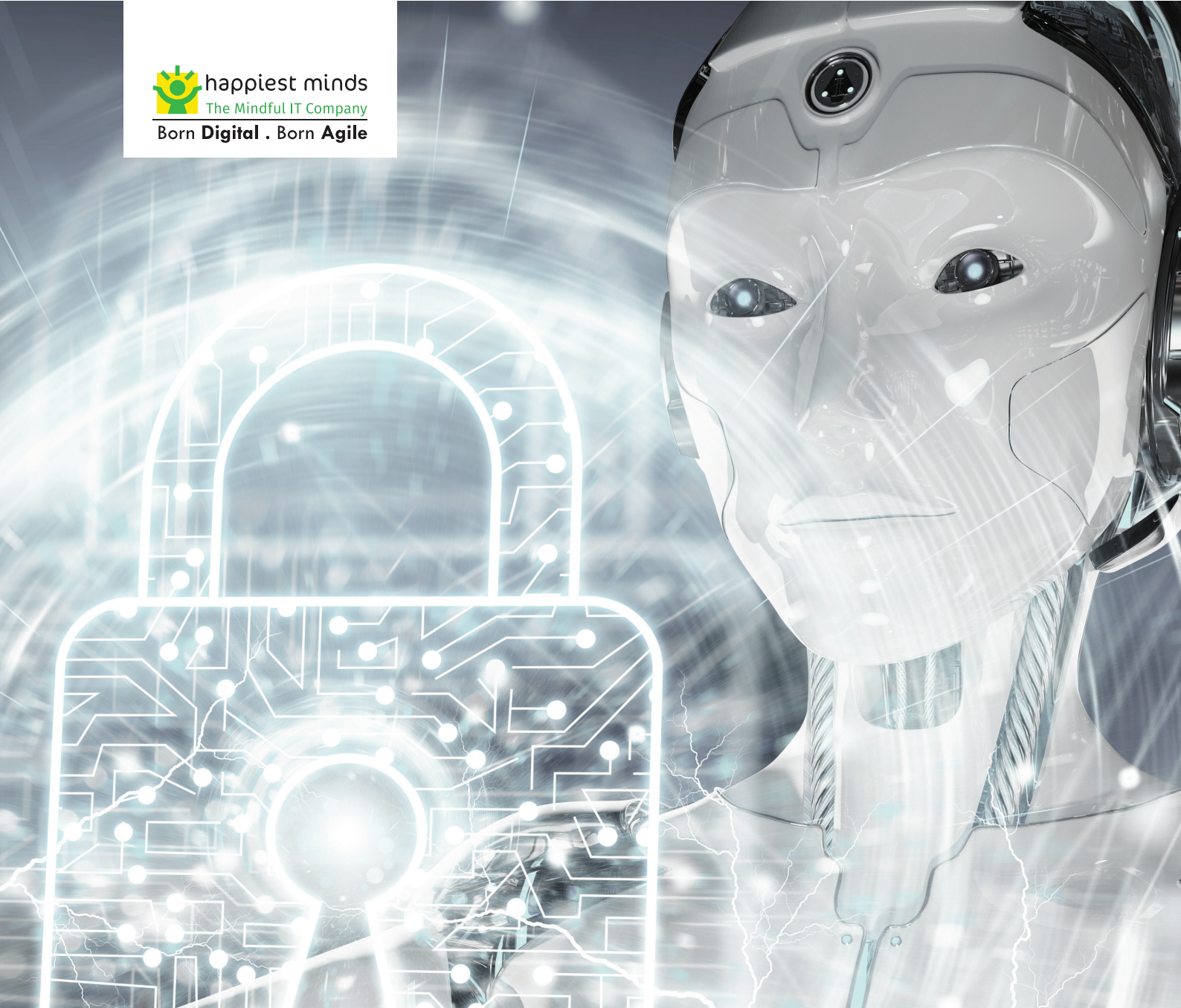




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# Automating L1 Support

A solution to CIO's ordeal



## OVERVIEW

This paper is a collection of experiences and interviews with clients to establish the top challenges that CIO's face today regarding security, scalability, and performance of their corporate end-user computing environments and how Intelligent Service Desks can help you deal with those issues. With **security** becoming a major area of rapidly growing concern due to adware, malware, phishing, and other means of cyber-crime activities, it is hard to keep up external intervention's pace into highly secure corporate networks.

This piece is a perspective to what can make every CIO nervous about their compute environments. And how Happiest Minds can help solve these challenges with new techniques resulting from time tested approaches that have been created while we were solving these typical challenges for our other clients.

Two perspectives that we would like to focus on:

A CIO's perspective to the way he looks at these challenges

An End-User's perspective to his expectations

## INSIDE A CIO'S BRIEF CASE

CIO viewpoint about the changing End-User mindset in the order of organizational priorities and impact to the business.

