

# 5 Reasons

why your analytics initiatives are failing &

# HOW TO FIX THEM USING AI





# **5 reasons why your analytics initiatives are failing and how to fix them using AI**

## **Introduction**

**D**espite the advancements in analytics and business intelligence applications, IT teams continue to struggle to make sense of their data. That's because analytics remains the province of data experts who possess the skills to access, manipulate, visualize, and derive insights from data. In organizations where self-service analytics is employed, the results are often ineffective, and rampant with inaccuracies and biases that lead to errors. The root cause of these errors aren't poor adoption of analytics, but the all-too-common human component involved in the analysis. Leveraging the power of computers to process data through artificial intelligence (AI) provides the solution. This can be fixed by adopting AI-enabled analytics that minimizes the leg-work involved in gathering insights as well as eliminates fallacies that can be generated by human behavior.

In this e-book, we discuss five reasons why your analytics initiatives are failing and how AI can help remedy them.

# 1

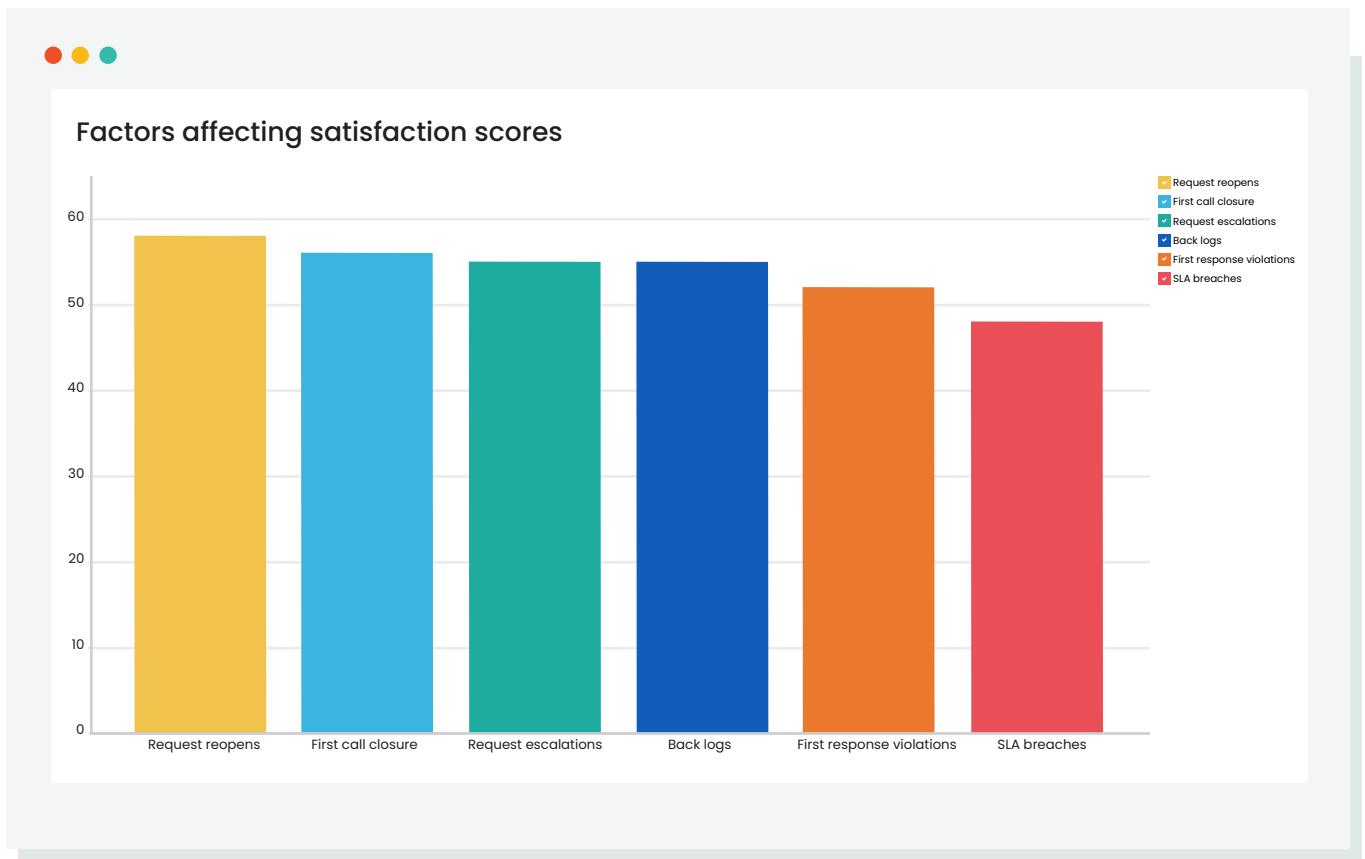
## Conformation bias

It's easy to spot a yellow car when you're always thinking about a yellow car.

