Artificial Intelligence-Driven, Cloud-based Systems Management Platforms Fill an Important Market Need

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Executive Summary

IT Operations Management (ITOM) tools supplemented by artificial intelligence are being seen by savvy IT executives as a way to embed the competitive advantages of speed and quality.

- Artificial intelligence (AI) underpins advanced ITOM tools
  - Allows for proactive/predictive troubleshooting
  - Enables quicker root-cause identification and analysis of issues
  - Helps with scaling capacity across the network
  - Reduces need for costly resources

Applying AI, in combination with cloud-based systems management platforms (CSMPs) has potential to empower the enterprise to reduce multi-cloud complexity and achieve improved user experience.

IDC expects demand for CSMPs to help drive 21% CAGR over the next 5 years in the worldwide system and service management SaaS market. Cisco’s CSMP – Intersight – embeds Cisco Digital Experience and is designed to fill this market need.
AI Underpins Digital Transformation at Most Organizations, Driving Faster Process Efficiencies

Organizations that plan to implement AI in the next 1-2 years rank the IT organization as the top beneficiary of AI; operations ranks 2nd.

Where in the organization will AI be most beneficial?

<table>
<thead>
<tr>
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<th>Ranked 1st</th>
<th>Ranked 2nd</th>
<th>Ranked 3rd</th>
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<tbody>
<tr>
<td>IT Organization</td>
<td>26%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>Operations</td>
<td>19%</td>
<td>17%</td>
<td>13%</td>
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AI is seen as a technology that can help IT organizations become more efficient and manage the increased scale of cloud-based application deployment and data. The major benefits or outcomes seen of AI in the IT organization include:

- Improve availability
- Lower IT software costs,
- Speed time to market
- A foundation for digital transformation
- Lower IT staff, hardware, and services/management costs

n=312. Source: Cloud and Artificial Intelligence Perceptions Survey 2018, IDC, January, 2018
Operational Analytics Deliver I&O Transformation AI is taking center stage in IT Operations

The majority of organizations use IT Operations Analytics (ITOA) software and/or SaaS solutions to monitor a range of security, infrastructure, database and application performance log data and expect to expand data sources by 2020.

End user experience and infrastructure capacity are top ITOA functional priorities by 2020 but scope and sophistication of ITOA analysis is expected to increase significantly (e.g. root cause analysis; proactive, predictive performance and trend analysis; statistical correlation; virtual workload placement and optimization in runtime).

Cloud-based ITOA Enables Infrastructure Management at Scale in a Multi-Cloud World

88% of enterprises expect to buy net new ITOA solutions where the top reason was 54% want to move from on-premise to cloud service ITOA.

As organizations increasingly adopt multi-cloud IT environments, cloud-based systems management platforms help:

- Automate processes
- Drive faster time to resolution
- Add a level of intelligence with machine learning and predictive analytics
- Scale to manage complex infrastructure
- Simplify through unified management

Cloud-based, Automated Digital Infrastructure Streamlines B2B and B2C Interactions

Any disruption to systems management directly impacts customer experience, **productivity**

Lack of upkeep of systems management infrastructure exposes organizations to **security vulnerabilities**

As complexity increases, **cost** to maintain rises
Multi-Cloud Complexity Requires Automation and AI solutions to Identify and Solve Problems Faster, Before Impacting the Customer

93% of organizations intend to be using multiple types of clouds within the next 12 months.

As enterprise and service provider customers embrace cloud-based architectures for production and DevOps workloads a new cloud-based systems management platform (CSMP) market has emerged.

The task of gaining deep insight into the state of the infrastructure is best left to CSMPs, especially those powered by operational analytics and machine-learning algorithms to assist IT staff.

Source: IDC CloudView 2017 Survey, n=6084
The Worldwide System and Service Management SaaS Market – of which CSMPs are a Significant Portion – is Projected to Grow to $8.8B+ by 2022 – a 21% CAGR.

AI-infused cloud based management platforms and tools aim to:

- Provide deep insights on the state of the infrastructure
- Identify troubles before they become major issues – e.g. reducing downtime
- Enable quicker “root-cause” identification and analysis of issues – e.g. improving productivity

In turn, CSMPs have the potential to address many of the inefficiencies and pain points system administrators contend with daily to improve speed and the customer experience.

Key Success Criteria and Expected KPIs for CSMPs IDC Perspective

Important Criteria for CSMPs:
- Be Secure
  » Access to portal should be granular and tiered
- Support consolidation of multiple point tools and functions
- Incorporate machine learning-based operations and predictive analytics capabilities to:
  » Analyze data at scale
  » Detect potential vulnerabilities and make proactive recommendations
  » Quickly perform root cause analysis

KPIs Associated with CSMPs
- Improved service delivery quality
- Reduced risk to the business
- Improved IT staff productivity
- Scaled capacity without additional capex investment in infrastructure to manage infrastructure
Cisco’s Cloud-based Management Platform – Intersight - Embeds Customer Digital Experience (CDX) into its Design Principals

Cisco Intersight
- Embeds automation and analytics to shift IT management from reactive to proactive
- Identifies potential issues and providing recommended remediation before they occur minimizing downtime
- Allows IT staff to focus on value-add work and improving efficiency
- Offers a consistent experience via a unified interface
Cisco’s Connected Digital Experience Vision

1. Automate data collection and routine tasks
2. Must be always on
3. Operate in a bidirectional fashion

“Make it simple to adopt and easy to use”
- Improve the user experience
- Single consolidated support portal
- Blends systems management and support services

“Don’t make customers change the way they do their business or change their processes to adapt to CDX”
Make the UI/UX “plug and play” with the objective of integrating into customers’ existing environments, and providing a cohesive view in a unified interface.
It Organizations Need to be Agile with ITOM Tools Supported by AI That Improve Customer Experience and Efficiency

**IDC Recommendations**

- Plan for creating technology capabilities—including platforms, technologies, processes, governance, talent, and data components—that will empower the enterprise.
- IT executives and operations teams must adopt ITOM tools that improve the user experience and enable them to continuously enhance the efficiency of their organization.
- **Applying AI, in combination with CSMPs has potential to empower the enterprise and achieve improved user experience.**

To learn more about Cisco’s offering in this space—Intersight, Click Here.