendors continue to partner to provide many of these capabilities, even as they invest in building their own.

The CRM vendors are adding applications that have traditionally belonged to the WFO/WEM suite market. Enterprise customers are asking their CRM vendors for improved analytics and automation capabilities; the vendors are responding by giving their users what they are asking for through acquisitions, partnerships, and internal development. It's increasingly common for a CRM vendor to offer interaction analytics, quality management, and gamification features. Some CRM vendors have started to provide WFM functionality, which is considered one of the more complex contact center solutions. And recently, there has also been a lot of



messaging about customer journey applications, although this is an area that is still in need of major investments and innovation.

Below are DMG's projections for 11 of the applications sold by the WFO/WEM suite providers, many of which are now being offered by CX, CCaaS, CRM and other vendor categories. The 5-year projections take into consideration the overall performance of each of the applications, regardless of who sells them, as well as the impact of an economy in turmoil, which many expect to go into recession. Despite the unknowns, DMG Consulting is generally positive about the 5-year performance of most of the applications sold by WFO/WEM suite providers. This is due to innovation in the areas of automation and AI (which is driving a new generation of vastly enhanced solutions) and the strong past performance of these applications during challenging economic times. See Figure 3.

30% 25% 25% 20% 20% 20% 20% 15% 15% 12% 12% 10% 5% 0% WEM -5% Recording OM CCPM Gamification Surveying/VoC RPΔ КM CIA -6% -10% ■ 2022 ■ 2023 ■ 2024 ■ 2025 ■ 2026

Figure 3: WFO/WEM Application Projections, 2022 – 2026

Source: DMG Consulting LLC, December 2022

Recording – Enterprises do not want to pay much for recording functionality, since they view it as a commodity. And as the adoption of CCaaS grows, enterprises expect recording functionality to be a core feature of the contact center solution, not a separate line item. This is fine for companies that are satisfied with a recording solution that comes with basic search and filtering capabilities but not for those that want advanced features. Despite the generally accepted perspective about recording solutions, differentiators remain among some offerings, and in a



few situations, there are good reasons why a provider charges more than others. Vendors continue to invest in their recording functionality, as it's an essential enabler or component of some of their other applications. We expect the market to need increasingly advanced recording solutions despite its unwillingness to pay for them. This will drive the vendors to increase prices for products that incorporate their recording capabilities. DMG Consulting expects recording revenue to increase by 1% in 2022 and 2023, to be flat in 2024, to decrease by 1% in 2025, and to drop by 2% in 2026.

Quality Management – The WFO/WEM suites were designed around the need to perform QM on customer interactions. For the past 35+ years, the vendors have made enhancements to improve the usability of their QM modules, but the process was still highly manual and required human resources to do the work. Analytics-enabled QM (also known as automated QM) is set to change this, and the timing couldn't be better as QM departments are under substantial pressure to reduce costs. Companies will still purchase traditional QM solutions for the next few years but at a much slower rate. The investment dollars are migrating to the AQM category (typically reflected in the IA segment), as this application can give managers and agents the insights to deliver on the QM mission. For these reasons, DMG Consulting expects sales of traditional QM solutions to lose momentum to the next-gen AQM offerings. Revenue for traditional QM is expected to grow by 1% in 2022, not grow in 2023, lose 2% in 2024, decrease by 4% in 2025, and drop by 6% in 2026.

Workforce Management — Companies need WFM solutions to manage the complexity of hybrid staffing models and a growing number of channels. WFM has always been viewed as a solution that drives contact center productivity and improves the CX, and it still delivers on its core mission. However, recent innovations make WFM highly valuable for improving employee engagement by enabling agents to select and manage their own schedules. The market is in the early days of using AI and automation to improve WFM capabilities, but enterprise interest is strong and growing. If the economy continues to worsen, DMG expects more companies to upgrade to new-gen WFM solutions deployed in the cloud, as they look for ways to deliver an outstanding and cost-effective CX, while improving employee engagement. DMG Consulting expects WFM market revenue to grow by 12% in 2022, 10% in 2023 and 2024, and by 11% in both 2025 and 2026.

Contact Center Performance Management – This has always been an application that is hard to sell; not because it's not needed, as it is, but due to difficulty in clearly explaining its value proposition. CCPM is viewed by many as highly advanced reporting, which is true, but that's not its actual value proposition. These applications are designed to make sense out of the massive amount of information and data provided by the 45+ systems used in contact centers, so that managers can make better decisions. Today, CCPM is increasingly viewed as an integrated reporting system for contact center information, and this value proposition is getting some traction, particularly for organizations that are trying to get a handle on the customer journey. As the current revenue for CCPM solutions is very low, and companies are beginning to see some benefits from these applications, DMG



Consulting expects to see moderate growth in this IT sector during the next 5 years. The CCPM sector is expected to grow by 8% in 2022 and 5% in each of the years between 2023 – 2026.

