White Paper

Modernize Service Management in the Digital Age

The emergence of the digital economy has created distinct expectations about what technology should enable and how the user should engage with it. For businesses to succeed in this era, they must build modern capabilities that meet these expectations into all areas of the business, including the service desk. This white paper explores current requirements for modern service management in IT and beyond, and the capabilities that can propel businesses forward with greater ease, efficiency, productivity, and overall agility.

To Thrive in the Digital Era, ITSM Must Embrace New Imperatives

Digitization is creating new revenue streams, new services, and new experiences. It has opened the door for businesses to embrace emerging technologies and engage in activities that weren't possible just a few years ago.

Digitization provides an opportunity to do more, execute tasks differently, move faster, and—ultimately—drive better performance. It's a revolution that's touching all aspects of business—including IT service management (ITSM).

One thing that has become painfully obvious is that traditional and manual ITSM tools simply cannot keep up in the digital era. This also explains why many millennials and digital natives are choosing to avoid the slow and unresponsive service desk. Some are even bypassing internal IT altogether.

Businesses must therefore do a better job of engaging the digital workforce—to accommodate modern expectations for applications that are intuitive and leverage consumer-oriented technologies. They must explore new ways to boost the efficiency and productivity of service desk agents—and the IT teams that support them. They must also think creatively and consider alternate deployment methods that provide greater choice, preserve data sovereignty, and help lower the total cost of ownership (TCO) for service management.

Essentially, it means modernizing the entire service desk operation with an ITSM toolset designed specifically for the digital age.

The Future of ITSM

Three imperatives define modern ITSM solutions—key requirements that can help businesses achieve greater success in the digital economy. It begins with the creation of an easy, intuitive, and engaging user experience. It encourages IT and service agent productivity through sophisticated analytics and machine learning. Finally, it builds flexibility and portability into deployment options to reduce TCO and increase speed and agility.

Engage with Your Users

The digital economy is changing the way people engage with technology. Workers expect to get from the workplace the same consumer-grade user experience they get in their personal lives. This expectation carries over into every business interaction, including the service desk, where users are looking for smart, personalized self-service, and zero wait time.

Today's ITSM Tools Must Engage Users While Also Empowering Agents and IT

To deliver the easy, seamless experience today's digital workforce seeks while also building efficiencies into the ITSM function, modern tools must engage users and facilitate productivity across the board. Features and capabilities that do this include:

Virtual agent—A virtual agent capability is the first line of defense at the service desk, helping end users resolve issues on their own with a minimum of service tickets. A virtual agent automatically offers instructions or suggested readings on a range of topics that can help users address specific issues. If the virtual agent is unsuccessful at remedying an issue, a service desk agent will eventually take over. But this capability effectively facilitates end-user self-sufficiency and frees service desk agents to focus on more critical issues. Providing this capability out of the box (OOTB) helps businesses save time and the added expense of a third-party integrator.

Native mobile capabilities—Native mobile apps provide distinct advantages over mobile web and hybrid apps, especially in terms of enhancing the user experience. Users gain access to device-specific features, offline functionality, faster speeds and responsiveness, and the consistent experience they're seeking.

Social collaboration—Modern ITSM tools include built-in social collaboration capabilities that enhance the user experience while also adding value to the business. Users will recognize features such as ratings that help them quickly find the best services and make more informed decisions. This feature also provides the business with valuable feedback. "Ask a friend" is a feature that also personalizes the user experience and is often preferred for solving issues over submitting a ticket. Translation on-the-fly is a convenient social tool that removes potential language barriers to information access.

Chat bots—Chat bots enable sophisticated real-time collaboration among IT teams for more timely and effective incident resolution. Chat bot capabilities eliminate many of the delays associated with manual service desk operation, including those caused by siloed IT interaction. Chat bots inject intelligence into incident collaboration, identifying people and teams that should be involved, and providing a complete history so all parties are quickly up to date.

