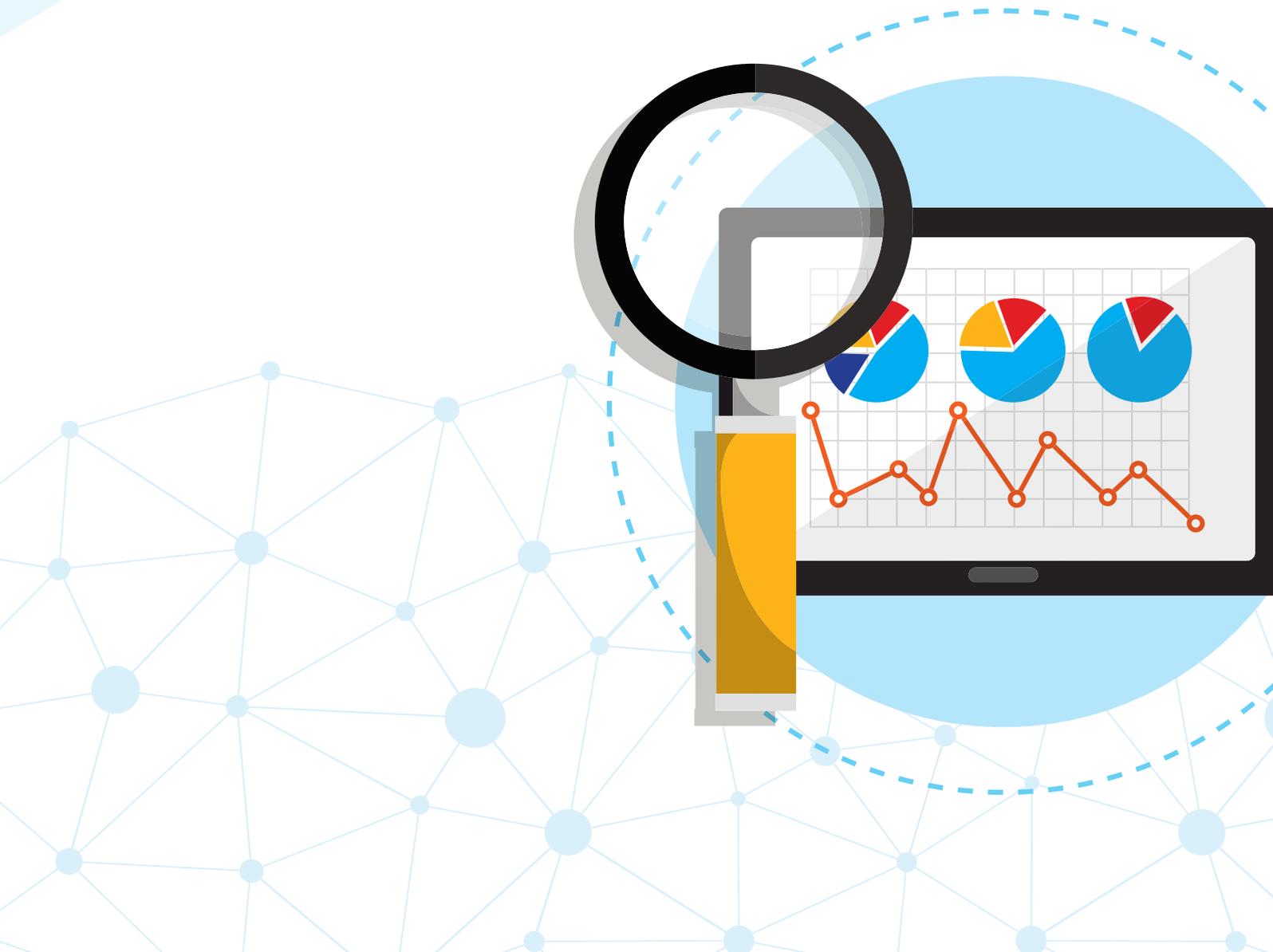# ACTIVEMONITOR

Alerts and KPI monitoring

End-to-End KPI management for effective management by exception

ActiveMonitor is a business performance monitoring solution that enables the management of situations by exception. ActiveMonitor allows your organization to measure performance against predefined goals, look for red flags and immediately react to the unexpected.

Calculated measures form the cornerstone of operational intelligence. This is a domain where ActivePivot excels because it computes sophisticated measures using large amounts of data that is updated on the fly. However, you can derive greater insights from calculated measures if you can compare them with a desired goal. That is the reason why you need Key Performance Indicators (KPI) to manage operations and detect exceptions.

KPIs are an essential component of management by exception. A KPI is the combination of a goal and a calculated measure, which delivers meaningful signals about your operations. When a KPI breaches the limits that were set, this can be a sign of an error, a disruptive or abnormal event, an unusual pattern, an outlier or a change in trend, which is worth looking at.

In finance, the most frequent form of KPI is the limit. A typical KPI example is the calculated Value at Risk of a book (i.e. the measure) and the maximum VaR limit per book (i.e. the goal). Similar monitoring is applicable for the daily Profit and Loss per trader per desk. Another example is the limit associated with each tenor of the market risk sensitivity indicator (delta, vega...)

In logistics, most KPIs exist around performance, productivity levels and utilization levels. A KPI example could be the actual percentage of goods delivered in more than four hours at any moment of the day, compared with the objective of completing 99% of all goods deliveries in less than four hours by 18:00. Another example is how actual shipment volumes measure against the minimum load factor set for trucks on specific lanes for different times of the day or month.

In e-commerce, a KPI example is the number of products with the highest conversion rate in the last 7 days, which become 5% more expensive than the next best competitor for more than 3 consecutive hours.