Confirmation bias is the act of interpreting neutral information in a way that confirms one's existing beliefs. In the service management context, conformation bias can be disastrous, misleading leaders to focus only on positive aspects such as throughput, service-level agreements (SLAs), and customer satisfaction while completely ignoring red flags such as backlogs, reopens, and complaints.

Some of the common confirmation biases observed in the service desk context include believing that implementing a configuration management database is difficult, change management is just red tape, incidents and problems ought to be handled the same way, knowledge management is too much effort, and delivering on SLAs is the ultimate goal of the help desk.

One way to combat conformation bias is to admit it's there, and start questioning your beliefs by leveraging data. This is where AI comes into the picture. AI-based analytics eliminates cherry-picking data by using historical data to look for trends, patterns, and outliers, and thus provides accurate, bias-free results. A managed service provider looking to expand its service portfolio can benefit from AI-enabled analytics that uses sophisticated mathematical modeling techniques to identify services and products that can yield greater revenues and profit.



A service desk manager can use AI to identify areas for growth by objectively analyzing factors that impact end user satisfaction.

The report above, generated using AI, shows the factors that affect end user satisfaction. It's interesting to note that several factors, such as first response and first call closures, contribute significantly to end user satisfaction as opposed to popular beliefs that these factors don't really contribute much.

## 2

### Obtaining insights from multiple sources of truth

**IT** departments frequently deploy several applications to monitor and power the organization's IT needs. These applications don't often communicate well with one another. For instance, if you have 50 technicians working in your IT service desk, then you might see 51 versions of every report—each using data from a different data source or application so there is likely to be more than 51 different interpretations for each report. This can lead to chaos and tunnel vision.

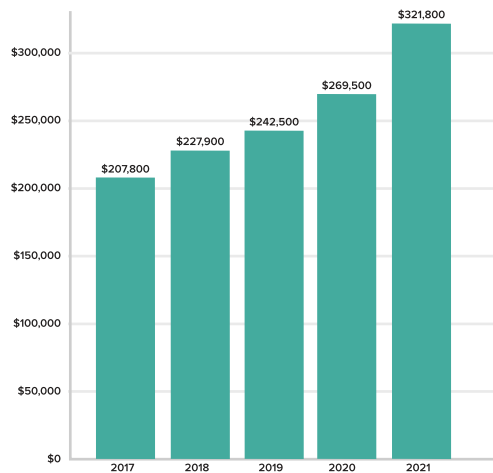
One way to combat this is using AI to not only create reports but to generate insights. By unifying data from several interconnected systems and applications, AI can effectively eliminate duplication and misrepresentation of data, and provide a single source of truth. Besides, AI can also interpret data and obtain actionable insights.

For instance, if you want to look at the IT budget spent so far, and compare it against previous years, AI-enabled analytics can give you the report report with year-to-date comparisons along with bite-sized insights that offer quick, actionable information. This is a better option than collating budget spending reports from sub-departments and individual support groups within IT that can only provide a partial picture.



### IT spend - YTD

Sort Underlying Data



Edit Design + Insights Share

### Insights

Total IT Spend YTD for each year with Time not in 2015 or 2016

#### Insights for IT Spend YTD

- ◆ Total IT Spend YTD between 2017 to 2021 was **\$1,269,500**
- ◆ Maximum IT Spend YTD of **\$321,800** was observed in 2021 and minimum IT Spend YTD of **\$207,800** was observed in 2017
- ◆ In 2020 total IT Spend YTD increased by 11% ⓘ
- ◆ Total IT Spend YTD increased by 30% from **\$207,800** in 2017 to **\$269,500** in 2020 ⓘ

