Hyperautomation Platform
For Autonomous Enterprises

White Paper
Automation and BOTS for Scaling Value Transformation

Technology companies have been leveraging automation for the past decade to drive outsized competitive advantages in garnering large market share with their customer offerings and turning these advantages into re-defining their internal processes to drive similar advantages. Tesla calls itself a technology company and updates its cars over the air. Uber calls itself a mobility company and knows where all its drivers are and tracks all rides globally. A lot of these paradigm shifts were possible due to automating customer products and services. The backbone of these offerings were significant investments made by these companies in large development teams that are in a continuous development and continuous integration mode. DevOps and ITOps became the bridge between the developers and customers to keep things smooth and customer experience high.

Enterprises in other industries are going through their digital transformation and adopting some of the same methodologies for their customer interactions but their internal IT operations are still not transformed to drive similar changes to the customer experience. And script based and developer dependent approaches to automation are falling short of the expectations due the lack of talent and high costs.

The advances in artificial intelligence and machine learning only compounded the problems for enterprises to leverage data insights in their transformation and automation efforts.

Existing automation approaches do not provide the transformational needs that enterprises require. They either provide limited automation of simple repetitive tasks through Robotic Process Automation (RPA) or legacy rule based automation tools that are not scalable in the data and API driven world that enterprises want to go to.

Software applications for the last decade was mostly to service human decision making and simplify/improve traditional workflows. With the rise of BOTS and BOTS economy, it is possible to rethink the enterprise architecture to include a layer of bots that will drive automation and tasks that will involve some simpler decisions that humans make today.

Botprise Hyperautomation platform is designed ground up to leverage data to drive the workflows through smartbots that will make simpler decisions and also collaborate with humans. Over time we expect other bots to communicate with and interact with these smartbots in the enterprise context.
IT Operations are Expensive

Large Enterprises spend around $6M per month on resolving L1/L2 tickets alone (200K Tickets/month). Leveraging Botprise costs are reduced by 30% and to 70% over time.

Cost per ticket (North American Average)

- **Incident Prevention**: $0
- **Self Help**: $2
- **Service Desk**: $22
- **Desktop Support**: $62
- **IT Support**: $85
- **Field Support**: $196
- **Vendor Support**: $471

Cost of Resolution increases as more human touch is involved.
Enterprise Automation Opportunities

Hyperautomation enables business process automation by combining the process flows and data between multiple applications with the decision making capabilities of artificial intelligence and machine learning. Smart bots are making the simpler decisions that humans are delegating to the bots to drive enhanced customer experience.

Hyperautomation opportunities extend across enterprise functions from IT Operations to Sales and Marketing, Finance and HR. Enterprise architecture will rapidly evolve to include the smart bots layer with hyperautomation capabilities to provide agility across multiple applications within the function and across multiple functions.

Enterprise Automation Challenges

- IT Operations are converging rapidly with increasing complexity and costs
- Complexity of multiple tools with a lot of manual steps
- Challenges in dealing with cloud, open source and legacy tool services
- Enterprise architectures are designed to human actions with limited automation of discrete tasks with RPA
- Legacy automation approaches with scripts and rule-based are failing to meet requirements
Botprise Hyperautomation Platform Overview

**Intelligent Decision Studio**
- DevOps: DevOps process mining, Integration into Cloud orchestration, Cloud Ops automation, Release cycle automation, Legacy to Cloud native ops bridge
- InfraOps: Cloud infra data mining, Intelligent Event Correlation ML Models, Cross Domain Correlation, Cloud Infrastructure log, Root cause analysis models

**DevSecOps**
- Security analytics
- Sec Ops Automation
- Security Data Enrichment

**DevOps**
- DevOps process mining
- Integration into Cloud orchestration
- Cloud Ops automation
- Release cycle automation
- Legacy to Cloud native ops bridge

**SecOps**
- Log Analytics
- Security Compliance Check Automation
- Daily check automation

**IT Ops Process Mining**
- Incident
- Change
- High volume ticket resolution
- Change automation
- Daily check automation

**Full Stack Ingestion**
- Event data
- Application Data
- Event Management automation
- Data Enrichment

**Integration Service Mesh**
- Bot and Domain Analytics
- IT Ops Process Mining
- Full Stack Ingestion
- DevSecOps
- DevOps
- InfraOps
- Bot and Domain Analytics

**Smart Workflow Studio**
- DevOps process mining
- Integration into Cloud orchestration
- Cloud Ops automation
- Release cycle automation
- Legacy to Cloud native ops bridge

**Botprise Hyperautomation Platform for IT Operations**
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Key features

Smart Bots
Smart bots learn IT operational issues and apply the right workflows to resolve them including involving human in the loop as needed for information and decisions.

Automated Operations
Botprise AI driven automation helps enterprises autonomous IT Ops and DevSecOps processes at scale both on-premise and in the cloud.

Bot and Domain Analytics
Continuously monitor, analyze and optimize smart bots performance and relevant domain analytics through analytics that deliver key KPI’s on performance.

