



Impossible was  
improving customer  
engagement with  
data-driven insights

## **EPIC CHALLENGE:**

The out-of-the-box analysis capabilities of the platform were insufficient for the breadth and depth of analyses required by the company.

## **BOLD SOLUTION:**

A middleware solution to collect, analyze, and generate highly specialized and customizable reports based on a multitude of data elements.

## **BIG WIN:**

Generation of very specialized and customizable reports that are able to examine, analyze, and scrutinize, to a very high granularity, the operation and success of numerous digital communities.



## CASE STUDY

# Improving customer engagement with data-driven insights

## EXECUTIVE SUMMARY

### Who

Microsoft

### Goal

Create specialized customizable reports, dashboards, and analytics tools to continually evaluate and improve the effectiveness of the digital customer engagement platform

### Challenges

The out-of-the-box analysis capabilities of the platform were insufficient for the breadth and depth of analyses required by the company

### Solution

A middleware solution to collect, analyze, and generate highly specialized and customizable reports based on a multitude of data elements

### Results

Generation of very specialized and customizable reports that are able to examine, analyze, and scrutinize, to a very high granularity, the operation and success of numerous digital communities. This spawned a further similar collaboration with other teams within the company such as the Minecraft support team

## OVERVIEW

**Microsoft's Power BI platform is an interactive data visualization software product with a focus on business intelligence. Power BI is comprised of a complex yet elegant ecosystem of components delivering cloud-based BI services including data warehouse capabilities, data preparation, data discovery, and a multitude of interactive dashboards.**

Microsoft Power BI encompasses a flourishing set of services with ever-increasing market penetration, and as such, its user base of network administrators and systems deployers is always expanding. Microsoft has created a digital customer engagement platform where product users can connect, exchange views, share difficulties they've faced, get technical support, and find solutions to common problems. These online communities have grown to well over several million members and the sheer volume of content, interactions, collaborative exchanges, and technical support that has been accumulated is as vast as it is valuable.

## THE CHALLENGE

The magnitude of data that is accumulated in these online communities hides within it great informational wealth. But it is only valuable when analyzed, processed, and visualized appropriately. Microsoft needed an extremely powerful, customizable, and tailor-made solution that would be able to pull data from the back end of the community platform to generate reports, deliver real-time dashboards, and perform analytics. The company sought to go even further by introducing intelligence into the solution that could draw on data from other available sources, to deliver deeper insights into business operations and growth.

The ultimate goal was to be able to create a series of real-time and historical analyses that evaluated the current and future status of the Power BI community ecosystem, allowing them to fine-tune the reporting to the point where they can run their business as effectively and efficiently as possible.

## THE REQUIREMENTS

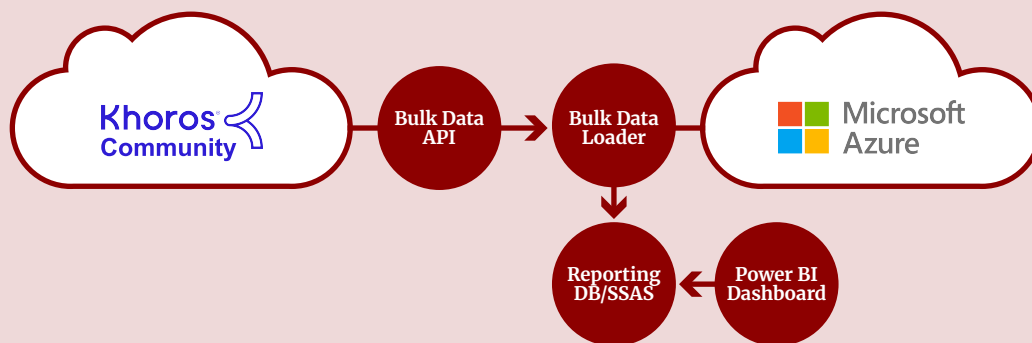
Microsoft leverages Khoros, a digital customer engagement platform to deliver these online communities. As a product, it offers basic analytics that do not deliver the kind of in-depth understanding of the intricate functioning of these online communities that Microsoft sought. The solution required a sort of middleware that could interface with the bulk data APIs made available by Khoros and draw upon data and information from other sources, as well.



