A Lakeside Software White Paper

Succeed with Workspace Analytics for IT

Lakeside®

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State of Affairs

Technological developments have a way of subtly altering our perceived notion of an acceptable user experience. Take video streaming, for example. As video has become crisper and more high-definition, it can be uncomfortable to watch something from even ten years ago. We've grown accustomed to a base level of quality in all aspects of technological interactions, and that baseline steadily creeps up regardless of whether we take notice. So how do users measure the quality of their experience? By how often and to what degree things go wrong. As personal computing has improved and home devices have entered the workspace, users have gone from a distaste for new technology to becoming digital "foodies" with increasingly discerning palates.

No one senses this shift more acutely than IT professionals who are looking to meet end users' rising expectations while fulfilling their traditional technological support role. The major hurtle for IT on both fronts is that the lines are blurring between in-house IT and service providers, applications and services, and enterprise and consumer hardware. As IT loses sole ownership over the delivery and management of technology, they are left with fewer modes of visibility into their environment. This phenomenon, known as the consumerization of IT, is an inevitable result of the evolution of technology and society. IT teams have no choice but to adapt their strategies to continue to support their environments while external service providers take over the management of important functions such as application delivery and data storage through the Cloud.

The complexity between IT and service providers raises concerns for groups who understand that the quality of digital interactions between people, business processes, and technologies has a direct impact on workforce productivity. How can IT teams ensure that their environment is delivering a positive experience despite no longer directly managing business-critical technologies? By homing in on the overlap.

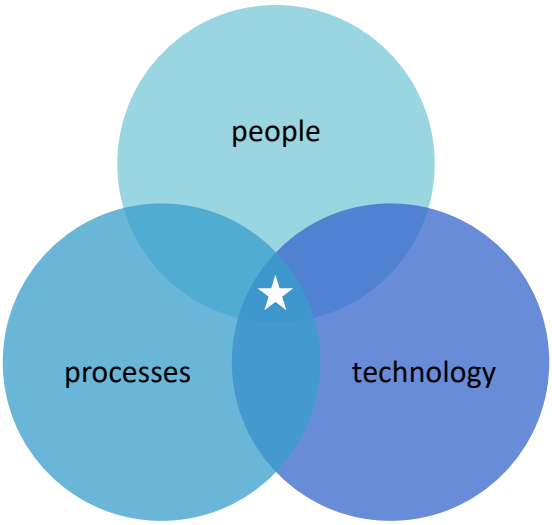

Figure 1. A model for IT success

Where these core facets of business operations align represents optimal productivity infrastructure. The greater the harmony between people, processes, and technology, the larger the space for productivity to occur. The way to unleash productivity is through initiatives targeting the overlap between these three key areas.

The "workspace" encapsulates the ways in which technology affects end users and business processes, making it the most privileged viewpoint for IT. How can IT grow this space despite decreasing modes of visibility into the end-user computing landscape? Through strategic implementation of a modern solution that quantifies the end-user experience and uses that metric as a guiding principle for IT decision making: workspace analytics.

This paper will give you an understanding of what workspace analytics is, how it can be incorporated into IT operations, and what you stand to gain from modernizing IT to keep pace with technological evolution.

Workspace Analytics

Workspace analytics is a framework for making high-level IT decisions that provides meaningful insights into business productivity by analyzing end users, the business processes that encompass their jobs, and the technologies they use to get work done. By considering IT operations as a whole component of a business engine rather than a series of isolated gears, decision makers can strategically provision time and resources to address the evolving technological needs of the modern workforce.

Gartner defines workspace analytics as "…analytics using data from an instrumented workplace to help achieve a range of objectives such as better workforce productivity and creation of new business workflows to provide a richer user experience. This is enabled through contextual delivery and discovery of information with support for new endpoints such as wearables and harnessing the convergence of people, business and things in the digital workplace."[1]

You can apply this concept into practice through utilization of a holistic workspace analytics solution, which is the tool that will help IT achieve the viewpoint necessary for optimizing the computing environment and improving the end-user experience. This solution will facilitate the discovery of actionable insights, such as what technology exists in the environment, user behavior and experience, and the state of transformation projects. As a result, a workspace analytics solution has a direct impact on IT's ability to enable business productivity.