Auto Remediation
Botprise smart bots read ticket information and other data to understand the intent to take the appropriate remediation to resolve the issue, gather/analyze relevant information or updating the user with additional information to solve the issue quickly.

Smart Workflow Studio/Intelligent Decision Studio
Operational teams can easily design their workflows with Botprise drag and drop studios using automation units (BAU) and decision units (BDU) to build complex workflows for different situations with scalable and reusable BAU and BDU.

Integration Mesh
Botprise platform is integrated with ITSM (eg: ServiceNow), Monitoring systems (eg: DataDog), collaboration (eg: Slack) tools with an open integration framework to seamlessly integrate with all your on-premises/cloud infrastructure and applications. 400+ integrations are supported!
Botprise Smartbots and Catalogs

a. Botprise Smartbots

- BDU - Botprise Decision Unit
- WF1 - Workflow Step 1
- BAU - Botprise Automation Unit
- BWU - Botprise Workflow Unit

b. Scalable Platform and Use Cases

Botprise Units:

- BDU
- WF1
- BAU
- BDU
- BWU

Smartbot Catalog:

- Smart Ticketing
- Security
- Cloud Ops
- Customer Experience
- DevOps/SRE
- Testing/QA

Benefits:

- Re Use
- Drag and Drop
- Leverage AI/ML
- Build Simple to Complex Bots
- Large Enterprise => Automation as a service
Autonomous IT Helpdesk Tickets

Smart resolution bots reduce the burden on the IT teams to go through the hoops for each of the tickets reducing the risk of ignoring the one ticket that can start a big disruption. The smartbots look at the tickets in ITSM tools like ServiceNow, classify them and trigger off the bot workflows that a typical L1/L2 engineer goes through. 60% of the tickets are resolved automatically and updated on the ticketing system to be used for future resolutions. In the resolution process smart bots perform various automation tasks and take decision like correlation, reducing alert noise, etc..

Proactive Customer Experience

Botprise smartbots read the monitoring data from end user experience systems and tools to detect the less than expected user experience for say, an application. The smartbots then analyze the issue, open a ticket in ITSM tools like ServiceNow and track the issue to proactively remediate the issue by taking appropriate actions in the allocation of resources like additional compute or restart rouge processes where possible or alert the appropriate IT Operations team member if desired.

Botprise Customer Value Addition

Our customers are realizing over 50% savings in costs and 90%+ time savings through use of Smartbots and Hyperautomation.

Automate existing workflows and data with Botprise Automaton Units – Enterprises have made significant investments in designing workflows and monitoring/security tools. However they fail to realize the benefits with lack to automated processes for driving closed loop process automation due to lack of automation between various tools with costly human involvement for even repetitive tasks

Drive precision with Botprise Decision Units – Leveraging AI/ML on the data that enterprises have around their process is challenging and Botprise Decision Units enable easy to use decision units that can be incorporated in workflows to drive precision in execution

Reduce human error and speed up execution – Over 90% of outages are due to human error and Botprise automation reduces the human error and speeds up the execution.

Enterprises generate a lot of data that is not humanly possible to be analyzed for improving customer experience and Botprise provides an easy to use, open framework and tools to leverage the data in all areas of IT Operations and DevSecOps cycle.
Autonomous Ticket Resolution

Problem statement
A large global conglomerate customer receives over ten thousand tickets in their ServiceNow ticketing system every day and IT Operations teams struggle to cope with effectively resolving them. Lot of these tickets are repetitive or false alerts and these keep the teams from doing more critical transformational work.

Outcome
Botprise smartbots autonomously resolve the tickets by reading the tickets in ServiceNow, classifying the tickets into the correct category, triggering the appropriate workflow steps to resolve each of the ticket that includes checking the validity of the alerts in the monitoring systems, etc.

- 80% Tickets resolved automatically
- 98% Tickets classified automatically
- 70% Cost Savings
A large global company has distributed workforce and applications that customers use. IT operations team faces challenges in making sure that all applications and infrastructure/cloud are functioning properly and efficiently.

In order to exceed customer experience and proactively identify issues, they use Botprise to collect data from various sources and AI/ML to proactively identify user experience issues and resolve them automatically. Global IT Operations teams are updated automatically and ITSM is updated with any identification of anomalies in user experience.
Conclusion

Botprise Hyperautomation Platform and Solutions free up expensive and high-value resources, FTEs, from more manual and repetitive tasks to put them back on the front line assisting your customers. Smartbots and Hyperautomation have the great potential to bring about significant changes in the enterprise applications and process architectures to drive significant competitive advantages and cost savings. Botprise Hyperautomation platform with Smartbots, will automate your workflows, leverage your data for driving precision to workflows, reduce human error and speed up execution of your business processes.

About the company

Botprise Inc - Hyperautomation Platform for IT Operations - We are enabling agile enterprise in Hyperautomation using smart bots with advanced AI and workflow automation.

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