# 3

## Downplaying the impact of problems

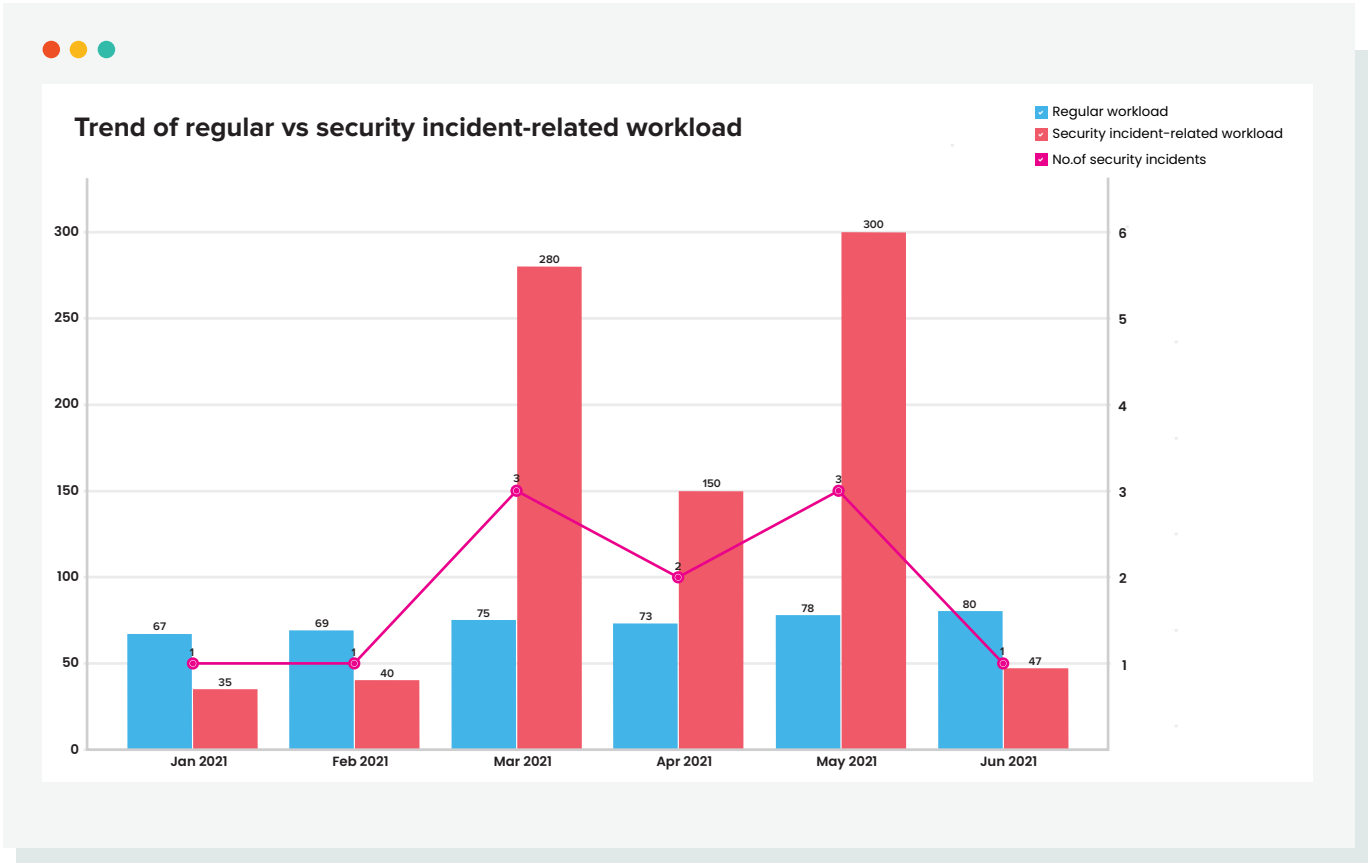
It's a human tendency to downplay losses, and present a positive picture. While this is generally good, it can be disastrous for businesses when you always present a rosy picture by covering up issues. Take for instance, the true cost of security breaches. While doing a postmortem of security breaches, organizations focus on the business impact of the security breach, and neglect to account for how it impacts other departments, namely, the service desk.

In reality, service desks witness a sharp increase in the number of incidents immediately after a security breach, and they are also the ones who're left to grapple with the aftermath of security breaches—upgrading hardware and software, or processes in the wake of a security threat. All this adds operational expenses to the service desk. These factors should be accounted for when presenting a report on the actual impact of a security breach.

The challenge of collecting data from several applications, such as data from endpoint management applications and the service desk, can be overcome using AI.

Additionally, AI can help establish meaningful relationships between data from several applications using relational data modeling and other advanced logical functions.

