

EPAM'S

ANALYTICS

ACCELERATORS

FOR TIBCO SPOTFIRE

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Overview

EPAM provides extensions and accelerators for enterprise analytics to expand the capabilities of TIBCO Spotfire to accelerate adoption, increase productivity, optimize analytics and address integration and connectivity challenges.



DATA

Right data, right time, right format



SCALING

Streamline analytics to answer any question at any scale



ADOPTION

Embed analytics into everyday decisions



EMPOWERMENT

Align data, analysis, and people through collaborative systems

FPAM Guided Tour

AUTOMATED TRAINING & CERTIFICATION FOR ENTERPRISE ANALYTICS

CHALLENGE

Many organizations struggle with integrating analytics into day-to-day business operations and decision-making, despite the proliferation of technology designed to ease this process. One barrier is making new, analytically-driven applications easy for business users to adopt and understand, while giving them the confidence that the decisions they are making are founded on solid data-driven principles. For data to reach its full potential, staff needs to be trained and empowered to make data-driven, high-impact decisions.

SOLUTION

Guided Tour has been developed to tackle the challenges of analytics adoption and training enablement.

As a self-service training and certification tool that enables business analysts to prepare interactive help, training and exams to end users, it operates with highlights, pop-ups, built-in user guides, online help options and training on each page of a specific template. It is also equipped with customizable exam and certification modules to facilitate your organizational needs.

KEY FEATURES

- Story-driven guided tours and individual help screens
- Tooltips and shortcuts to access guide:
- Data value validation
- Single/multiple server environment support
- Training module
- Exam and certification module
- Cloud service accessibility

BENEFITS

ACCELERATED ANALYTICS ADOPTION

- Simplify analytical integration into the organizational culture
- Embed automated guidance into dashboards
- Standardize training quality for all users across the enterprise
- Learn through an easy-to-follow, contextualized guide on any complex analytical workflow

EXAM & CERTIFICATION

- Easily differentiate requirements among user teams
- · Personalize training and exam materials for different user groups

INTERACTIVE HELP

- Enable your employees to discover new tools on their own by providing on-demand help within the solution
- Bring templates to life by embedding rich content (e.g. videos)
- Shine light on the latest updates with built-in guides

EPAM Floating Visuals

DISAMBIGUATE YOUR REPORTS & SAVE VALUABLE SPACE

CHALLENGE

Overcrowded analytics dashboards are hard to analyze at a glance and require a lot of time and effort from business users to get insights and detailed data. Moreover, ineffective usage of the visualizations can result in high and unnecessary costs for an organization.

On top of this, a lack of visualization types is also problematic, and missing KPIs can decrease a business's ability to gain a comprehensive performance overview.

SOLUTION

With the help of EPAM Floating Visuals on top of their analytics visualizations, business authors can keep complex templates clear and focused on the most important business questions by using pop-up charts or data tables over given visuals.

The hidden visualizations are displayed when an element is highlighted in a predefined chart by hovering the mouse cursor over it. The base visual can be permanently kept visible or hidden, depending on context.

KEY FEATURES

- · Compatibility with default Spotfire visualizations
- · Multi-level pop-up visualizations
- · Adjustable visual viewability
- Nested visuals
- Custom filter panel for all floating visuals
- · Adjustable opacity on floating visuals
- Custom configuration of pop-up visuals

BENEFITS

- See the details behind a given dataset by simply hovering your mouse over the chart
- Experience easy and obvious drilldown with pop-up charts or data tables over main visuals
- Position floating windows for better visibility of underlying charts
- Easily install the accelerator with no custom parameters
- Highlight trends behind datasets without unnecessary navigation to further tabs

EPAM Visual Replacement

INTERACTIVE DASHBOARDS WITH INCREASED CLARITY & TRANSPARENCY

CHALLENGE

Space on analytics dashboards is usually limited, and there is not always enough room for showing every relevant KPI chart or detail. Too many report slides can lead to lost focus for the decision-maker, and can require too much effort when it comes to finding relevant details in an overcrowded template.

