Coty

Coty Employs DX AIOps to Gain Service-Centric Visibility

CLIENT PROFILE

Industry: Beauty

Company: Coty

Employees: 20,000

Revenue: $9 billion a year

BUSINESS

Coty is one of the world's largest beauty companies, with products sold in over 150 countries. The company's portfolio includes cosmetic brands like COVERGIRL and Max Factor and luxury fragrance brands like Calvin Klein and Burberry.

CHALLENGE

The company relies extensively on an IT infrastructure that has continued to increase in size and complexity, which meant IT operations was contending with explosive growth in the volumes of event data generated.

SOLUTION

To address their objectives, the IT operations team is implementing DX AIOps, which offers a unique combination of robust machine learning, comprehensive automation, and efficient integration.

BENEFIT

With this solution, Coty is poised to gain advanced insights, improved operational efficiency, and enhanced agility. The solution streamlines many ongoing efforts, while helping optimize service levels.

Background

Coty makes many of the world's most popular cosmetics, beauty products, and fragrances. The company has established itself at the top of a number of segments, and has grown to become one of the largest beauty companies, generating more than $9 billion a year in revenue. The company's portfolio includes cosmetic brands like COVERGIRL and Max Factor, luxury fragrance brands like Calvin Klein and Burberry, and professional beauty product lines like Wella Professionals and Sebastian Professional. Today, Coty has approximately 20,000 employees around the world, and its products are sold in over 150 countries.

Coty represents a dynamic, large-scale, and global business—and it relies extensively on its IT infrastructure and team to keep many of the most critical processes and operations functioning optimally. When it comes to implementing and operating the tools that are used to manage this business-critical infrastructure, the responsibility falls to Dan Ellsweig, Coty's Enterprise Management Architect.

"My team is responsible for all our enterprise management tools, including supporting our existing tools as well as selecting and implementing new solutions," Ellsweig explained. "On a continuous basis, my team is tasked with monitoring infrastructure, applications, and job controls. These elements are relied upon around the clock to power many of our most critical business services, everything from wireless networks to payroll."

Ellsweig and his team have established a solid foundation, effectively implementing the tools and processes needed to support the organization, and continually enhancing the capabilities in place to adapt to changing requirements and objectives.

"When I started, there wasn't really anything in place," Ellsweig revealed. "This was a challenge, but it also represented an opportunity that many don't enjoy, which is to start with a clean slate."

An industry veteran, Ellsweig started by deploying a number of industry-leading tools, including several products from CA Technologies, a Broadcom Company. His team employs DX Infrastructure Manager for database and storage monitoring. They also use DX Application Performance Management, generating synthetic transactions to monitor end-user experience. The team has also been using DX Spectrum® (which is now part of the DX NetOps Manager suite) extensively, relying on the solution to monitor their infrastructure, including servers, virtualized environments, and networks, as well as Active Directory and Exchange environments.

"DX Spectrum has been around for 20 years, but it's still the best thing on the market," Ellsweig stated.

Challenge

Over time, the IT environment at Coty has continued to grow in size and complexity. Now, Ellsweig and his team are tasked with monitoring a large, global environment that includes 4,000 servers, and 2,000 network components. In addition, the environment is 100 percent virtualized and fully redundant.

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Dan Ellsweig
Enterprise Management Architect
Coty

The organization has become increasingly reliant upon cloud services and container-based environments. IT operations continue to grow more dynamic and see explosive growth in the volumes of event data generated.

Even with the optimized tools and processes that have been established, Ellsweig and his team needed to employ a new solution that would support a few objectives:

- **Agility**. To compete in its markets, Coty needed to innovate with increasing rapidity, and respond to and create disruption in its markets. This objective placed a continued urgency around the agility of the infrastructure.

- **Scalability**. The infrastructure needed to deliver optimal scalability in order to support the continued growth in Coty's products, brands, and markets. This objective meant efficiently supporting more data volumes, transactions, and users.

- **Efficiency**. The first two objectives had to be met without significant increases in budgets and staffing. This final objective meant Ellsweig and his team had to operate with maximum efficiency, and continue to do more with less.