Gamification – Every contact center manager we know wants gamification functionality, as they appreciate its value and see many ways of using it to promote agent engagement and well-being. Their challenge is that it's one of the easier things to cut from a budget when money gets tight because it's a tool targeted toward an internal audience: agents. During the last few years, many of the related IT segments, including WFM, QM, CCPM, and even CCaaS, have added basic gamification capabilities to their solutions. This is making it harder for best-of-breed gamification vendors to sell their offerings, although the leading solutions do much more than is available from many of these other providers. The timing is right for gamification due to the Great Resignation, but there is still work to be done to open up the market opportunity. Vendors need to come up with a business case supported by a strong return on investment to justify investments in these solutions. However, since the revenue for this IT sector is extremely low, the upside potential is high. For these reasons, DMG Consulting expects the gamification IT sector to grow by 15% in 2022, 10% in 2023 and 2024, and 8% in 2025 and 2026.

Surveying/Voice-of-the-Customer – Surveying continues to be viewed as the most expedient way to gather customer intelligence regarding a product, service, or the CX. It's a tactical approach to address a strategic opportunity, as keeping customers satisfied is essential for the success of any company or organization. The challenge is, and always has been, getting organizations to apply the findings properly and on a timely basis. Despite the many known issues associated with surveying, including the low response rates to most initiatives (which makes their findings statistically irrelevant), companies are often willing to invest in these solutions or services because they are generally inexpensive and perception of risk is low. This is the traditional and most common way of thinking about surveying, but it is a highly limited perspective. Hopefully this will change as organizations combine the use of these tools with interaction analytics to more broadly capture and measure various aspects of the customer journey. The market is in the early days of capturing the data necessary to measure the customer journey, but surveying is expected to be a component of the process. DMG Consulting expects to see the revenue for surveying solutions increase by 8% in 2022 and 6% during the next four years between 2023 – 2026.

Interaction Analytics (speech and text analytics) – Historical speech analytics entered the commercial market in 2003 and is now considered a "must-have" solution for contact centers. Interaction analytics, which analyzes voice and digital conversations, is used primarily by contact centers to gain insights into the reasons why customers reach out to the company. While this is a valuable use case, particularly if an organization's internal processes enable them to apply the information and take corrective action to fix the identified underlying issues, it's only one of the potential benefits of IA. Interaction analytics is the technology behind AQM and real-time guidance. Both are use cases designed to assist front-



line agents and employees who work directly with customers. IA can also be used to identify the emotional levels and sentiment of both customers and agents, giving great insights into customer (and agent) satisfaction. All of these uses are highly beneficial, but the real value of IA will come from embedding it into a variety of third-party solutions such as customer journey analytics and sales applications. The IA market is hot and is in the midst of a replacement cycle as companies move away from older solutions to more flexible and feature-rich offerings. The market is also experiencing growing adoption of AQM as the pressure builds to gain deeper insights into customer interactions. And companies are turning to real-time guidance and next-best-action solutions as a way to improve the customer and agent experience while reducing the cost of service. DMG Consulting remains bullish on this application, as it has great potential for contact centers and to help improve the customer journey. We expect the IA market to grow by 12% in 2022, by 10% in 2023, 2024, and 2025, and by 9% in 2026. The revenue projections appear relatively conservative but are very significant because they build off a large base.

Desktop Analytics – The most valuable contributions of DA are as the foundation for RPA solutions and to provide visibility into how employees use their desktop servicing applications. Today, most adoption of DA is in back-office departments where it is being used to keep track of what employees are doing at their desktops and to track the volume of incoming and outgoing work. This solution is seen as a niche application but has proven to be valuable when used properly. DMG expects revenue for DA solutions to experience a slow but steady increase of 5% per year during each of the 5 years between 2022 – 2026.

Robotic Process Automation – This is one of the fastest growing IT sectors, although contact centers have been slow to adopt these applications despite having a large need for their automation capabilities. The market-leading RPA vendors have not been successful in penetrating the contact center market with their best-of-breed suites. Instead, the majority of revenue that falls into this category is coming from WFO/WEM suite providers and CCaaS vendors, most of whose offerings are not as robust as the leading competitors in the market. DMG Consulting expects RPA revenue to grow by 20% in 2022, 15% in 2023 and 2024, and 20% in 2025 and 2026. However, there is also a chance that this sector could take off and experience 100% year-over-year growth during all five years, as the opportunity and need is there.