SOLUTION

EPAM Visual Replacement for TIBCO Spotfire seamlessly extends built-in Spotfire functionality and gives users the ability to switch between two or more visualizations all in one place without navigating from page to page. The extension creates a button on the selected visualization's context menu and a dropdown selector for switching between the replacement visuals.

KEY FEATURES

- Supports all default Spotfire visualizations
- Allows users to configure visuals independently from one another
- Enables shared markings and data limitations across replacement visuals

BENEFITS

- Save space for even more visuals per screen
- Drill down on visuals in an easy and obvious way
- Emphasize versatility of data with analytical guidelines
- Switch between multiple visualizations to allow better view of data
- Create simpler, sleeker-looking DXPs
- · Work with DXP files with less pages
- Improve UX on Spotfire visualizations



EPAM Visualization Widgets

BOOST ENGAGEMENT WITH SUPERIOR ANALYTICS REPORTS

CHALLENGE

Analytical template authors often struggle with finding the most impressive and engaging way to present business ideas. There is no debate about the importance of differentiation, but figuring out how to make ideas really stand out can be challenging.

SOLUTION

EPAM Visualization Widgets provides a quick, automated way of generating filters, interactive navigation and D3 Radial Charts within TIBCO Spotfire. Once installed, users will be able to stand out from the crowd with clear dashboards and colorful visualizations that help to simplify complex analyses.

Business users can easily interact with menu icons, buttons, control groupings and easy-to-use filters. Personalized content can be differentiated by directing users to dedicated analytics pages, and links can be shared to help users 'Click and Go' to find the right content at the right time.

KEY FEATURES

- D3 Radial Charts
- HTML5 navigation
- Theme setting
- Off canvas panels
- Tab panels
- Control button
- Accordion
- Dropdown lists
- Pop-ups
- Support button
- Control grouping

BENEFITS

EASY IMPLEMENTATION

 Leverage pre-defined and standardized HTML code snippets to turn self-serve BI template authors into visualization experts

IMPROVED UX

 Enhance user adoption of analytics templates by creating easy-to-use, appealing visuals

REUSABLE CODE

 Integrate reusable, easy-to-deploy code snippets into Spotfire templates for insightful visualizations

EPAM KNIME Connector for Spotfire

COMBINE THE POWER OF DATA DISCOVERY WITH HIGH-LEVEL VISUALIZATION

CHALLENGE

Manipulating or wrangling data, finding insights in large datasets, or testing and running advanced analytics algorithms pose a number of challenges for analysts. Many tools might be used and manual steps are needed to move between environments, impeding the speed of work and discovery of new insight.

SOLUTION

The EPAM KNIME Connector for TIBCO Spotfire enables business users to perform advanced analytics investigations and calculations on large data sets, data transformation via KNIME, and visualize the results in TIBCO Spotfire. By fully embedding KNIME workflows within existing Spotfire applications, the connector can eliminate manual work and errors from loading data between platforms like Spotfire and automating data refresh with data function.

KEY FEATURES

- Run configured KNIME workflows from Spotfire
- Concurrent usage of KNIME workflows
- Set workflow parameters in Spotfire
- Connect to both KNIME desktop and server
- · Automatic data refresh
- Compatible with TIBCO Spotfire 6.5+, KNIME Platform 2.10+ and TIBCO File Writer Node

BENEFITS

AGILE ANALYTICS ON MASSIVE DATASETS

- Integrate TIBCO Spotfire environment with the KNIME analytics platform
- Eliminate manual work and errors of loading data from KNIME to Spotfire
- Automate data refresh with Spotfire Data Functions
- Run analytics on massive datasets
- \bullet Easily modify visualization without rebuilding the ETL process
- Manipulate data affluently
- · Provides simple usage with no coding needed



EPAM Sharepoint Connector

STREAMLINE REPORTING WORKFLOWS WITH SECURE DATA ACCESS TO MICROSOFT SHAREPOINT

CHALLENGE

Leveraging enterprise data stored on Microsoft SharePoint inside analytics is time consuming, and can be very costly to automate. Data validation, temporary data storage and exports require the constant participation of the IT department. Enforcing strict enterprise governance when connecting Microsoft SharePoint and TIBCO Spotfire is a must for every organization.