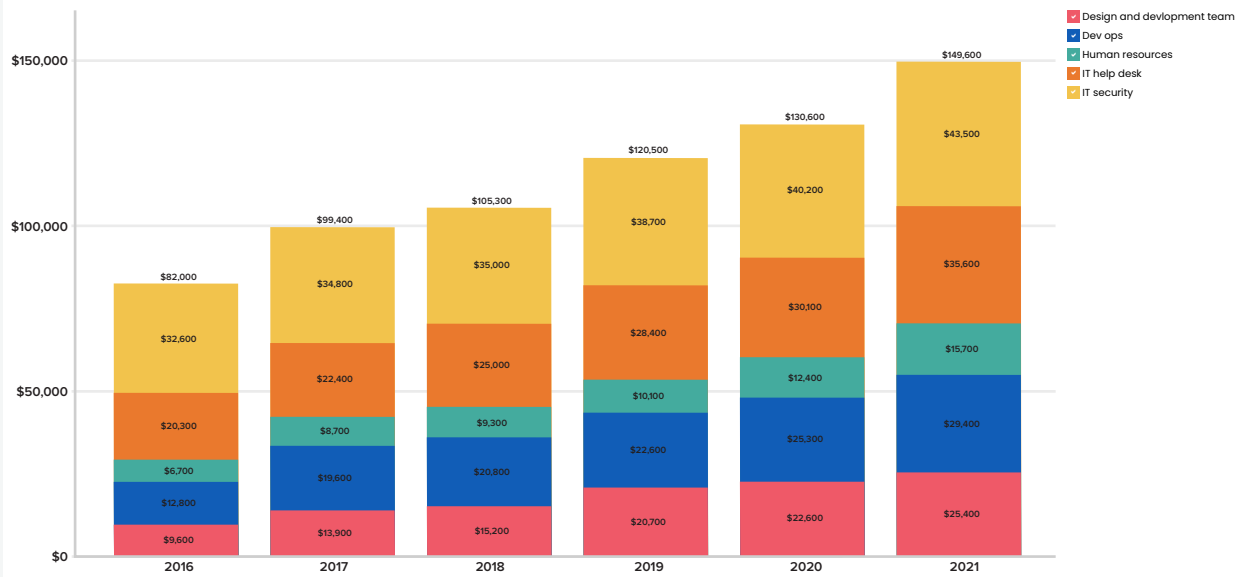
The report below shows the trend of a help desk workload composed of two components—regular service requests and incidents, and security breach-related incidents. It's evident that security breaches increase help desk workload drastically.



Here's another report that illustrates the impact of security breaches on various departments in terms of costs over a period of six years. It's interesting to note that the cost of security breaches has almost doubled for the IT help desk in the last three years.