Solution

To address their objectives, Ellsweig is in the process of implementing DX AIOps. While assessing the alternatives, Ellsweig found that DX AIOps offered the following key differentiators:

- **Robust machine learning**. DX AIOps offers powerful, machine-learning-driven analytics and algorithms that are optimized for IT environments. This meant the solution could provide immediate insights and value.

- **Efficient integration**. The solution offers seamless connectivity with CA tools. Ellsweig and his team can fully leverage their existing CA investments, and all the timely, accurate intelligence they deliver.

- **Comprehensive automation**. The solution offers intelligent, comprehensive automation that sets the stage for breakthrough improvements in operational efficiency.

- **Topological visibility**. The team needed AIOps tools that could do automated topology mapping. This topological context is critical in complex networks like the one Coty was operating. For example, a service might not be affected just because a network router failed. In the network, there were multiple paths for transmissions. However, the outage could put a business service at risk. DX AIOps delivers the automated topology mapping capabilities that the team required to effectively manage these complex environments.

- **Comprehensiveness and scalability**. It was vital to leverage the massive, growing, volumes of data that were generated in their environment. This data needed to be aggregated in a data lake, which is a foundational requirement for feeding machine learning mechanisms. DX AIOps offered the flexible integration, comprehensive environment support, and high performance that the team at Coty needed.

With these capabilities, DX AIOps helps the IT team deliver modern services that offer optimal scalability and flexibility. Initially, the objective was to have this intelligence guide teams and make them more effective. By harnessing the solution's machine learning capabilities, IT and operations teams gain insights to more quickly identify the source of problems, and how to best address them. Longer term, this solution helps the organization establish automated, self-healing operations.

Service-Level Visibility

It was essential for the team to move from a traditional, event-based management model to one that was more global and service-oriented in nature. Even for an operations administrator focused on the infrastructure, this move would offer insights into how an infrastructure issue might affect a business service. In this way, the team could become less reactive to events, and start more proactively managing service levels.

Executive-Level Dashboards

Now, Ellsweig is working to leverage this service-level visibility to deliver high-level views to the organization's senior management. At any given time, the environment might be generating massive amounts of device-level data, such as synthetic transaction failures or intermittent disk operations. Senior management doesn't necessarily need or want this level of detail. Instead, they want to know if a business service is running. Will the payroll application deliver paychecks on time? For management, they want to access geographical, hierarchical, service-centric views of global environments. They want to understand if services are performing, and if they're at risk of degraded performance or outages.

With DX AIOps, it is possible to deliver this visibility to senior management in a timely, intuitive, and easy- to-access manner. For example, if a partner calls the CTO to complain about an issue, the CTO can view a dashboard and see if a ticket is open, that an engineer was dispatched, and provide a timeframe for resolution. This team transparency translates to better customer service and instills more trust. Further, as opposed to requiring multiple people to drop what they're doing and follow up on the customer's inquiry, senior management can respond directly when these scenarios arise. Over time, senior management gains increasingly unified intelligence. If a manager wants to track an issue, they'll be able to drill down into the underlying infrastructure layers to get device-level details if desired.

Configuration Management Database and IT Service Management Integration

Given the comprehensive, current, and accurate data generated by CA tools, and the comprehensive data lake they've created with DX AIOps, the team is able to capitalize on a number of advantages. For example, this comprehensive data lake is used as the intelligence to feed the company's configuration management database (CMDB).

In addition, they are planning to integrate with a new IT service management (ITSM) platform. In time, they will establish automated, bi-directional communications and workflows. In the future, if an engineer opens a service request to work on a specific device, the device can be put in maintenance mode, and details fed into specific monitoring tools. As a result, the maintenance can take place without triggering any alarms—all in a fully audited, fully compliant fashion.

Implementation Success: Key Lessons and Takeaways

As Ellsweig and his team embark on the adoption of AIOps technologies and approaches, there have been several key strategies that have proven instrumental to their success.

Repeatable Onboarding Approaches

The team has well-conceived processes for onboarding new technologies. At the start, Ellsweig and his teams meet with key stakeholders and work to identify all the monitoring and service level requirements.

