SERVICE EXPERIENCE TRANSFORMATION WITH SERVICENOW AI

Abstract

ServiceNow is a leading service management platform that began with a focus on IT service management and has recently expanded to strategic business areas. While the platform has transformed in the last few years with continued innovation, artificial intelligence (AI) is relatively new and platform is yet to embrace AI fully to drive NextGen transformation. As ServiceNow is the preferred system of records and service management tool for several organizations, there is significant potential to use AI methods to improve user experience, reduce outages and manage operations in a cost-efficient manner. This PoV explains the key building blocks for implementing AI on ServiceNow along with a reference framework and roadmap for the ServiceNow AI journey.

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Making a case for AI on ServiceNow

IT and business leaders are constantly challenged by the need to drive cost efficiencies, improve productivity and enhance the user experience. Recognizing service management as a key enabler, many organizations have invested in initiatives to transform their tool landscape, simplify processes and expand the reach of ServiceNow to areas such as HR, CSM, ITBM, etc. While these initiatives have helped organizations meet some objectives, leaders looking to drive further progress are faced with questions such as:

- How can I reduce dependency on human intervention while ensuring high user satisfaction?

- How can I manage more operations with less cost?

- How can I use analytics-driven recommendations to resolve outages faster?

- How can I deliver improved service to my business? How do I change the perception of IT?

- How do I improve forecast on investment

areas and identify potential failures to enhance the service experience and reduce cost?

Organizations continue to struggle due to human or error-prone operations, dependency on staff for rudimentary tasks, fragmented knowledge, and lack of structured data for decision-making. Today, several organizations are evaluating AI as the potential solution to meet the above demands and drive improvements in more business areas. With ServiceNow becoming the main source of information and foundation data, it is useful to introduce AI methods to ServiceNow, thereby elevating service management to the next level.

AI on ServiceNow – Key building blocks

There are several building blocks needed to create a holistic AI solution on ServiceNow. These building blocks target unique user needs while enhancing the overall service experience:

- Virtual chat agents/chatbots can seamlessly interact with end users, answer their queries, create tickets, auto-prioritize/categorize/route tickets,

and resolve issues using orchestration workflows.

- Natural language processing (NLP) can process a user's text/speech input in certain languages while integrating with virtual assistants such as Siri, Cortana, etc.

- Decision engine framework can provide accurate analytics-driven recommendations to perform IT and business tasks such as creating a change request for payroll processing.

- Machine learning algorithms can dynamically build knowledge, confidence intervals and patterns for continuous improvement.

- Intelligent search with predictive typing making it easier to find and use knowledge.

- Knowledge graphs can link information and help the decision engine to display accurate results.