## Financial impact of security incidents on various departments



# 4

## Choosing the right metrics for performance evaluation

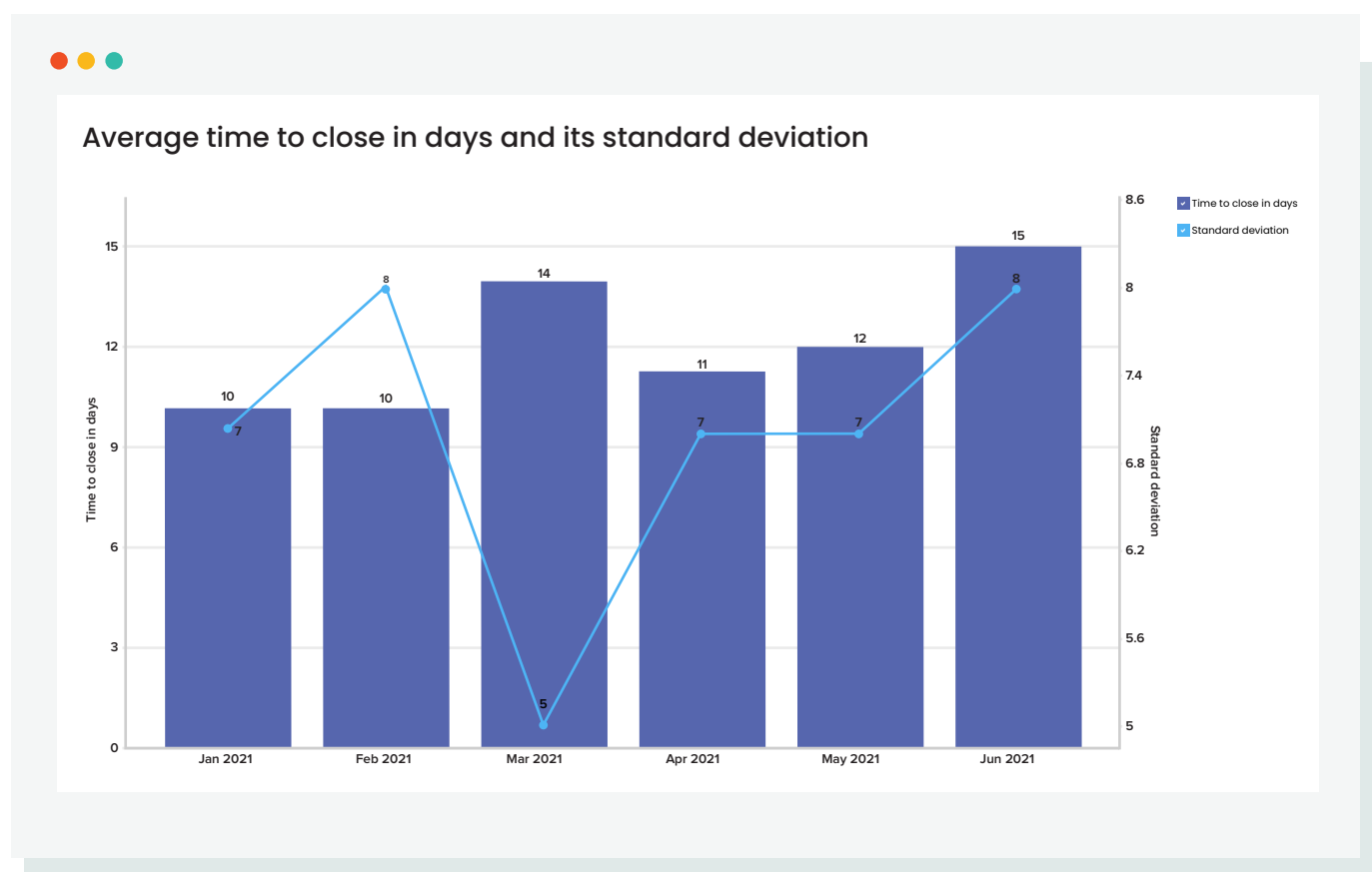
Let's say the "average resolution time per ticket" for a two-person help desk is five hours. Does this mean that each technician takes exactly about five hours to resolve a ticket? What if technician one's average resolution time is two hours while technician two's is eight hours? The average will still be five hours, and yet, the time taken to resolve a ticket by these two technicians vary greatly.

Without a clear definition of how the help desk intends to measure specific objectives, haphazard metrics are often used that create confusion rather than provide clarity into service desk objectives. AI can help add transparency to help desk operations by offering an easier way to visualize and analyze their IT data.

In the example above, standard deviation is a far more accurate way to compare individual contribution against the overall. Standard deviation is the measure of variance of individual points from the mean.

In our example, if the standard deviation value is lower, it means individual values are not far apart. That is, that the two technicians share an equal workload. Whereas if the standard deviation values are high, it means the individual values are far apart, and that the two technicians do not share an equal workload.

The report below offers a comparison of the average resolution time and its standard deviation.



# 5

## Not able to dig deeper and get the answers to questions

**A**sking the right questions and getting the right answers can put a help desk light years ahead of its peers that do not follow such practices. Asking the right questions and gaining insights can provide rich and meaningful insights, open up the world of possibilities, make way for change, provide options to reflect and collaborate, and help discover underlying problems and issues.