SOLUTION

The EPAM SharePoint Connector for TIBCO Spotfire enables SharePoint data to be embedded within analytics, automates data import, ensures regular data refresh and also solves all integration challenges, such as enforcing strict enterprise security and protecting sensitive business data.

KEY FEATURES

- Native integration in TIBCO Spotfire as a custom data source
- Automated refresh when opening reports
- Support for multiple SharePoint data types (e.g. Microsoft Excel files, CSV files, Custom Lists, Calendars, Text Files, etc.)
- Support for recursive content (e.g. lists inside lists or folders inside folders) for unlimited depth
- Automation job support
- Compatible with SharePoint 2007, 2010, 2013 and SharePoint Online

BENEFITS

UNLOCK ENTERPRISE DATA

- ·Enable SharePoint data to be leveraged in TIBCO Spotfire analytics
- Retrieve deeply held data with powerful search and retrieval of lists and sub-list items

AUTOMATED DATA ACCESS

- Easily differentiate requirements among user teams
- Personalize training and exam materials for different user groups

ENTERPRISE SECURITY

 Ensure strict enterprise security standards with built-in support for various authentication methods (basic, forms, integrated Windows and SSO)

EPAM Excel Export

AUGMENT STANDARD SPREADSHEET APPLICATIONS WITH ADVANCED ANALYTICS OUTPUT

CHALLENGE

TIBCO Spotfire is a best-in-class visual analytics tool with data discovery and analytics capabilities far surpassing those of spreadsheets. However, MS Office applications represent the backbone of many traditional business processes and pushing data or analytics output in this suite, especially Excel, is not always as seamless as it needs to be.

SOLUTION

The EPAM Excel Export extension lets TIBCO Spotfire users overcome cross- platform barriers with customizable export functionality. It allows users to convert every visualization into pictures or native Excel charts, export data tables and manage them into *.xlsx files without any third party applications.

Exporting every aspect of analysis is easy with an intuitive and all-encompassing GUI. Exported data and the final layout can be fully customized, providing the most flexible exporting solution for your business.

The EPAM Excel Export allows organizations to bridge modern and traditional BI solutions, simulate real-time business scenarios from read-only dashboards and analytics, and export live Excel charts based on Spotfire visualizations.

BENEFITS

EXPORT FUNCTIONS

- Export all or active visualizations, pages, data tables or cross tables
- Export visualizations as editable Microsoft Excel charts with style settings
- Export can be started directly from page context menu

ADVANCED EXPORT

 Exported data can be formatted via advanced settings with marking and filtering

CUSTOMIZATION

Customize fonts, format, legends and labels of the exported Microsoft Excel file



EPAM 1-Click Support

RESOLVE ISSUES IN MINUTES WITH INSTANT, SEAMLESS TROUBLESHOOTING

CHALLENGE

When rolling out reports to hundreds of users, these need to be supported and maintained. Traditional helpdesk models may be suboptimal, requiring several iterations between Help Desk and users. As a result, mission-critical issues are not resolved in a timely manner, and users often have a difficult time providing feeding when Support is unaware of how their services could be improved.

SOLUTION

The EPAM 1-Click Support enables business users to share information with the support team in a quick and easy way. The Support team automatically receives the information needed to solve issues, so the user's only task is to write a description of the request.

KEY FEATURES

- Automatically collects the following attributes:
- Feedback and messages from the business user
- Browser console log
- Screenshot from the dashboard
- Auto-generated issue description
- Dashboard meta-information
- Information on the context and behaviors of the user
- · Available for integration:
- Analytics Support as a Service
- Platform as a Service

BENEFITS

IMPROVED SLAS

- Significantly reduce Level 1 Support overhead by providing all relevant information concisely
- Provide highly effective Support within an Analytics Platform as a Service
- One-click access to support with all details, integrated directly inside the analytical tool
- \bullet Mission-critical issues are addressed as quickly as possible
- $\bullet \ \mathsf{No} \ \mathsf{third}\text{-}\mathsf{party} \ \mathsf{applications} \ \mathsf{necessary}$

FPAM BI Version Control

INCREASE GOVERNANCE AROUND AUTHORING TO ENABLE TEAMWORK & COLLABORATION

CHALLENGE

Coordinating development and change of enterprise analytics work-flows is challenging due to the risk of human error and managing multiple report versions, especially if there are several contributors. Development cycles and production releases without appropriate governance can lead to mistakes in the final release, which could impact business decisions. Meanwhile, a lack of standardized development processes causes conflicts, bottlenecks to collaboration and additional time-consuming manual verification.