**Response to Security Incidents** – Protecting company information and assets is every CIO's numero uno priority. The increasing **dark web practices** and their intent to infect corporate networks to steal/disrupt business data through malware, ransomware, and phishing attacks has become a great challenge for many industries. Leveraging **Intelligent Service Desks** can reduce the impact caused by the external threat through early detection and response.

Industry averages say that 50% of the PCs in a corporate environment get infected with a virus or malware incident happens every year.

For a set of 1000 PCs, below are some of the industry statistics.

**2500**

Average # of Threat Attempts per Annum

**250**

Average # of Threats that need human intervention

**30 mins**

Time taken for Resolution per Threat

**1500 Hours**

Average # of Hours Per Annum

## Approaches to Solve:

Technology-assisted root cause analysis to establish patterns and similarity

Analytics to understand why these threats are occurring

SOP Automation to identify and resolve threats of repeatable nature

**End-User Experience** – What makes it to the forefront of all of this is End-User experience. It is every CIO's dream to transform the experience of their employees and to give a boost to their productivity. As elaborated below, today's modern worker comes with a set of high expectations to receive best in class support for their IT issues.

**Device Performance and Efficiency** – Each device generates a set of issues every year. Below are some of the industry averages impacting device management & its performance.

Per **1000** Employees = **1700** tickets / issues = That's a whopping **20,400** nudges every year

Break Up of these 20,400 tickets

**Hardware Problems**

**5%**

**Operating System**

**15%**

**Application Issues**

**15%**

**Service Requests**

**50%**

**Incidents / Break Fixes**

**10%**

**New Issues / Requests**

**5%**

## Approaches to Solve:

Technology-assisted root cause analysis to establish patterns and similarity

Analytics to understand the problems of a similar nature

Discovery and Configuration Management Database

Catalog Management to analyze and process repeatable requests faster

SOP Automation at Level 1 and workflow automation of repeatable nature

**A Modern Worker's Environment** in today's context consists of three important expectations:

**Single Pane of Glass:** End-User mindset today is to have a single interface point to discuss everything that concerns their relationship with their organization. Be it a question for HR, or a question for Payroll or to log an issue with the IT team an End-user should reach out for help in a single channel within a single pane of glass. Modern service management systems have made it possible to develop and maintain such extensions with little or no additional development effort.

**Instant Response and Resolution:** Today's modern worker wants to work more with a digital worker than a human. The mindset is changing as they know that a Digital IT Helpdesk can give them instant solutions to their issues in a matter of seconds with the comfort of a few buttons while complying with everything that would have otherwise taken many hours for a human to resolve.

**More Self Service:** Today's modern worker also wants someone to be available 24/7 for them to immediately report any IT related issue. Gone are the days where we need toll free numbers and long hours on the phone to report IT problems. With proven technology like **Chatbots** & Self-Service Portals, the End-user mindset has turned towards ease of contacting IT support teams. Most users also hesitate to approach their managers to seek approval to resolve an IT challenge and decide to let it be. Excessive approval cycles and governance leads to End-User dissatisfaction, and this has been one of the top reported challenges from an IT standpoint.



## USE CASES FOR L1 AUTOMATION

**Security Threat Response:** As explained earlier, issues like Malware detection, Antivirus Definitions updates, Bit-Locker encryption issues top the volumes when it comes to the incidents that most service desks deal with in the present condition. These Incidents are repetitive and therefore, automating these processes can impact End-User productivity through early detection, orchestration, and rapid response.

## TOP INCIDENTS USE CASES

Malware detected



Antivirus Definitions



Password Resets



Core Image Upgrade issue



Internet is slow



Bit Locker Encryption issues



Unauthorized Apps



PC is very slow



Windows Connectivity issues



PC shuts down for no reason



**Automating Service Requests:** Based on our experience with many client environments, we have also classified a set of commonly requested services by End-Users in an organization.