## THE SOLUTION

itD created an intelligent solution that receives detailed information about content, engagement, problem resolution, and customer activity from the Khoros community and combines it with data from a multitude of additional sources such as sales and marketing.

The result is an enterprise-level reporting system delivering information about helpdesk, resolution statistics, community engagement, marketing strategy effectiveness, and user responsiveness. Generated reports can range from general birds-eye views of the operation and effectiveness of Khoros to very specific reports and analyses that help zero in on particular areas.



## ADDING INTELLIGENCE

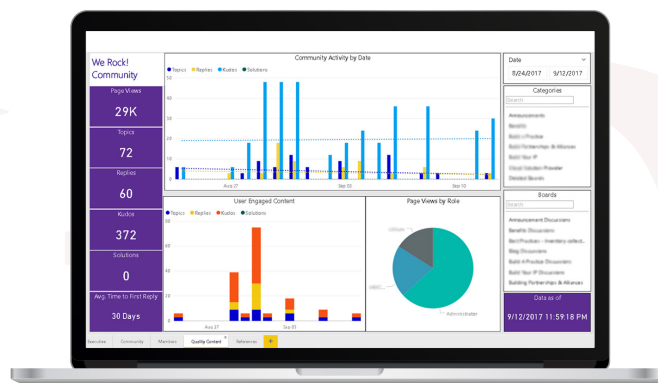
Complex algorithms were formulated to quantify things like estimated ROI. Based on metrics such as number of views and likes, number of “accepted solution” designations, and other elements, algorithms can apply a cost factor per case, based on a multifaceted set of parameters. All of this can be brought together and demonstrated through a dashboard, creating more meaningful and well-presented metrics.



Membership Overview (fictitious data for illustrative purposes)



Executive-Level Views (fictitious data for illustrative purposes)



Quality of Content & User Engagement (fictitious data for illustrative purposes)

## TECHNOLOGIES USED

- Power BI
- Power Apps
- Power Automate
- Power Virtual Agents
- Power Pages
- Azure
- SQL Server

## THE RESULTS

itD has successfully crafted a middleware solution to generate very specialized and customizable reports that are able to analyze and scrutinize, to a very high level of granularity, the operation and success of these immense digital communities, enabling Microsoft to manage its Power BI business more efficiently. This is achieved based on a multitude of data elements from multiple sources, and has resulted in:

- Clear analysis and visualization of the effectiveness of the digital engagement platform
- Creation of specialized reports to measure success in a multitude of ways
- Intelligent algorithms that can deliver insights from disparate data sets

Within the scope of this collaboration, itD was able to impart to Microsoft's support team the technical know-how to run, troubleshoot, and even further develop the analytics platform as needed.

This solution for the Power BI customer engagement platform has since been implemented elsewhere within Microsoft. For example, itD worked with the team supporting the Minecraft video game to deploy a similar system that adds BI to their Zendesk-based customer support operation. This demonstrates that itD, as a platform-agnostic solution provider, was easily able to adapt the solution to the specific needs and platforms used by different groups.

## ABOUT itD

itD is a global woman-and minority-owned software engineering and full-service tech consulting company headquartered in Silicon Valley that champions the people side of tech. We help companies achieve exceptional business outcomes through a suite of digital transformation services such as enterprise collaboration, personalization and unified search, business insights and analytics, cloud and software development, and Change as a Service (CaaS).

The team has numerous awards to its name, including 25+ Stevie® Awards, two Forrester Groundswell Awards, five Khoros Awards, two Globee® Disruptor Company of the Year Awards, two Cisco Responsible Procurement Awards, and many others.

“itD's knowledge of the Khoros platform and ability to deliver creative solutions are second to none.”  
**Program Manager, Power BI Community**