They start by examining what monitoring data is available. As part of this, they also establish a list of major and minor incidents. For example, they determine what events warrant an administrator being alerted at 2:00 AM and what minor incidents require a 24-hour turnaround. Based on this information, the team establishes an event catalog and run book that guides ongoing operations. From an operations perspective, they define what to do when events arise, establishing escalation and triage procedures.

All this work is done before technologies are deployed to production. For example, when the organization decided to adopt container-based approaches, Ellweig's team employed this approach to successfully onboard the new systems.

Minimize Noise

One of the most important considerations in these efforts is to be judicious when deciding what data is sent to operations, and what isn't.

"We don't try to do all things for all people," Ellsweig explained. "It is critical that we minimize event noise. We want to ensure the data being delivered offers actionable insights, and ultimately helps our team manage service levels proactively."

The advantage of DX AIOps is that targeted information can be delivered to operations teams. At the same time, massive data sets can be fed into the data lake to inform machine learning.

Maximize Data Quality

It is also critical to ensure the accuracy, currency, and veracity of data being ingested.

"If inferior, untrustworthy data made it into the data lake, we'd not be able to trust the intelligence generated by the machine learning models," Ellsweig said. "With solutions like DX Spectrum in place, we can ensure that timely, accurate, and actionable data is being fed into our data lake."

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Incremental, Non-Disruptive Approach

While these transitions were underway, it was critical to keep the existing nuts and bolts of operations and monitoring working optimally.

"Our operations teams are very good at analyzing and acting on the data our tools deliver," Ellsweig stated. "It's critical that we don't disrupt these workflows. The reality is that, if a system crashes, an administrator needs to be alerted immediately, and ideally, be notified what the cause was. For example, we need to see not only that a device has crashed, but that it crashed because its fan failed, so operators can respond quickly and efficiently. By harnessing AIOps tools, we can start to add more context around the data delivered. By providing this additional intelligence, we can we can help staff members continue to do their jobs better, without jeopardizing ongoing operations."

Toward that end, the team also makes the move to adopt automation carefully. Ellsweig has focused on starting with small use cases in order to establish and build the confidence of various teams. Through these initial efforts, teams can achieve wins, and then use these wins to articulate the benefits to the broader team and allay any concerns.

"It takes time for individuals to change their approaches and workflows," Ellsweig explained. "In rolling out these capabilities, team members have to get familiar with service-led approaches, and begin to trust the machine-generated insights."

Benefits

By turning to DX AIOps, Coty has realized a number of benefits:

- **Enhanced operational insights**. With DX AIOps, IT and operations teams gain improved, more predictive insights. For example, administrators can quickly identify that a fan failure was the cause of an issue. As the organization continues to leverage the solution's machine-learning-fueled intelligence, they become better equipped to identify the specific anomalies that occurred prior to the device failure. They can more intelligently respond to, and ultimately prevent, issues.

- **Improved operational efficiency**. DX AIOps offers a number of advantages that continue to make teams across the organization more efficient and productive. Teams can harness unified, service-level visibility, so they can better prioritize their efforts, and focus on the tasks that matter most to the business. This unified intelligence helps teams collaborate more effectively, and ultimately set the stage for automated workflows that yield breakthroughs in staff productivity.

- **Enhanced agility**. With DX AIOps, the IT team ultimately begins to streamline many ongoing efforts, while effectively ensuring optimized service levels. As a result, the team helps IT operations more rapidly respond to changing requirements and objectives. The business can respond more quickly to emerging threats and opportunities.

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Profiting From a Mutually Beneficial Partnership

Both Coty and CA have benefited from a long-term, mutually beneficial partnership. Ellsweig and his team have been working with CA and its solutions for years. They began working with CA early in the development phases of the DX AIOps solution. Through this collaboration, the development team has gained great insights into Coty's service requirements, and benefited from being able to work with the company's live event streams rather than fabricated lab data. Through this collaboration, Ellsweig and the team at Coty will ultimately benefit from enhanced products.

"Working with CA has been fun," Ellsweig revealed. "With CA, I have a level of access that I don't have with any other vendor. I can get in direct contact with engineers and executives from a number of teams whenever I need. Most importantly, the team really listens. Over the years, there have been many examples where my team has spotted new features and areas for improvement, and we've seen how our ideas have been incorporated into subsequent versions of the product."

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