SAP Retail assortment planning for retail applications

Comprehensive solution for purchase order recommendations in the SAP ERP, that adapts to seasonal and non-seasonal merchandise. Detailed breakdowns: styles, colors, sizes for fashion items; and KPU-s for non-fashion.

Overview _

Client:
Multinational software corporation (enterprise software)
> 100000 employees
Germany

Business case:
+ Creation of purchase order recommendations

Industry _

+ Retail

Services _

+ Custom software development

Project type _

+ SAP Fiori

Technology _

+ JavaScript
+ HTML
+ CSS
+ Jquery
+ ABAP
+ SAP UI5
+ SAP Fiori
+ Odata
+ Qunit
+ Selenium
+ CDS
+ SADL
+ Eclipse IDE
+ River RDE
+ Maven
+ GIT
+ Jenkins
+ ESLint
+ SAP Analysis plugin
+ HANA Studio
+ SAP GUI
+ Tomcat 7
+ HANA

Description _

Retail Assortment planning is the foundation for initial creation of purchase order recommendations in the SAP ERP. The result of an assortment planning process is an assortment plan for seasonal and non-seasonal merchandise. This process includes planning merchandise categories down to the option level (style – color – size) for fashion merchandise and SKU (article) for non-fashion merchandise. The planner will determine the number of options to plan and assign these options to a particular assortment.

Challenges _

Developing a custom software on behalf of a large software corporation brought very specific challenges:

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+ Working together with the end customers to develop features close to their needs.
+ Supporting customer development teams to extend the standard applications to fit their business use cases.
+ Continuously striving to be up to date with the latest technologies and to improve application's performance.

Solutions _

We met client's high expectations with a series of cross-technology solutions:

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+ SAP Fiori-based development and oData definition.
+ Data retrieval using CDS views; mapping to the oData entities.
+ CRUD operations using ABAP.
+ Enabling and customizing smart controls using annotations.
+ Usage of HANA oData service on XS server and Fiori development for an LP solver to optimize assortments.
+ Modelling data to be passed to AFL (Application Function Libraries extend the functionality of HANA by adding additional functions that can be called via stored procedures).
+ Investigation of SAP Fiori extension capabilities to create extensions for existing projects.
+ Creation and adaption of QUnit, ABAP Unit, Avalon, Double tests.
+ Harmonization of UI across all teams.