

BT Enterprise Managed Services and NetBrain: Driving Business Outcomes for 2,000 Managed Services Clients

Quick Facts

BT Data Services

Employees: 11,300 (BT Enterprise Services)

Customer Sites: 2,000+

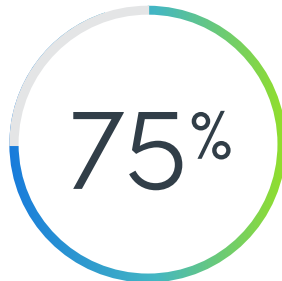
CPEs Managed: 300,000

Technologies Supported: LAN, WAN, WLAN, 5G, and others

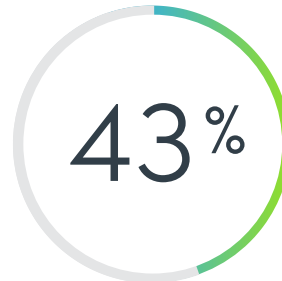
NetBrain Use Cases: Automation, MTTR reduction, automated documentation, knowledge sharings

About British Telecom

As one of the world's leading communications services companies, British Telecom (BT) serves organizations around the world, providing consumer and enterprise communications solutions across all verticals. BT's Enterprise Managed Services arm, the company's second largest, provides security, cloud, networking, and other technology services to companies of all sizes across the UK and Republic of Ireland. BT Data Services falls within this arm, providing end-to-end managed network infrastructure services.



Reduction in MTTR



Time Saved in Complex Incident Resolution

“ (With NetBrain), we can shortcut a lot of the knowledge issues or problems, that needed us to review documentation and refresh on networks that we've not seen for some time. ”

Lewis Hardy
Sr. Manager, BT Data Services

The Challenge

According to Sr. Manager Data Services, Lewis Hardy, BT Data Services sought to reduce mean-time-to-repair (MTTR) and mean-time-to-innocence (MTTI) on the 2,000+ customer networks it manages. These network accounts range from SMB to large enterprise and encompass public and private sector. Having identified network automation as a means for scaling these improvements across their shared and dedicated service models, they were looking for a means of becoming more productive and efficient and to drive better customer outcomes for every customer service request. Additionally, Hardy recounts his goal of creating a data model “that could bring network documentation to life” knowing that this deep knowledge would help solve problems more quickly.

“

...Being proactive enough to get ahead of the stuff that (customers) haven't recognized as an impact – you know, that's the next opportunity for others and that's work we're excited about ”

Lewis Hardy

Sr. Manager, BT Data Services

The Solution

According to Lewis Hardy, NetBrain checked all the boxes. NetBrain's network automation solution provided a truly end-to-end, technology agnostic platform, that could enhance the resources currently in place, and make their outcomes more predictable and measurable. In addition, NetBrain's extensible data model allowed vast amounts of external context to be stored inside its digital twin, empowering every operator to have the 360-degree view of every issue and take the most informed actions possible.

The initial goal for the deployment of NetBrain for BT Data Services' customers was to establish the network operational and performance baselines and detect when the network deviates from the baseline, helping them understand the business impact and get to the quickest possible resolution. As BT Data Services manages all types of network technology, NetBrain's standards-based openness was critical.

In BT Data Services' Proof-of-Concept, Hardy worked with the NetBrain team to establish baseline metrics to be able to compare before and after results with NetBrain. They began this process by indexing prior years' MTTR/MTTI metrics for customer accounts against after NetBrain has been deployed. Not only does this provide the basis for ROI measurement, but also ensures that learnings are captured at scale. And since NetBrain understands the concept of 'similar', learnings from one account can be applied to the others.

This type of knowledge sharing became a crucial aspect of the NetBrain value proposition to BT Data Services, especially in their shared services model where different engineers can be picking up tickets for networks that they may not have seen recently, or for the first time.

Having all the accumulated network knowledge recorded and accessible to everyone was a huge boon to all the operators and engineers who get involved in problem solving. This ultimately supported the company's customer satisfaction and retention goals. Hardy describes this as a "cascading of knowledge in an industrial way" that enables higher productivity at scale.

Furthermore, BT Data Services uses NetBrain to provide a better customer and employee experience. Given the network's importance to digital business, ensuring network uptime and fast remediation of issues, particularly P1s and P2s, is paramount to customer experience, from BT's customers to their customer's end users. Similarly, the employee experience and satisfaction for BT Enterprise technicians has been elevated. By being able to quickly and with absolute confidence declare the network's innocence, network technicians can now help customers get to the actual root problems faster and use their time much more efficiently.

The Results

BT Data Services keeps a close eye on both individual customer KPIs and incident change metrics. Today with NetBrain in place, Hardy reports BT is seeing marked reductions in MTTR. This is particularly noticeable where there are interoperability issues between third parties and multiple suppliers that lead to network issues where the impact of change and complexity of change calls create a multiplicative effect. Hardy reports seeing strong 'before and after' differences and is realizing MTTRs decline by as much as 75% in some cases. Additionally, he reports seeing a 43% improvement in complex incident resolution time, with the average duration reduced to two hours from three and one half.

In all these cases, BT can export findings from these resolved cases into simple reporting documents suitable for any audience. This assists in sharing findings with internal and external stakeholders and creates the basis for a streamlined action plan for future incidents and tickets. Hardy emphasizes that the knowledgebase they're building spans across multi-cloud hybrid networks with individual branch CPEs, as well as the behaviors of various core applications on the network across different topologies.

Centralized visibility and automation have removed the need for manual hop-by-hop troubleshooting across even very complicated paths, saving 10 to 15 minutes per each half of the path. Getting to the root cause instantly means better efficiency and scalability. Codifying what was learned in the automated network troubleshooting process and saving it into NetBrain's automation library means that the same problem will either be prevented for the future or solved even more quickly when any similar problem reoccurs.

Hardy points out that the services of the NetBrain team, from pre-sales to delivery, throughout the implementation cycle was critical to BT's success. Hardy says, "They (NetBrain) have really gotten to understand our business; they've gotten to understand our people." He adds, "the Center of Excellence type approach in terms of the projects and how we deploy it into our organization has been really refreshing and we certainly feel that their team are invested in making it successful, and I think that approach is being really key to how far we've got in this project. It's a Win-Win for everyone."

What the Future Holds

Hardy and BT are excited about how NetBrain will continue to make a difference for the operations of their managed networks. There is much power to be unlocked in not only sharing operational knowledge across the employee base, but also in their customer base. In a hypothetical example, Hardy states "These are the trends that we're seeing in customer one. Therefore, let's go and look for the same trends in customer two through 2000 and see if there's anything we need to be focused in on proactively. That's really powerful stuff from our perspective." Hardy believes the results BT is getting from NetBrain bode well for customer satisfaction and retention, and the follow-on effect of winning new customers.

BT Enterprise looks to a future where they evolve and go deeper with DevOps, AI, and automation. NetBrain is set to play a pivotal role in that story through its intent based PDAS solution. NetBrain's preventative automation capabilities are of particular interest – and how problems can be prevented before they affect business applications with its leading network intent-based technologies. Hardy foresees customers seeing tremendous value in this, as well as BT developing an increasing ability to solve problems proactively before the chance of any impact.