Self-service portal and catalog—It goes without saying that modern ITSM must provide self-service capabilities that enable users to pick and choose the services they need. The portal and catalog should be easy and intuitive with no training required. Businesses will also want the option to modify or personalize

their portal on their own and when they want. Many vendors of ITSM tools offer customization but only through a third-party integrator, adding time and expense. The goal with modern ITSM is to optimize service delivery through customization you control—enabling much faster time-to-value.

Many of these features improve the experience of using and operating the service desk, but that's only one aspect of modern ITSM. It's also important to consider the entire service desk function, finding new ways to decrease the number of tickets and the heavy load burdening service desk agents.

Boost Efficiency and Agent Productivity with Built-in Analytics and Machine Learning

The traditional service desk is manual and reactive, primarily addressing large volumes of tickets and user requests.

This puts businesses under tremendous pressure to improve the efficiency of ITSM processes and the productivity of their service desk agents. The good news is that entire service desk operations can be transformed into a proactive function. Features that enable codeless configurations and seamless upgrades are a step in the right direction. Applying advanced analytics and machine learning, however, can enable truly predictive, personal, and actionable insights across all service management activities.

Businesses should look for ITSM tools that contain:

Chat bot support—This includes intent based smart virtual agents and chat bots that automatically facilitate end-user learning and IT collaboration—ultimately freeing up service desk agents to focus on innovation and more critical issues. Chat bot driven support is available to users 24x7 and dramatically speeds time to issue resolution.

Smart news and notifications—This feature enables IT to proactively notify users about issues that may impact them. IT can provide suggested workarounds through personalized notifications that engage and empower end users with relevant, useful information on topics they're likely to encounter and advice on how to avoid potential issues. Integration with collaboration tools such as Microsoft Teams allows IT to communicate and collaborate important information such as incidents, within agent teams, and to employees who benefit from receiving it in an easily accessible manner.

Smart search—As users search for information or services, a contextually relevant knowledge management system can provide recommendations, articles, and links. This system will also dynamically adjust and learn as the interaction progresses, helping users ultimately find answers to their questions while minimizing the number of new tickets submitted.

Hot topic analytics—Modern ITSM tools with analytic capabilities can help agents identify patterns across structured and unstructured data sources. Information on "hot topics" is graphically displayed like a heat map, showing where segment size corresponds with the frequency of topics or keywords in demand by users. This information alerts agents to areas where users may need additional education. The system will then automatically identify articles that can help inform users.

Smart ticketing—Today, users want to be able to submit a ticket as if writing a tweet. They'd like to send a very short message, in natural language, that describes their issue or request. They may even want to use their mobile device to include a photo that illustrates the issue. Smart ticketing with machine learning accelerates the ticketing process by automatically populating fields—all based on the user's message or an optical character recognition (OCR) scan of the image. The service desk system also automatically replies to the user—regardless how the issue was reported—with links to suggested solutions. Leveraging a data set of observations, the system will automatically classify tickets and assign them to the appropriate service desk agents. Agents can reassign tickets to different support teams. They can also overwrite fields that the system populated automatically, if needed for a given case. The system learns from new patterns, enabling the best-fit function to perform better in the next situation.

Smart change management—Machine learning also plays heavily into modern change analytics and management. Given the frequent number of changes in ITSM that businesses demand today, intelligent systems provide agents or change managers with suggestions that can help optimize the environment and increase the success rate percentage moving forward.

The change process owner can define key performance indicator (KPI) goals, and the system will provide KPI measurements and achievements over time while offering suggestions on continuous improvement. Actionable insights enable a faster and more successful change management process. They also help drive more automation by alerting agents to what they should automate for the best return on investment (ROI).

Risk analysis also factors into change interface statistics as the system highlights the top/bottom success rate for similar changes. Smart change management automatically detects any configuration item (CI) information (such as IP, hostname, MAC address) agents put into unstructured text, highlighting it and automatically linking changes. This is critical because failure to relate Cis to changes is a common cause of change failure. Agents can then easily ensure they're inputting the right CIs. They can also get CI information or run an impact analysis with just one click.