SOLUTION

The BI Version Control accelerator is focused on transforming the TIBCO Spotfire Platform into an enterprise-managed, version-controlled environment.

It features seamless, native integration into TIBCO Spotfire and is compatible with industry-leading versioning and revision control systems, such as Microsoft Team Foundation Server, GIT or SVN.

KEY FEATURES

- · Native integration into TIBCO Spotfire
- Version tracking, comparison, history, change log generation and ability to restore previous versions
- · Automatic user check-out and check-in on dashboards
- Detailed report comparison, history and change tracking of DXPs

BENEFITS

INCREASED EFFICIENCY

- · Close the loop between report authors
- Streamline the development lifecycle and improve quality

INTEGRATED RESOURCES

- Leverage strategic software assets through further integration and seamless operation
- Replicate and scale integrated use across service lines for full monetization of assets

BETTER GOVERNANCE

- Ensure validated reports are released to production with full control
- Eliminate risk of non-compliant reports used in regular audits

OPTIMIZED INFRASTRUCTURE

- Create a standard environment for publishing analytical reports that simplifies and reduces IT overhead
- · Increase governance and reduce IT risk

EPAM Dxp Documenter

AUTOMATE DOCUMENTATION TO STREAMLINE & GOVERN YOUR ANALYTICS PLATFORM

CHALLENGE

Many business processes – especially in regulated environments – require extensive documentation that can consume several man hours of work with little added business impact. Analytics directors are frequently challenged with increasing productivity, which means compressing the time from release to production, as well as increasing the agility and impact of their output without compromising quality.

SOLUTION

EPAM's DXP Documenter enables automated documentation of your complete analytics platform or individual dashboard to streamline and accelerate deployment processes (including development and validation) and create a governed environment.

You can use the solution to compress report deployment cycles through automatic DXP documentation and improve performance by pinpointing unused data tables, columns and calculations in Spotfire templates.

KEY FEATURES

The solution automatically collects the following information

- Document properties, meta-data, pages, data tables, pages and calculations
- Unused data and column information
- Columns and expressions (supporting all column and expression types)
- Data functions
- Scripts (Iron Python and Java Scripts)
- Visualization screenshots
- Visualization details
- HTML Text Area contents, action and filter controls, and custom content
- Datasets used on each page
- Marking and active filter information

BENEFITS

AUTOMATED DOCUMENTATION

- Automate documentation of standard reports or the complete analytics platform
- Improve performance by pinpointing unused data tables and columns, and simplify maintenance

SUPPORT GOVERNANCE

- Enforce adherence to company documentation standards
- Feel confident rolling out documented releases without risk of human errors

STREAMLINE ROLLOUT & DEPLOYMENT

 Enjoy one-click documentation from reports to save up to 90% of the time normally spent on report documentation

EPAM SQL Writeback

VERSATILE DATABASE ACCESS WITHIN A STREAMLINED ANALYTICS ENVIRONMENT

CHALLENGE

Scenario mapping and collaboration between business groups is an essential part of business decision-making, yet some elements of these workflows are not always available in BI platforms. Furthermore, saving modified dashboard visuals or data to the database can require manual effort and extended user rights and programming skills, which can lead to additional specialist overhead.

SOLUTION

EPAM SQL Writeback for TIBCO Spotfire allows insertion, modification and writeback of data to the database without writing a single line of code. Scenario planning, simulation results or focused data cleansing can be saved back to the database quickly and easily, allowing simple retrieval by collaborators.