- Self-healing workflows use orchestration workflows to self-heal infrastructure

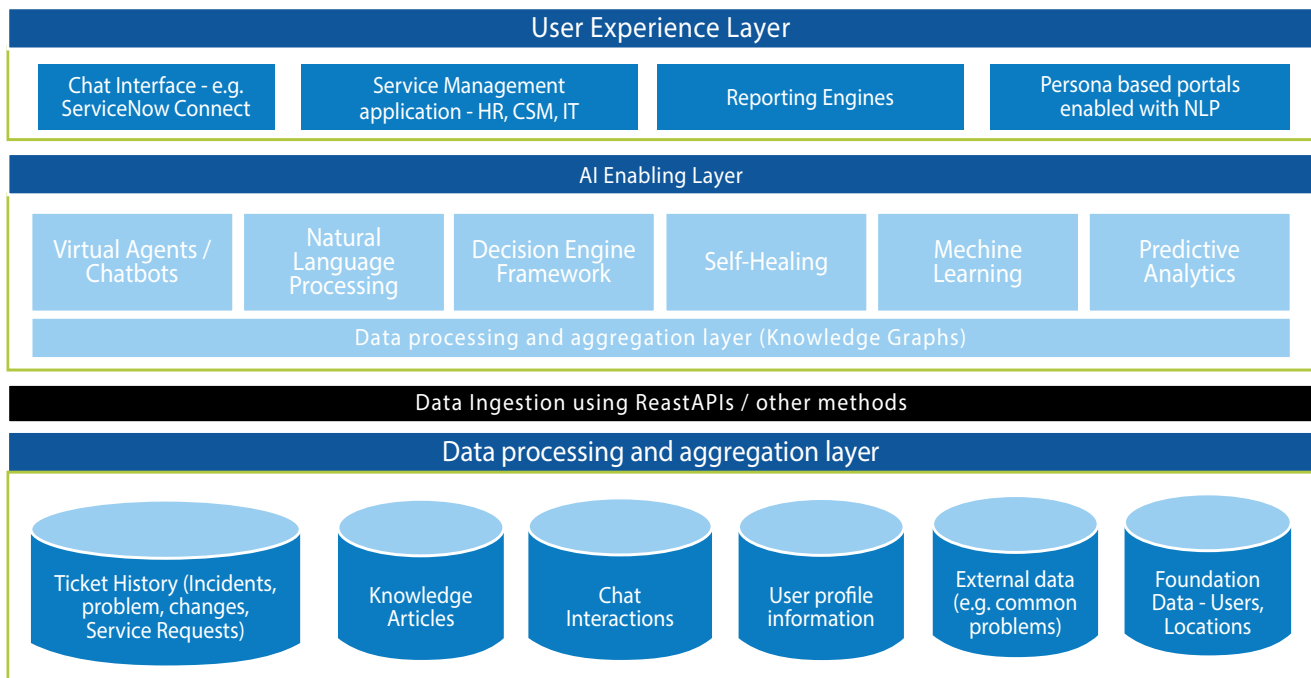- Predictive analytics can provide forecasts based on historic information.

Figure 1: Recommended ServiceNow AI Reference Framework

Roadmap for enabling AI on ServiceNow

ServiceNow offers a unique set of capabilities with each capability / module delivering value to organizations. AI building blocks can be mapped with ServiceNow capabilities to help achieve service management goals in an accelerated timeframe.

The following table shows a few examples of how different AI components can be mapped to ServiceNow capabilities.

IT service management	• Virtual agents/chatbots for connect chat • Integration with virtual assistant tools • Self-service portals enabled with Natural language processing (NLP) • Decision engine framework to provide fulfillers with information to drive resolution in a step-by-step process. • Predictions based on past learning such as forecasting a failed change based on past issues with similar changes on the Configuration items • Machine learning algorithms for dynamic knowledge build and recommendations • Auto-fulfillment of service requests by mapping with • Intelligent search capabilities • Self-healing infrastructure and workflows
IT operations management	• Predict potential services outages and impact on upstream and downstream relationships • Assist monitoring teams with better visibility of events across landscape • Correlate events to reduce noise and identify bottlenecks
Customer service management	• Virtual agents to address customer issues in a seamless manner • User satisfaction trends to drive improvements to CSAT scores • Managers get visibility to agents performance
Security operations management	• Correlate security events and reduce noise • SOC assistance for faster and more effective troubleshooting • Predictive analytics to identify vulnerabilities
HR service management	• Predict user satisfaction based on surveys and past interactions • Virtual agents resolve HR queries • Capabilities that are applicable for Service Management

