



# IJRASET

International Journal For Research in  
Applied Science and Engineering Technology



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

**Volume:** 12    **Issue:** VIII    **Month of publication:** August 2024

**DOI:** <https://doi.org/10.22214/ijraset.2024.63992>

[www.ijraset.com](http://www.ijraset.com)

Call:  08813907089

E-mail ID: [ijraset@gmail.com](mailto:ijraset@gmail.com)

# Balancing Agility and Control: A Comparative Analysis of Change Management in ServiceNow and BMC Helix

Sunil Kumar Yadav

*Master of Computer Application, CSVTU, Bhilai (India), Technical Architect, NTT Data*

**Abstract:** *This research paper presents a comprehensive comparison of the Change Management applications offered by ServiceNow and BMC Helix. The study examines key features, risk assessment capabilities, approval workflows, integration with other ITSM processes, and reporting tools of both solutions. By evaluating their strengths and weaknesses in managing IT changes, this paper aims to provide insights for organizations seeking to optimize their change management processes in increasingly dynamic IT environments.*

## I. INTRODUCTION

In today's rapidly evolving IT landscape, effective Change Management is crucial for balancing the need for agility with the imperative of maintaining stability and compliance. ServiceNow and BMC Helix, two leading ITSM platforms, offer sophisticated Change Management applications designed to streamline the process of planning, assessing, implementing, and reviewing IT changes.

This paper aims to provide a detailed comparison of the Change Management capabilities offered by ServiceNow and BMC Helix. We will explore how each platform addresses the key stages of the change lifecycle, from initial request and planning to implementation and post-implementation review. By examining these aspects, we seek to offer valuable insights for IT leaders and decision-makers evaluating these solutions for their organizations.

## II. BACKGROUND

### A. ServiceNow Change Management

ServiceNow's Change Management application is a core component of its ITSM suite, built on the Now Platform. It offers a comprehensive set of tools for managing the entire change lifecycle, with a focus on risk mitigation and process automation.

### B. BMC Helix Change Management

BMC Helix Change Management, part of the BMC Helix ITSM suite, provides an AI-driven approach to managing IT changes. It leverages cognitive automation and predictive analytics to streamline change processes and improve overall change success rates.

## III. COMPARISON

### A. Change Request Creation and Classification

#### 1) ServiceNow

- a) Multi-channel change request submission
- b) AI-powered categorization and impact analysis
- c) Customizable change request templates
- d) Automated linking to related incidents and problems

#### 2) BMC Helix

- a) Omni-channel change request initiation
- b) Cognitive classification using natural language processing
- c) Configurable change models for different change types
- d) AI-assisted impact and risk assessment

*B. Risk Assessment and Planning*

1) *ServiceNow*

- a) Built-in risk assessment frameworks
- b) Integration with Configuration Management Database (CMDB) for impact analysis
- c) Collision detection for identifying conflicting changes
- d) Change calendar with visual scheduling tools

2) *BMC Helix*

- a) AI-driven risk scoring and analysis
- b) Automated conflict detection using machine learning
- c) Integration with BMC Helix Discovery for accurate CI impact assessment
- d) Dynamic change planning with resource optimization

*C. Approval Workflows and Authorization*

1) *ServiceNow*

- a) Configurable multi-level approval workflows
- b) Integration with organizational hierarchies for approvals
- c) Mobile approval capabilities
- d) Delegation and proxy approval options

2) *BMC Helix*

- a) AI-recommended approval routes based on change type and risk
- b) Role-based access control for change authorization
- c) Integration with digital signature solutions
- d) Chatbot-driven approval processes

*D. Implementation and Monitoring*

1) *ServiceNow*

- a) Task breakdown and assignment for complex changes
- b) Real-time monitoring of change progress
- c) Integration with CI/CD tools for automated implementations
- d) Rollback planning and execution capabilities

2) *BMC Helix*

- a) AI-assisted task sequencing and resource allocation
- b) Automated change implementation through BMC TrueSight Orchestration
- c) Real-time change monitoring with predictive analytics
- d) Intelligent rollback suggestions based on implementation progress