Changes are scheduled in calendars, and the look and feel of these calendars is as important as any other user interface. Automatic indicators alert change managers to any issues, such as risk concerns, scheduling in an unplanned window, or lack of approval.

Change management is a critical service management process—and one of the most complex. It relies heavily on accurate data that it receives from the change management database (CMDB). Through discovery, organizations are able to inventory their infrastructure and applications, monitor their status, and

understand relationships and interdependencies in real time. With virtual and cloud environments and short-lived containers, having a snapshot of your assets and how they fit together is fundamental for efficient service delivery. Discovery, automated service modeling, CMDB, and ITSM processes should be on the same platform and use the same data model if you want to achieve the needed speed and accuracy of changes. Applying machine learning to the discovery process contributes to an increasingly mature software application index.

Analytics and machine learning transform service management systems through intelligent assumptions and recommendations about ticketing issues. These results help agents and IT support teams describe, diagnose, predict, and prescribe what has happened, is happening, and will happen. Much of this is done automatically, without human interaction. And, as the system learns over time, processes only get better.

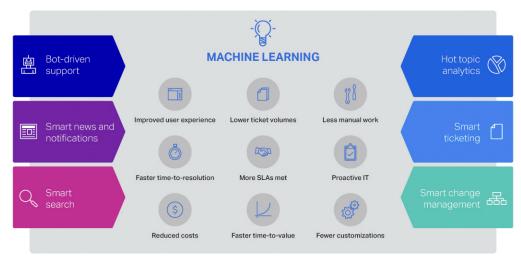


Figure 1. Key imperatives for modern IT service management

Deliver Your Service Desk Your Way

While ITSM is often delivered via software as a service (SaaS) only, businesses today are looking for a choice of deployment options. Businesses using SaaS today may need to migrate to a private cloud in the future. Similarly, some companies have strict security and compliance policies around data sovereignty, making on-premises deployment mandatory. That's why it's important to factor deployment flexibility into your evaluation of modern ITSM solutions.

If SaaS is not an option for your organization, the best way to achieve this level of service management flexibility is to leverage container technology. This enables portability and a range of other benefits including speed, simplicity, improved economics, and scalability and resource efficiency.

Flexible Container Technology for Portability, Faster Time to Value, and Lower TCO

Container-based ITSM tools deliver the deployment flexibility that businesses require while also leveraging benefits inherent to the technology: faster installation, easy upgrades, and more.

Portability—The convenience of containers is that they can run anywhere—on-premises, in the cloud, or in a hybrid environment. Because businesses are not locked into any one deployment option for ITSM, there's much greater autonomy in terms of how you want to run your service desk and who has the control over your data.

Resource efficiency—Compared to typical VM solutions, container technology uses existing resources more efficiently with less duplication. Containers are typically smaller and faster, making it easier to initiate, scale, and migrate workloads while also minimizing overhead.

Peace of mind—Software delivered in containers is easy to install and maintain—updates are automatic and patching typically occurs in minutes. The lifecycle for containers is measured in minutes and seconds, while traditional applications span months or even years. Containers, paired with orchestration and microservices, enable automated scaling in and out, self-healing, high availability, and disaster recovery OOTB.

Codeless configurations—No two businesses are alike, and concrete service management processes will always differ. This is true of ITSM process workflows as well. When it comes time to upgrade, companies may incur additional costs if they need to reconfigure and later maintain those workflows manually. Codeless process designers can help users develop processes and workflows instantly—without programming. Even with complex processes, including branching and looping, users should always be able to use the graphical interface. Codeless configurations simplify upgrades through standardization and clarity of business logic, so customers are always using the latest product version—as if they're using a versionless service desk.

Whether your organization has a preference for SaaS, on-prem or hybrid—the best solution is one that gives you the option for any of these. When change is the norm, businesses want the flexibility to adapt and capitalize on that change when it happens.