KEY FEATURES

- · Save data from visual to SQL or Oracle Database
- Save multiple tables with one click from the tools menu
- Insert records in the SQL database directly
- · Save data using custom stored procedures
- Fully control saved data distribution
- Batch save execution on stored procedure level
- Execute store procedures for tasks in the database

BENEFITS

CONNECT, MODIFY & SAVE

- Write back data to enterprise databases, like Oracle and SQL, without programming skills
- Save valuable business insights from users directly to the database
- Easily integrate data with existing stored procedures
- · Control the distribution of saved data
- Connect Spotfire apps

INTEGRATE & INNOVATE

 Integrate EPAM SQL Writeback with EPAM Editable Cross Table to distribute simulation results with 1-click from Spotfire



EPAM Optimization Suite

STREAMLINE ENTERPRISE ANALYTICS FOR BOOSTED BUSINESS PERFORMANCE

CHALLENGE

A cornerstone of analytics maturity depends on understanding the analytics ecosystem: who is using it, how are they using it, and can issues be spotted and resolved quickly or ahead of time? The inability to do so limits the effectiveness of the environment and increases development and administrative cycles, whereas providing highly granular information closes the loop between administrators, developers and users to streamline the process.

SOLUTION

EPAM Optimization Suite for TIBCO Spotfire augments BI-on-BI by capturing and integrating key metrics of the Spotfire environment and individual templates, as well as delivering interactive reports, usage analysis and documentation of the Spotfire system. It allows you to optimize the reporting environment, streamline documentation and QA processes, and add additional governance to the analytics ecosystem.

KEY FEATURES

- · Available on-premise and in-Cloud
- User behavior analysis with business workflow validation of Spotfire dashboards and solutions
- Performance and speed analysis from dashboard and data use, as well as analysis of data loading times
- A better understanding of data consumption patterns
- · Usage tracking, broken down by regional meta data
- Identification of unused and obsolete reports, unused calculations, columns and visualizations within Spotfire dashboards
- Documentation of performance and automatic dashboards

BENEFITS

BOOST PERFORMANCE

Pinpoint analytics reporting bottlenecks and their causes in seconds

DRIVE COMPLIANCE

- Reduce business risk through detailed understanding of report use and user behavior
- Improve quality and transparency by enabling report developers to quickly identify and resolve issues through calculation documentation

ACCELERATE DEPLOYMENT

 Speed the path to enterprise analytics solutions while closing the loop between authors and report consumers

EPAM BI Application Store

STREAMLINED ACCESS FOR ALL ENTERPRISE BI APPLICATIONS THROUGH APP STORE LIKE EXPERIENCE AND CONTEXTUALIZED WORKSPACE

CHALLENGE

BI applications and solution islands are isolated, not exposed across the organization. There is a lack of single point of truth to access the BI application within the enterprise. It's time consuming to find and gather access to the relevant report. The interconnected applications are working individually implying loss of focus for end users when switching between dashboards. The repetitive manual tasks to set the same filters over and over again frustrates end users.

SOLUTION

EPAM's BI Application Store provides a unified experience to access all available BI apps, and establishes the single truth and access point for end users.



KEY FEATURES

- App Store like experience when accessing the BI Apps of the organization.
- Plugin any supported BI apps easily
- Provide access on global and department level with enterprise grade authorization
- Open any BI app on the go Mobile, iPhone and iPad ready
- Applied filters go global automatically over dashboards designed for similar purposes, to keep context of the end users with advanced filtering functions
- Guidance by smart landing page to the requested analytical reports allows quick searches
- Be inspired by the recommendation engine for applications to explore.
- · Social functions (ratings, comments)
- Increase security level by SSO integration
- Be up to date with the latest analytical assets, news, recommendations and ratings

SUPPORTED BI APPS

- TIBCO Spotfire Dashboards
- MicroStrategy Dashboards
- Tableau Dashboards
- Custom HTML Reports (in-house, or cloud)
- · KNIME Server Workflows

BENEFITS

EPAM BI Application Store helps with evangelizing analytics in a scaled organization by providing next generation layer on the top of existing analytics. Meaning unified access for all available BI tools, boosted with recommendation engine & advanced filtering functions.