Implementing AI on ServiceNow will transform daily operations across organizations. Thus, the implementation must be carefully planned and executed in order to ensure successful enterprise-wide adoption. Figure 2 outlines an approach to enable AI on ServiceNow with incremental capabilities. It also lists out a framework that demonstrates ROI improvements and well-defined metrics that measure success.
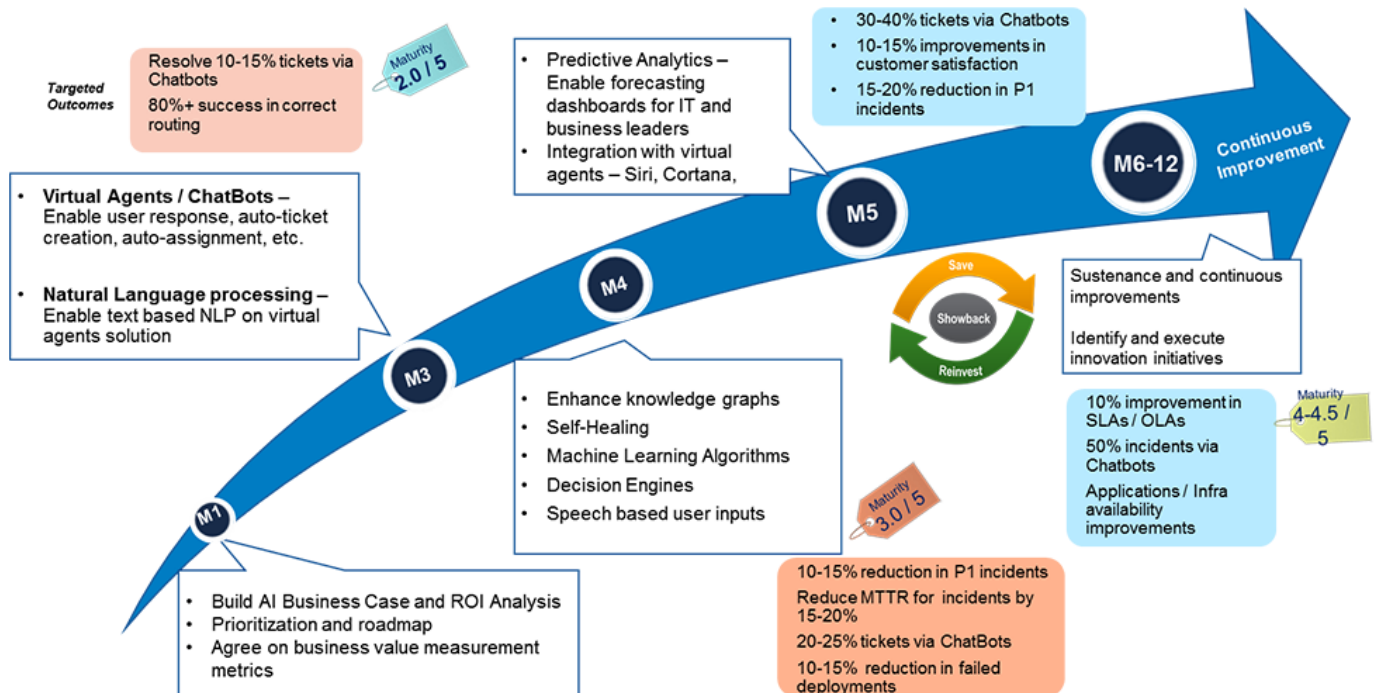

Figure 2 Approach to implementing AI on ServiceNow

Conclusion

Innovation in AI is rapidly gaining traction across the business operations landscape. However, service management is yet to embrace AI completely as an enabler of transformation. As a popular tool for service and business management, ServiceNow is the right platform to test the power of AI. ServiceNow can leverage key AI building blocks such as chatbots, decision engine frameworks, NLP capabilities, etc., and maps each of these to different service areas to achieve significant process and productivity improvements. With AI set to become a key driver of large-scale ServiceNow transformations within the next year, organizations need a comprehensive framework that will accurately measure success as well as the right implementation roadmap to improve ROI. Such an approach will help business and IT leaders achieve crucial objectives of improved user experience and reduced cost.

Authors

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Gaurav has been a part of the IT infrastructure industry for over 15 years, and has spent several years in leading large scale ServiceNow transformation programs for global organizations. Author of over ten industry publications, his area of expertise includes global ServiceNow deployments, ITOM, AI for ServiceNow, and implementing ServiceNow for non-IT functions.

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Ashish has 14 years of experience ITSM consultant with around 12 years of experience in managing IT Service Management transformation programs with focus on Cross Functional Services. Led teams and Implemented ServiceNow covering self-service portal elevating user experience focus on UI UX, Incident Mgmt., Problem Mgmt., Service Level Management, Reporting/dashboards, Change Mgmt. Asset and Configuration Mgmt. for multiple clients across US and UK and holds a Bachelor of Engineering degree in Comp. Science Ashish is ServiceNow Administrator and Implementation certified.

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