At Lakeside Software, we have worked with thousands of clients to implement our workspace analytics solution. Our unique metric, the end-user experience score, has enabled enterprises to unify IT efforts around a high-level indicator of environmental wellness and productivity impact. The score is comprised of key performance indicators (KPIs) that can influence the end-user experience. By subtracting the amount of time that a user was

[1] Gartner, "Hype Cycle for Back-Office Analytic Applications, 2017," Alys Woodward, (July 2017), G00314730, https://www.gartner.com/doc/3763264/hype-cycle-backoffice-analytic-applications.

negatively impacted from the amount of time that they were active, a score from 0-100 is created and trended by individual user and over the entire environment.

In the case of one client, a global investments corporation, prior to implementing the end-user experience score, they didn't know which data sources to trust out of the dozens of tools they were using to perform IT operations. Looking for a quantitative metric they could depend on to accurately assess the success of IT functions, the corporation settled on Lakeside's solution. Through doing so, they found that they could measure IT performance by tracking quarterly improvements in end-user experience scoring. Going further, they enabled employees to see their own scores and compare them to the general enterprise to help users obtain a more objective view of their computing experiences. The corporation continues to rely on our workspace analytics solution to show them what's really going on in their environment, from granular problem solving to high-level trends.

As in the example above, workspace analytics brings continuous value to a business by tracking, analyzing, and optimizing the three key workspace areas (people, processes, and technology) through three foundational categories: digital experience monitoring, asset optimization, and event correlation and analysis. Each of these categories represents a distinct, but interrelated, area of consideration for measuring and improving productivity across an enterprise.