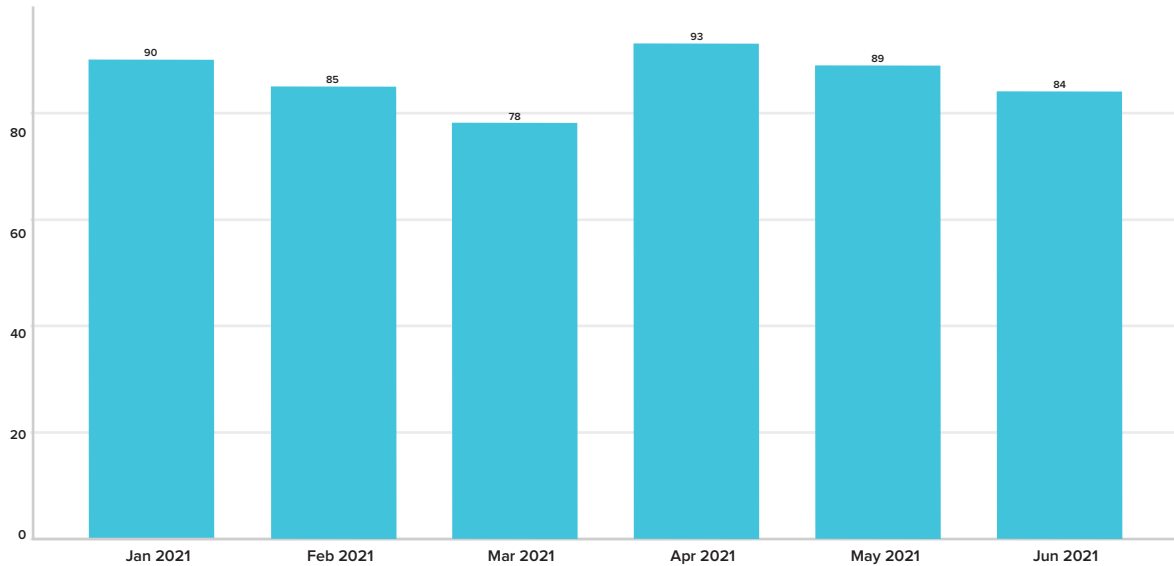
It is exactly for these reasons that you need AI in your analytics. Being able to gain insights just by asking the right questions, and then digging deeper into those answers by narrowing your questions with further questions is made possible with AI.

The example below (obtained using Analytics Plus' AI-assistant, Zia) demonstrates how AI makes it easy for users to find the root cause of emergency changes.

## Trend of emergency changes



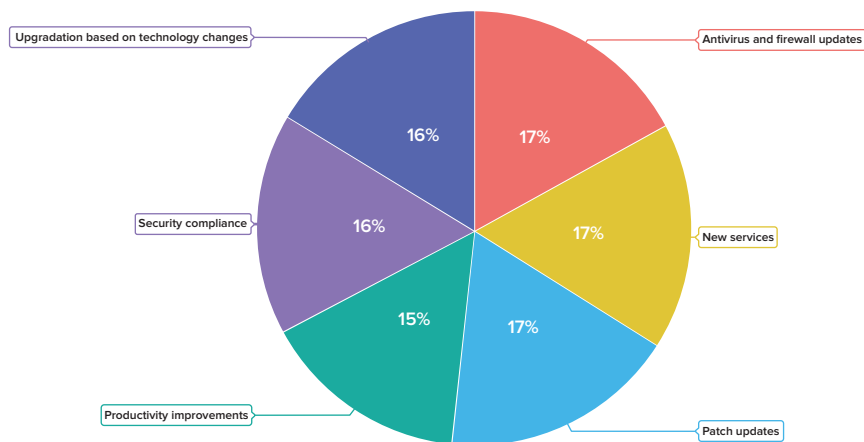
Show the trend of emergency changes



## Emergency changes by reason for change



Show me the reasons for emergency changes



## Conclusion:

AI-driven analytics offers several benefits to its users. From providing actionable insights in minutes to eliminating errors or biases in self-service analytics, the advantages are endless. If you want to see how AI-driven analytics can benefit your organization, sign up here to talk to our experts, or download a free trial today.

# About

## ManageEngine Analytics Plus

**ManageEngine Analytics Plus** is a self-service business intelligence and IT analytics solution that integrates with several popular help desk applications, such as ServiceNow, Zendesk, and **ManageEngine ServiceDesk Plus**. Analytics Plus also integrates with other IT applications used for network and application management, project management, endpoint security management, and more. Powered by AI, machine learning, and natural language processing, Analytics Plus features an AI assistant that can display stunning visual responses to voice and text comments. This ITSM solution also features capabilities such as importing data from multiple sources, data blending, trend forecasting, real-time sharing and collaboration, and advanced computing and analysis.

[Download a 30-day free trial of Analytics Plus](#) to kickstart your IT analytics journey. Want to know more about the product before giving it a try?

[Sign up for a free virtual tour with our experts.](#)

**180K**  
customers  
across the world

**18+**  
years of IT  
management experience

**90+**  
products  
and free tools

**190+**  
countries  
served

# ManageEngine Analytics Plus

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