ActiveMonitor builds on and extends the ActivePivot in-memory aggregation engine to deliver end-to-end KPI management. ActiveMonitor provides a framework to define, monitor, and act upon Key Performance Indicators within a collaborative and controlled environment.

Define KPIs
Using ActiveMonitor, you are now able to define Key Performance Indicators to measure how your most important business metrics perform against pre-defined goals over time.

Monitor KPIs
Once a goal has been defined, ActiveMonitor monitors actual measures and detects deviations from the goal. When exceptions occur, you are proactively notified of KPI breaches or changes in KPI status.

Analyze a KPI breach
Following an alert, you are able to analyze the root cause of the KPI breach as of any point in the past, with ActiveMonitor delivering the contextual information you need to understand which combination of factors resulted in the breach.

Take relevant action
Based on this insight, you can take the appropriate course of action, adjust KPI goals within the time window of your choice – from one minute to permanently. You can also involve other relevant contributors following an escalation process that mirrors the organizational structure.
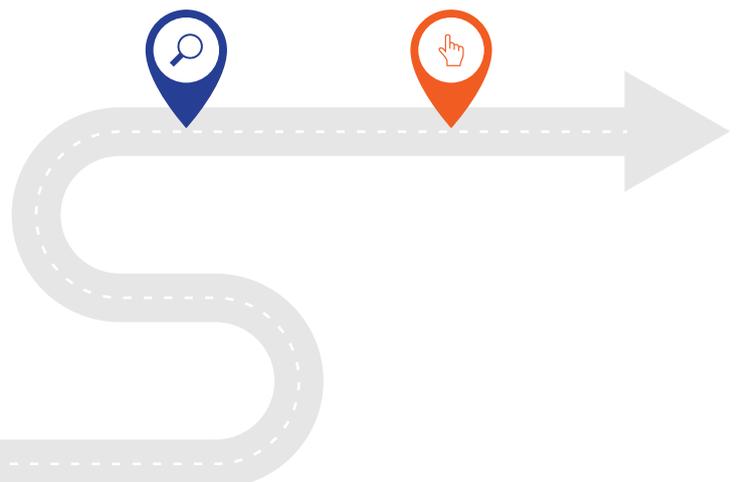
Analyze breach

Take action

Define KPIs

Monitor KPIs

Key Features

ActiveMonitor is a module of ActivePivot which is delivered as an independent component with the following functionalities:

KPI objects

A KPI is a complex object which cannot be restricted to a mere metric. ActiveMonitor's component-based approach allows you to define and manage your KPIs as rich objects. Typically you can define several properties for your KPIs, including the goal, a calculated measure, time validity, status and trend. Because KPIs are not static, ActiveMonitor allows you to adjust them over time so that they always reflect your strategic or tactical goals.

Real-time notification

ActiveMonitor integrates a rule-based engine which allows you to define the specific combination of conditions that must be met to trigger an alert in real-time. While ActivePivot processes events and updates measures on a continuous basis, ActiveMonitor adds the layer which enables the detection of KPI breaches and the subsequent user notification.

Meaningful alerts

Alerts are triggered with a specific purpose in mind. By introducing a time window in the qualification of a KPI breach, alerts are triggered only when the breach condition is observed across a predefined period of time. This avoids useless noise.

Collaboration

The collaborative process that exists around the definition and the approval of new KPIs enhances control and transparency, even in the fastest-moving environments. Mirroring what your organization wants to measure, this process ensures that meaningful KPIs are used at all times and avoids the proliferation of KPIs that are irrelevant, obsolete or simply created outside of any controlled environment.

Workflow

Actions on KPIs are taken following a multi-step escalation process that mirrors your organizational hierarchy. This ensures that multiple participants with different roles bring their individual contribution in a collaborative, yet structured environment. You can act upon KPIs in several ways: 'Approve KPI', 'Disapprove KPI', 'Adjust KPI goal, 'Comment', 'Cancel' and more. Greater control is also achieved through the ability to define a maximum time window for a given action.

Root cause analysis

Along with real-time notifications, ActiveMonitor delivers the contextual information that allows you to understand the root cause of outliers. The combination of ActiveMonitor and ActivePivot's epoch feature allows you to go back in time and to explore data snapshots at any point in the past, or within any time interval.

Audit trail

ActiveMonitor keeps track of every incident and records all corrective actions that have been taken. By keeping a detailed history of events that paved the lifecycle of a KPI, ActiveMonitor provides a reliable audit trail which you can use for regulatory reporting purposes.

KPI dashboard

You can easily view the status and the evolution of KPIs in a web interface that displays KPIs based on users' roles. Because it is fully integrated with ActivePivot, the KPI dashboard allows you to drill into the KPI underlying data and analyze the context of a KPI breach at any point in time. You can also leverage ActiveMonitor's openness to seamlessly visualize and analyze your KPIs in an Excel pivot table.

Key Benefits

▶ Measure your business performance based on meaningful KPIs

▶ Enhance operational awareness

▶ Focus on meaningful events and react to the unexpected

▶ Facilitate organizational alignment behind common goals

▶ Manage your goals and key metrics within a single analytical environment

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About ActiveViam

ActiveViam provide precision data analytics tools to help organisations make better decisions faster.

ActiveViam started in 2005 with the vision of leveraging in-memory technology to create an analytics platform where businesses could leverage the largest data sets without restrictions, keep them up-to-date in real time and use them to empower their decision makers.

Our goal at ActiveViam, is to let organisations not only make decisions faster, but better; to not only reach their data, but their potential; to not only see their data, but find their way into the future.

ActiveViam is a privately owned company with offices in Paris, London, New York, Hong Kong and Singapore.

For more information please visit:
www.activeviam.com