Employees are (also) the real succes factor in the digital era

Achieving success has traditionally been considered a matter of being competitive — traditionally this has meant “lowering your costs and increase productivity”;

— for the employee this usually means “run faster and get payed less, remember to smile”. But in the digital era, Digital Employee Experience needs to be more than just the new buzzword

In today's digital world, employees build their careers on the ever-changing opportunities presented to them. So, competitiveness requires more from companies than ever before — you need to present your corporation as attractive as possible to existing as well as future employees.

Therefore, you need to incorporate the **Employee Experience**, which includes all aspects of the relation between the employee and the employer. In the digital era it has become vital to companies to focus on the **Digital Employee Experience (DEX)** — in other words: How does your IT infrastructure meet the expectations of your workforce? The Digital Employee Experience can greatly affect employee satisfaction — positive as well as negative — and this will affect your company's competitiveness with regards to productivity as well as the ability to attract and retain a skilled workforce.

DIGITAL EMPLOYEE EXPERIENCE — HOW?

To gain insight into the **Digital Employee Experience**, first you need to flip your point of view 180 degrees and look at the IT infrastructure from where it is being used. Only by measuring at the end-user's device will you be able to tell if the experience fulfills the expectations. Meas□uring at the end-user's device provides several advantag□es you cannot get otherwise:

- Collect the sum of all infrastructure components — green lights on both server and network does not necessarily mean green lights from the end-user's point of view.
- Know in detail how many and who access your busi□ness services — this allows for much better capacity planning.
- Collect information about how the device itself per□forms — many business services run extensive pro□cessing on the end-user's device and only by collecting data from here will you be able to determine the root cause of a user's complaints.
- It's the only way to measure computer startup and login times.

With this we arrive at the definition of **Digital Experience Analytics (DEA)**. Digital Experience Analytics is an availability and performance monitoring discipline that supports the optimization of the operational experience and behavior of a digital agent, human or machine, as it interacts with enterprise applications and services. For the purposes of this evaluation, it includes real-user monitoring (RUM) and synthetic transaction monitoring (STM) for both web- and mobile-based end users.

BENEFITS FROM DIGITAL EXPERIENCE ANALYTICS

Implementation of **DEA** benefits most, if not all of your IT departments.

The **ServiceDesk** handles incoming calls from end-users. With DEA, ServiceDesk is able to quickly identify if the end-user is truly having an issue or not. If so, DEA can help identify if other end-users face the same problem and to what extent. The analysis can be done within a couple of minutes and typically it will be possible for the ServiceDesk to also determine if the problem is related to the application servers or the network. This drastically reduces the time needed to remedy the problem, as the ticket is assigned to the correct department from the beginning.

In **Application Management** the data in your DEA tool helps identify in which haystack to look for the needle and quite often it will even find the needle for you, whether this is caused by a single server, a network load balancer or a third-party cloud service.

The DEA tool holds a lot of information about the network traffic caused by the end-users accessing the business applications. This enables **Network Management** to gain insight into failing equipment as well as misconfigurations.

Change Management can use DEA to determine the effect of changes in the infrastructure. This is key for any company that aims at being **ITIL compliant**.

Outsourcing Management is able to keep track of the services delivered by outsourcing vendors. Following up with before-and-after-information is vital during transition to and from the outsourcing of business services — for the customer as well as the vendor.

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I**T Management** can use data from DEA to assess the overall performance of business applications as well as deep dive into the subcomponents if the overall SLAs have not been met. DEA is also useful for detecting trends over longer periods.

C-level Management can be informed about the overall performance of the entire IT infrastructure — as it is experienced by the end-user. With DEA you will be able to disregard people who complain for no reason as well as identify the end-users who suffer from poor performance without speaking up. This information may not be truthfully collected in questionnaires about employee satisfaction.

WHAT KIND OF SOLUTION SHOULD I GET?

It can be a huge task to keep track of all the functionalities in different tools as well as assessing which functionalities are essential for you. In this section we have described the most important areas that a tool must cover.

Server monitoring

Performance monitoring at the end-user devices should not be considered a replacement for your traditional server and network monitoring tools — these tools still come in handy when you need to troubleshoot performance issues. However, it is important to go with a tool that includes server monitoring, because having data from both the end-user device as well as the server allows for much easier analysis of what's going on. A key feature, when monitoring servers, is the ability to quickly and easily setup monitoring on any Windows Performance Counter — both the counters offered by the operation system but also application-specific counters.

Passive or active measurements?