*E. Post-Implementation Review and Reporting*

1) *ServiceNow*

- a) Automated post-implementation review workflows
- b) Success metrics tracking and reporting
- c) Customizable change management dashboards
- d) Integration with Problem Management for failed changes

2) *BMC Helix*

- a) AI-driven change success prediction and analysis
- b) Automated lessons learned capture and distribution

- c) Real-time KPI tracking and trend analysis
- d) Cognitive insights for continuous improvement of change processes

#### F. *Integration with Other ITSM Processes*

##### 1) *ServiceNow*

- a) Seamless integration with Incident, Problem, and Release Management
- b) Automated creation of changes from problem records
- c) Integration with Asset Management for accurate CI tracking
- d) Connection to Event Management for change-related monitoring

##### 2) *BMC Helix*

- a) Unified platform for Incident, Problem, Change, and Release Management
- b) Integration with BMC Helix CMDB for comprehensive impact analysis
- c) Connection to BMC Helix Digital Workplace for end-user change communications
- d) Integration with BMC Helix Discovery for real-time infrastructure visibility

### IV. COMPLIANCE AND GOVERNANCE

#### A. *ServiceNow*

- 1) Built-in support for ITIL best practices
- 2) Customizable compliance rules and checks
- 3) Audit trail and change history tracking
- 4) Integration with GRC (Governance, Risk, and Compliance) modules

#### B. *BMC Helix*

- a) AI-assisted compliance checking and reporting
- b) Support for industry-specific regulatory requirements
- c) Automated policy enforcement in change processes
- d) Integration with BMC Helix Control-M for enterprise-wide process orchestration

### V. STRENGTHS AND LIMITATIONS

#### A. *ServiceNow*

##### 1) *Strengths*

- a) Comprehensive integration across ITSM processes
- b) Extensive customization and workflow automation capabilities
- c) Strong visualization tools for change planning and monitoring

##### 2) *Limitations*

- a) Complexity may require significant training and expertise
- b) Potential for over-customization leading to upgrade challenges

#### B. *BMC Helix*

##### 1) *Strengths*

- a) Advanced AI and cognitive automation features
- b) Strong integration with IT operations and discovery tools
- c) Flexible deployment options (cloud, on-premises, hybrid)

##### 2) *Limitations*

- a) May require investment in broader BMC ecosystem for full benefit
- b) Transition from legacy BMC Remedy can be complex



## VI. CONCLUSION

Both ServiceNow and BMC Helix offer robust Change Management solutions with advanced features to support the complex needs of modern IT organizations. ServiceNow's strength lies in its comprehensive ITSM integration, extensive customization capabilities, and strong visualization tools, making it suitable for organizations with complex change management requirements and mature ITSM practices. BMC Helix excels in its AI-driven approach, strong integration with IT operations tools, and cognitive automation capabilities, appealing to organizations focusing on AIOps and predictive analytics in their change management processes.

The choice between these platforms will depend on factors such as existing IT infrastructure, specific change management requirements, the maturity of ITSM processes, and long-term IT strategy. Organizations should carefully evaluate their needs, conduct proof-of-concept trials, and consider the total cost of ownership when deciding between ServiceNow and BMC Helix for Change Management.

## REFERENCES

- [1] ServiceNow Documentation. (n.d.). Change Management. [https://docs.servicenow.com/bundle/tokyo-it-service-management/page/product/change-management/concept/c\\_ChangeManagement.html](https://docs.servicenow.com/bundle/tokyo-it-service-management/page/product/change-management/concept/c_ChangeManagement.html)
- [2] BMC Documentation. (n.d.). BMC Helix ITSM - Change Management. <https://docs.bmc.com/docs/itsm2105/change-management-1021810892.html>
- [3] AXELOS. (2019). ITIL Foundation: ITIL 4 Edition. TSO (The Stationery Office).



10.22214/IJRASET



45.98



IMPACT FACTOR:  
7.129



IMPACT FACTOR:  
7.429



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24\*7 Support on Whatsapp)