When organizations can speed up IT processes, onboarding and upgrading are that much faster, IT agility increases, and TCO reduces significantly.

One of the reasons why SaaS rapidly became such a popular model was because vendors could quickly add new capabilities to their solutions. Container technology, built with microservices, enables organizations to develop new capabilities even faster than pure SaaS vendors. Customers can now consume new and innovative capabilities with equal speed, whether they use the solution on-premises, in a SaaS model, or in the public cloud.

Service Management Automation X— a Truly Modern Solution

A modern service management tool must meet three key imperatives to drive business success:

- 1. Engage end users and enhance their experience
- 2. Employ advanced analytics and machine learning to boost service desk efficiency and productivity
- 3. Offer flexible deployment and consumption options to address today's changing requirements

 There are many ITSM solutions on the market today. Evaluating these solutions in light of the requirements outlined in this paper will help businesses identify modern capabilities that can transform operations.

Only one solution, OpenText $^{\mathbb{M}}$ Service Management Automation X (SMAX), meets all three requirements. This analytics-driven service management solution helps businesses manage the entire services portfolio and lifecycle within and beyond IT.

SMAX enables a highly differentiated and engaging user experience with modern features, such as native mobile capabilities, social collaboration, translation on-the-fly, virtual agent, and chat bots right out of the box. The solution includes intuitive self-service and self-help capabilities. Plus, the portal is completely customizable with free themes and layouts that businesses can alter to fit the brand.



Figure 2. SMAX Service Portal

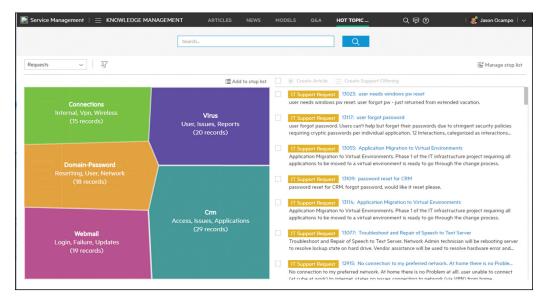


Figure 3. SMAX Hot Topic Analytics

OpenText™ applies smart analytics to service management in the same way that Facebook or LinkedIn analyze unstructured data and learn along the way. Automated analytics and machine learning at the service desk can significantly reduce ticket volumes and drive agent efficiency. This in-house capability is built right into the OpenText solution, so businesses do not have to rely on third-party integrations.

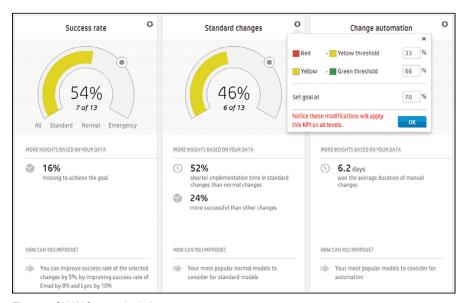


Figure 4. SMAX Change Analytics

SMAX also addresses today's need for portability and flexible, fast, and easy deployment. It uses modern container technology with managed Kubernetes for orchestration, which provides organizations with more deployment options and puts businesses, not their vendors, in control of how to run the service desk. This solution enables full data sovereignty. Plus, it offers fast time-to-value and a low TCO.

SMAX comes with a codeless process designer for fast and easy workflow development. Rapid and seamless upgrades are also part of the package. Customers follow the OpenText $^{\text{\tiny{M}}}$ quarterly cadence of service desk product releases, which helps ensure they're always using the latest version with the most innovative capabilities. SMAX is also available as a service (SaaS) from OpenText or regional service provider partners.

SMAX includes the leading CMDB and discovery of all software and hardware. Automated service modeling is an OOTB capability that applies machine learning to software title recognition and license compliance. Automation of tasks, processes, workflows, and change deployments comes standard, further simplifying the experience and enabling more effective service management.

Discover the advantages of modern ITSM with SMAX. Visit www.microfocus.com/itsm.

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