The tool should include an agent that can collect data passively and only report what is done by the end-user on the device (Real-User-Monitoring or RUM) as well as being able to perform active measurements, also known as synthetic transaction monitoring (STM).

Passive monitoring shows the true picture of what is going on — are the end-users actually having an issue and if so, how bad is it? This takes out the guessing when dealing with performance incidents and will empower you to get back to normal operation much quicker.

This type of data also enables you to proactively identify unexpected behavior in your IT infrastructure, e.g. if users in one location are validated on a Domain Controller on another location, causing longer login times due to network latency.

Synthetic transaction monitoring STM provides the ability to know the running status of all vital functionalities in your business services 24/7 — regardless of whether users are accessing the functionalities or not.

EXAMPLES WHERE STM CAN HELP

A database is not up and running after the nightly backup:

- **STM instantly alerts you if the other database node did not take over**

This way you will be able to fix the problem before the end-users get to work in the morning

End-users complain about performance on your finance application:

- **STM monitors multiple functions within the application**

Knowing if all or only some of the functionalities are affected speeds up troubleshooting significantly

Network monitoring

The above-mentioned synthetic monitoring gives the ability to measure network latency by adding a script for this. Even better would it be if you choose a tool that allows you to measure network latency and availability as well as the network routes with built-in functionality to reduce the administration costs.

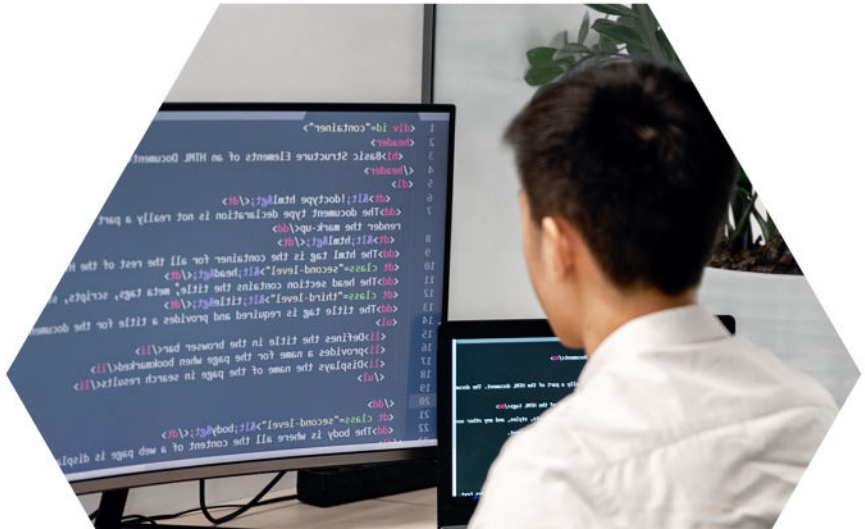
Hosting Independent

When measuring e.g. response times on an ERP system, your monitoring tool must be able to work in all combinations of hosting options: Inhouse, outsourced, or as a cloud service.

Especially when dealing with cloud services, your tool must be able to automatically adjust to the changes in where the internet service is accessed — without having to maintain this manually.

AI Thresholding

"What is a good response time?" is the most often asked question when translating the raw measurements into information about the end-user's perception.



The answer will almost always be: "Well, that depends...". Because that's what it does — it depends on a lot of different criteria that can be hard to quantify, but among others include the type of service, time of day, concurrent users and whether the system is hosted inhouse or if it's outsourced or even supplied as a cloud service.
The solution to this is AI thresholding based on machine learning

AI THRESHOLDING TAKES INTO ACCOUNT ASPECTS SUCH AS:

- From where in the network is the service accessed — network latency can greatly affect response times
- Which particular server is accessed — even in the best setups, different servers may have different performance even though they are supposed to be comparable
- Which service is accessed — servers may serve multiple roles, (for instance, an AD Domain Controller serves both Kerberos and LDAP and, in many cases, also DNS.)
- What level of performance can be expected based on previously recorded data — yesterday, last week, before outsourcing

Retention Period

'In order to spot slow-growing trends, it is important that you select a tool that keeps track of your performance for at least a year or even longer. Without the long-term data, you will lose track of the big picture.

PERFORMANCEGUARD SERVE THEM ON A PLATE

ith the end-user in focus for more than 16 years, PerformanceGuard from Capasystems offers a complete solution for Digital Experience Analytics powered by our machine learning engine with ultra-low footprint and quick implementation of all the requirements mentioned in this whitepaper

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