Knowledge Management – This sector is in the midst of a resurgence, driven by the growing need for a reliable source of enterprise knowledge to support a variety of applications and activities, including real-time guidance, self-service solutions, and the work-at-home and hybrid workforce. Consumers are pushing companies to provide them with effective self-service solutions so they can help themselves. Self-service solutions, both customer-facing IVAs and employee-facing VAs, are dependent on highly flexible knowledge bases. Enterprise-wide Al initiatives, especially those that leverage machine learning, require access to large repositories of unified, targeted and tagged data, some of which is coming from KM solutions. Real-time-guidance and next-best-action applications rely on



knowledge repositories to deliver the right policy, procedure, script, or knowledge article to enable an agent to perform their job. The market demand is driving a cycle of success that is being enabled by innovation in the areas of AI and advanced search, which is delivering a new generation of highly effective and flexible KM solutions. As the revenue for this IT sector is relatively small, DMG Consulting expects to see substantial growth during the next 5 years. The revenue for the KM market is expected to grow by 18% in 2022 and at least 15% in the next four years between 2023 – 2026.

Customer Journey Analytics – This is a sector that should be much more advanced than it is. CJA has been discussed for at least 12 years but is proving to be difficult to build and implement. It's one thing to build a CJA solution that can collect the data needed to analyze performance within a contact center. It's a totally different challenge to develop an application that crosses organizational boundaries and is able to track everything that happens to a customer as they proceed along their unique enterprise-wide journey. Companies that want to deliver an outstanding CX cost effectively need to take a broad view of everything that happens to a customer, to identify where there are bottlenecks and service quality issues throughout the enterprise. Organizations and vendors get it but are struggling to come up with a good solution to address this challenge. DMG Consulting expects to see this IT sector continue to move slowly during the next 5 years. Revenue for CJA solutions is expected to grow by 10% for the next three years, 2022 – 2024, by 20% in 2025, and 25% in 2026, as the starting base is extremely low.



4. NICE

COMPANY OVERVIEW	Founded: 1986 Ownership: Public (NASDAQ: NICE) HQ: Ra'anana, Israel # of Employees: ~8,400 Key Verticals: Financial services, telecommunication, insurance, healthcare, outsourcing, technology, retail, transportation, utilities
PRODUCT PROFILE	Product Name: NICE WEM Suite Deployment Models: On-premise, cloud (public, private), hybrid, managed service

NICE has two global business units: Customer Engagement (contact center, trading floor, back-office/branch solutions) and Financial Crime and Compliance (financial crime mitigation, risk and compliance management, digital evidence management). NICE's workforce optimization (WFO)/workforce engagement management (WEM) strategy is "to deliver WEM capabilities as part of a unified, cloud-native platform that combines digital self-service, Al-powered routing, and journey orchestration, for a complete customer experience and employee engagement solution."

PRODUCT OVERVIEW

NICE WEM is a contact center and back-office suite that natively offers omnichannel recording – voice, digital and screen capture, quality management (QM) analytics-enabled QM (AQM), gamification, performance management, surveying/voice of the customer (VoC), workforce management (WFM), knowledge management (KM), interaction analytics (IA), desktop analytics (DA), customer journey analytics (CJA), and robotic process automation (RPA). Data is shared with third-party systems via Direct Structured Query Language (SQL), Hypertext Markup Language (HTML), Web Services, and representational state transfer (REST) application programming interfaces (APIs). Language support includes English (US, UK, Australia-New Zealand, South Africa, Singapore), Spanish (EU, US), German, Hebrew, Russian, Japanese, Turkish, Italian, French (EU, CAN), Brazilian Portuguese, Mandarin (Chinese, Traditional), Hindi, Cantonese, Korean, Thai, and Polish.

FUNCTIONAL OVERVIEW

Su	pervisor	
Ex	perience	

Supervisors have real-time visibility into agent activities, including agent monitoring, scheduling, quality, and performance management, from a consolidated interface that is accessible via the web or mobile app. Supervisors can view real-time performance metrics, monitor live calls, coach, barge in, and take over a call for both on-site and remote agents. Bi-directional communication with agents is supported via third-party collaboration tools such as MS Teams, Slack, Zoom, and others. Supervisor dashboards provide customizable visualizations and report widgets. NICE WEM provides omnichannel recording of voice, screens, and digital interactions. NICE Smart Search supports user-defined queries and free search and recommends search terms to improve results. Retrieved interactions can be replayed, shared, and evaluated.