**Automation** of these requests will enhance internal experience and enable End Users to be independent.

## TOP SERVICE REQUESTS USE CASES

Guest Wi-Fi Access Requests



VPN Access Request



Adding URLs to Trusted Sites



New Hardware Requests



Software Installation



User ID Administration



New Application Certificates



Peripheral request management



Manage Virtual Desktops

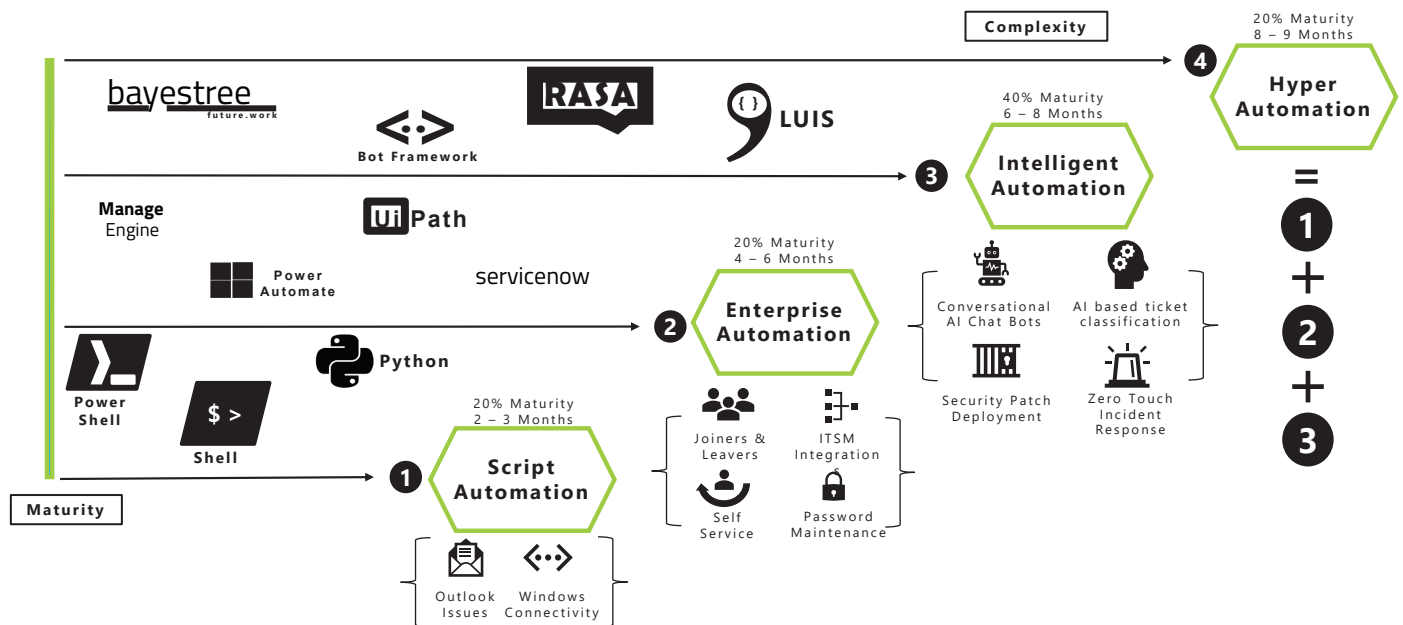


Memory Upgrades



# POTENTIAL IMPACT OF IT AUTOMATION

**Automation Outcomes:** We need to see the results of transforming a highly manual procedure into a completely automated one. Here is an example of a typical automation journey that we engage our clients and some tools and frameworks that we have prior experience. This list is not exhaustive as Happiest Minds does not prioritize selling of any tools/licenses. These are just indicative examples.



Below is an illustrative example of the outcomes other clients have been able to achieve. Our focus is to help our clients achieve higher operational efficiency gains and "Do More with very Less". We have seen our client reducing up to 20% of their team sizes, and 40% of their overall incident/request volumes annually by automating their top ten requests. It has also enhanced the End-user experience due to reduced resolution times from hours or days per request to less than just an hour to complete.

## Illustrative for a client : Automation potential in L1 tickets

### Service tickets Monthly effort (Hrs)\*

Anti Virus compliance	
Core Image Upgrade issues	
Device Encryption issues	
Password Resets	
Un-authorized Applications	

## Potential Automation Impact

~20% reduction in service desk personnel to support L1 tickets

10+ fully automated L1 ticket use cases that reduce resolution times from hrs/days to < 1 hr

Optimized resourcing

Improved user experience



\*Estimated organization size of 5000 end users with about 4500 tickets per month

## CONCLUSION

Based on our experience, we recommend implementing best practices to have a hyper automated and highly efficient Intelligent Service Desk team with:

The combined intelligence of a Chatbot that understands, and self learns

Implementing Service Catalog management to improve the efficiency of your ITSM system

Building API integrations around your ITSM environment

Implement low-cost AI Ops ideas that automate your Top 10 most frequently sought-after solutions



## ABOUT THE AUTHOR

*Karthik is a leader at the COE for Digital Automation at Happiest Minds. With over 17 years of experience behind him in the Infrastructure Operations area. He has a wide experience of having been part of Tools, Integrations and Automation. He has also led multiple high net worth transformation programs and is currently handling the Infrastructure Automation portfolio at Happiest Minds, including Service Desk, Server, Network & Security verticals.*

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### About Happiest Minds Technologies

Happiest Minds Technologies Limited (NSE: HAPPSTMNDS), a Mindful IT Company, enables digital transformation for enterprises and technology providers by delivering seamless customer experiences, business efficiency and actionable insights. We do this by leveraging a spectrum of disruptive technologies such as: [artificial intelligence](#), [blockchain](#), [cloud](#), [digital process automation](#), [internet of things](#), [robotics/drones](#), [security](#), [virtual/augmented reality](#), etc. Positioned as 'Born Digital . Born Agile', our capabilities span digital solutions, infrastructure, product engineering and security. We deliver these services across industry sectors such as automotive, BFSI, consumer packaged goods, e-commerce, edutech, engineering R&D, hi-tech, manufacturing, retail and travel/transportation/hospitality.



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