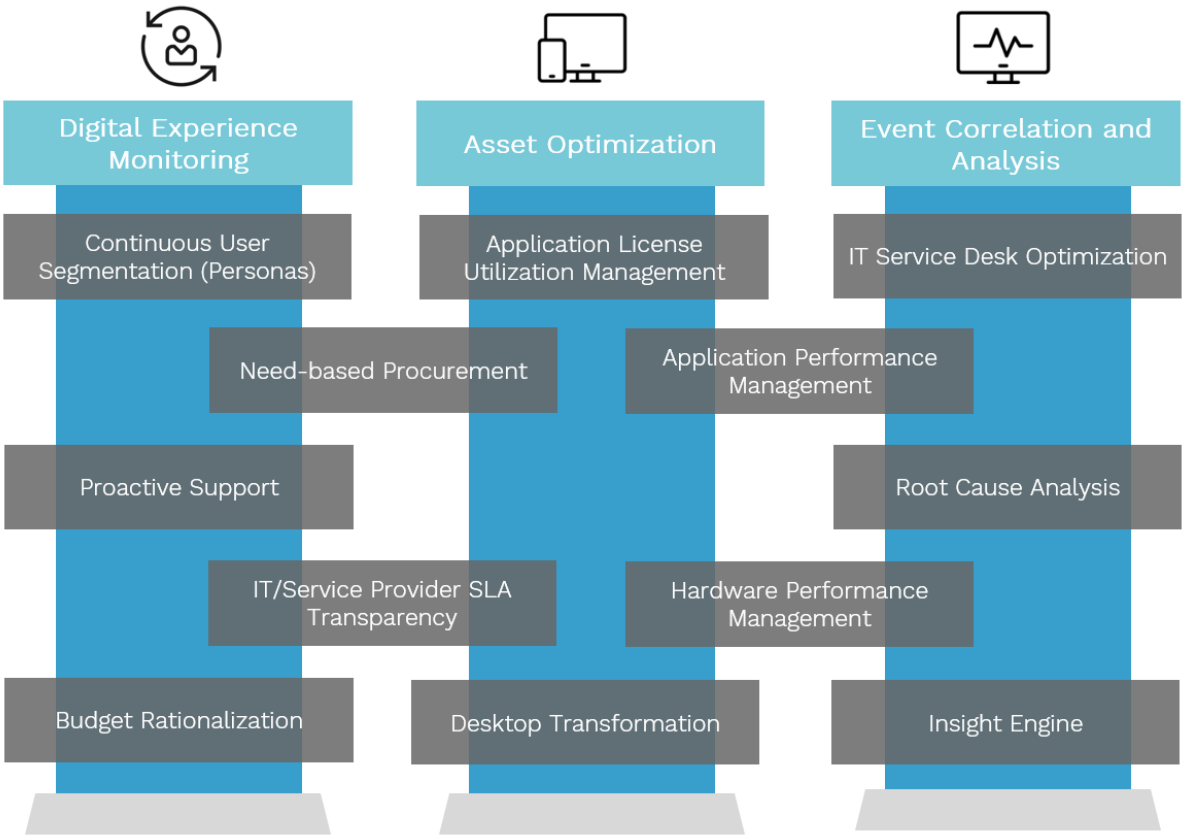

Figure 2. The pillars of workspace analytics

Digital Experience Monitoring

A growing number of businesses are incorporating digital experience monitoring (DEM) technologies, and Gartner predicts "by 2020, 30% of global enterprises will have strategically implemented DEM technologies or services, up from fewer than 5% today."[2] DEM involves the continuous collection, analysis, and visualization of data related to an end user's interactions with technology. As traditional modes of IT monitoring have started to become obsolete due to the increased adoption of SaaS and Cloud solutions as well as BYOD and greater user mobility, IT has been forced to seek new ways of gaining insight into an obscured environment. DEM is essential to a workspace analytics framework because it enables IT to regain visibility by focusing on the one metric that transcends technological evolution: the end-user experience. By quantifying and tracking the end-user experience, IT can create a baseline performance model and focus on remediation of performance degradation. A successful DEM approach seeks to understand the full scope of the user experience through the following actions:

- Continuous User Segmentation—categorizing users into observable groups based on their workstyles and mobility needs
- Need-Based Procurement—assigning technologies to users based on their individual needs
- Proactive Support—utilizing technology that intelligently alerts before a user notices an issue and automates the resolution process
- IT/Service Provider SLA Transparency—establishing quantitative measures of service and monitoring the service status of as-a-Service technologies
- Budget Rationalization—making IT purchasing decisions based on the analysis of user experience data

DEM in Practice

One of our clients, a premier Turkish financial institution, is committed to reacting to and resolving problems before they disrupt business. Here is an account from their System Architecture Director that explains how they arrived at Lakeside's solution:

> "Being able to provide proactive support required us to have very detailed information about the performance of devices, operating systems, and applications of our business users so that we could prevent and resolve as many issues as possible before they could escalate. We needed a tool that gave us visibility into what was going on in those endpoints and desktops so we could get ahead of CPU problems, memory problems, storage problems, network problems, and so on. Our charter was to troubleshoot things faster, ideally before impacted users could be aware of the issues. But we also had very specific constraints because we did not want any tool that would somehow introduce net new problems, like consuming too much bandwidth or system resources."

[2] Gartner, "Innovation Insight for Digital Experience Monitoring," Will Cappelli, (October 2016), G00316678, https://www.gartner.com/doc/3479517/innovation-insight-digital-experience-monitoring.

One way they found value in Lakeside's DEM capabilities was through implementation of continuous user segmentation. They discovered productivity improvements by provisioning optimal device and application blends for different employee workstyles. With workspace analytics, they could utilize real user data to identify ideal candidates for mobile devices, static devices, and shared workspaces.

Asset Optimization

The goal of technology in the workspace is to enable productivity, but often what we hear from users indicates that the opposite is occurring. This quickly builds frustration and can be a result of IT provisioning resources without considering the unique needs of end users. The issue is compounded when users start self-provisioning resources (Shadow IT), which can hinder IT's ability to provide a better user experience by introducing a new set of problems for IT to address. A workspace analytics approach seeks to remedy this issue by optimizing the procurement of end-user technologies. Asset optimization capabilities within workspace analytics solutions can help identify what hardware and software users need to be productive so that IT can purchase and deploy solutions according to need. Critical to this solution is the ability to take full stock of existing enterprise technology (including Shadow IT) and to eliminate incompatible and redundant technologies. The end goal of asset optimization is to improve the end-user experience by providing users with exactly what technology they need to get work done, while simultaneously optimizing IT resources and support time. Core components of asset optimization include:

- Need-Based Procurement
- Application License Utilization Management—Tracking the licenses that exist in your environment and monitoring their usage
- Application Performance Management—Monitoring the performance of applications to ensure that they are delivering a positive user experience
- Hardware Performance Management—Monitoring hardware performance and keeping systems up-to-date
- IT/Service Provider SLA Transparency
- Desktop Transformation—Actions that change users' interactions with their desktops, including VDI implementation and OS upgrades

Asset Optimization in Practice

One major sore spot in IT budgets is software license expenditures. Discovering all sanctioned and unsanctioned applications in an environment and determining which ones users need is an impossible process without a means of accessing real user data. Soon after implementing our workspace analytics suite, the IT team at a large energy manufacturing company was able to reduce the number of applications in their environment from 69,000 to 5,000. Application license utilization management functionality within asset optimization frequently presents such huge cost savings opportunities at the enterprise level.