NICE Performance Management (NPM) provides real-time results for out-of-the-box and customizable key performance indicators (KPIs). NICE Performance Management aggregates data from NICE applications and other contact center or enterprise data sources. Historical reports measure agent behaviors that impact the customer experience (CX), pinpoint recurring problems, identify trends, and provide performance tracking over time.

Agent Experience

WebStation agent portal provides role-based access to personal performance reports, evaluations, coaching assignments, and other assigned tasks. Self-service functions are accessible in the WebStation agent portal or, optionally, via Employee Engagement Manager (EEM), which provides a native mobile app for iOS and Android devices. Agents can request time off, set/change schedule



preferences, submit schedule changes (including meal and break periods), swap hours/shifts with other agents, and respond to overtime (OT) or voluntary time-off (VTO) opportunities. Agent-initiated requests can be dispositioned automatically based on administrator-configured net staffing thresholds.

NICE AQM applies interaction analytics, artificial intelligence (AI)-enabled sentiment and predictive models, desktop analytics, and/or metadata to analyze and score 100% of voice and text-based interactions. Rules-based analytics use the presence or absence of explicit words or phrases to determine whether or not an event occurred and detect discrete, defined events. AI-based behavior models evaluate and score agent behaviors and soft skills. Results can be mapped to customizable KPIs and shared on agent or supervisor dashboards.

NICE Gamification supports the creation of pursuits/quests/challenges that are tied to the achievement of KPI-based goals or objectives. Multi- or single-level activities can be assigned at the agent or team level. Leaderboards display agent rankings and badges earned. A virtual marketplace allows redemption of gamification points for intrinsic and extrinsic rewards. The online social community supports the creation of personalized avatars and peer collaboration.

Customer Experience (CX)

NICE VoC captures post-interaction direct customer feedback in 35+ supported channels in addition to digital input in survey verbatims, reviews, content ratings, web clickstreams, and streaming content. Passive feedback is captured from analysis of structured and unstructured voice and text-based interactions. Al Sentiment Analysis is leveraged to predict and score customer satisfaction and Net Promoter Score (NPS) on each interaction, and can be measured across topics, products, and processes.

NICE Customer Journey Analytics combines data from across the enterprise (channels, touchpoints, databases, external systems) into corresponding individual customer journeys that are aggregated into journey visualizations. Metrics associated with the customer journey can be analyzed by customer issue, touchpoint, channel, customer profiles, or any combination of available data. The Journey Excellence Score (JES) is an Al-based feature that incorporates findings from interaction analytics (repeat contacts, sentiment, customer intent), and other metadata, to identify areas of high customer effort and recommend remediation, including self-service enhancements. NICE Quick Insights utilizes AI to identify key differences between successful and unsuccessful journeys.

Scenario analyzers can be applied to predict how the customer experience would be impacted by changes to the journey.

Future

Planned enhancements during the next 12 – 18 months include:

- New WFM scheduling engine improved speed and accuracy of calculations for digital and voice channels; incorporates data on the active time spent on each activity
- Agent experience improved usability and integration; displays overall journey details and supporting data in a single contact card; includes an agent-assist hub that provides real-time agent data to the supervisor application
- Enlighten XO enhancements identification of automation opportunities; learns how to optimize tasks from top agents and designs conversational flows based on past interactions
- Enhanced supervisor application ability to monitor alerts based on real-time interaction guidance and analytics, including Enlighten Agent behavior CSAT modules; includes supervisor-agent chat capabilities
- Cloud recording support for the gradual migration of enterprise recordings and WEM to the cloud without having to change legacy systems such as ACD and switches



About NICE

With NICE (Nasdaq: NICE), it's never been easier for organizations of all sizes around the globe to create extraordinary customer experiences while meeting key business metrics. Featuring the world's #1 cloud native customer experience platform, CXone, NICE is a worldwide leader in Alpowered self-service and agent-assisted CX software for the contact center – and beyond. Over 25,000 organizations in more than 150 countries, including over 85 of the Fortune 100 companies, partner with NICE to transform - and elevate - every customer interaction. www.nice.com

About DMG Consulting LLC

DMG Consulting LLC provides expert guidance, industry reports and primary research that guide the critical decisions made by businesses, technology providers and investors in the dynamic and rapidly transforming contact center and back-office markets. Driving the strategic direction of the customer experience (CX) is at the core of DMG's extensive consultation and collaboration with executives, leaders and industry innovators. DMG's methodologies and in-depth understanding of people, process and technology create outstanding business outcomes and position organizations to deliver the next generation of customer and contact center experiences in an Al-driven digital world. Learn more at dmgconsult.com.

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