Event Correlation and Analysis

Event correlation and analysis (ECA) is IT's time machine. By saving data collected about a system, workspace analytics solutions provide a record of what was happening on a system at any given point in time. If your house caught on fire, chances are you'd like to know why. ECA is about discovering where the smoke detectors are going off and examining the surrounding infrastructure to be able to quell the flame and, eventually, put measures in place to prevent similar incidents in the future. ECA capabilities within workspace analytics solutions have the end goal of solving IT problems quickly, and (ideally) automatically. Specific functions of ECA include:

- IT Service Desk Optimization—Reducing the number of incoming tickets through proactive support and integration with service desk tools
- Application Performance Management
- Root Cause Analysis—Investigating the origin of an issue to solve problems at a deeper level
- Hardware Performance Management
- Insight Engine—Utilization of intelligent technology that automates the discovery process
- Desktop Transformation

ECA in Practice

The IT staff at a global call center with headquarters in the U.S. needed to enable high productivity in the workspace as billable call time directly translated to revenue. Slow bootup and login times were hurting the company's bottom line, and IT needed a better way of gaining visibility into the physical and virtual systems of over 40,000 employees spread across the globe. After implementing Lakeside's workspace analytics solution, IT staff was able to identify and remediate issues in their environment. In one instance, a call center reported that virtual desktop latency was degrading productivity. Using ECA, IT discovered that the actual cause of the issue was an unsupported application that was consuming over 50% of the center's CPU. The team was then able to deploy a script to prevent users from accessing the problematic application.

A Note on Desktop Transformation

Desktop transformation encompasses what are typically thought of as arduous, but necessary projects that alter fundamental characteristics of a user's desktop to provide a better user experience. These projects may include hardware or software refreshes, OS upgrades, or a shift to VDI.

Kelsey-Seybold Clinic in the Greater Houston area initially invested in Lakeside's workspace analytics solution to accomplish a desktop transformation project. They chose to virtualize part of environment to reduce technological downtime and improve patient experiences. First, they identified user workstyles and segmented them into physical and virtual workspaces, optimizing hardware and software procurement and VDI sizing. Chris Breaux, Manager of Enterprise Technology Systems at Kelsey-Seybold stated, "As a solution, it really helped us succeed with VDI transformation as well as understand and improve user experience for physical endpoint users."

Kelsey-Seybold continues to use workspace analytics to monitor their environment and ensure the success of IT projects.

SysTrack: A Workspace Analytics Solution

SysTrack, Lakeside's industry-leading workspace analytics suite, is a comprehensive tool for monitoring and managing enterprise computing environments. Collecting over 10,000 points of user data at the endpoint every 15 seconds, SysTrack creates dynamic visualizations and reports that enable IT to understand both what is happening at the end-user level and how the environment is performing as a whole. With this knowledge, IT can improve users' digital experiences, optimize the provisioning and performance of assets, and reduce the impact of technological problems.

Lakeside's patented DataMine architecture works by installing a lightweight agent on every physical and virtual system that is invisible to the end user. Granular data is continuously gathered on every system before being periodically summarized and sent to a local SysTrack Master. By deriving data at the endpoint, SysTrack provides an accurate view into real system performance and user experiences.

With SysTrack, IT can gain full, data-driven insight into their workspace. SysTrack's analytical capabilities assist through every aspect of a workspace analytics framework and help you turn actionable data into transformative IT initiatives.

Ready to experience new levels of productivity through workspace analytics? Learn more about what SysTrack can do for your business.

References

Gartner, "Hype Cycle for Back-Office Analytic Applications, 2017." Woodward, Alys. (July 2017), G00314730. https://www.gartner.com/doc/3763264/hype-cycle-backoffice-analytic-applications.

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For More Information

For more information about SysTrack and Lakeside Software please visit us on the web http://www.lakesidesoftware.com.

Lakeside Software, Inc. – Global Headquarters
40950 Woodward Avenue, Bloomfield Hills, MI 48304 USA +1 248 686 1700

Lakeside Software Solutions Limited – EMEA Headquarters
Morgan House, Madeira Walk, Windsor, Windsor and Maidenhead, SL4 1EP, UK +44 (0) 1753 272360

Lakeside Software Pty Limited – Australia/New Zealand Headquarters
Level 17, 40 Mount Street, Sydney, NSW 2060, Australia +61 (2) 8417 2100