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Webinar

Retail Growth Toolkit

Profitable management of promotions
based on advanced data analytics

Retail Growth Toolkit

Receipt data analytics in practice -
a data-driven promotional process

Maciej Kroenke, PwC Partner and Revenue
Management Team Leader in CEE

Increasing and underperforming trade budgets are draining profitability of retailers across Europe. Application of strategy and analytics can lead to significant profit increase through promo optimization

Smart way to tackle the promotional profitability drain

Market context

30%+

Of **turnover** in modern trade is **sold via promotions**

60%

Of **trade activities does not bring expected results** and leads to **negative ROI**

Solution

Strategy – good understanding of shopping missions and purchasing patterns per format and category

Analytics – profound understanding and actionable insights providing intelligence about most effective actions

Support toolkits bringing decision taking processes to data driven reality and speeding up trade workflows

Market proven results

15%

Of **trade budget can be either saved or reinvested** in order to **dramatically increase promotional ROI**

Source: PwC

We have identified a number of common issues related to promo management; Analytical Tools capable of automatizing the process and providing data-driven insights are the solution

Key issues faced by PwC during Promotional Excellence projects and implications for the developed Tool

Need for data-driven promo planning

- Promo planning frequently based on intuition and repetition of previous well-performing promos
- Application of „same as last year but better" approach to promotions
- **Currently many retailers lack automated promo recommendation tool boosting the promo efficiency**

Process complexity

- Promo planning is a time-consuming and complicated process with multiple stakeholders taking part at different stages
- **Automation and workflow based collaboration can shorten the planning process even by 60%**

ROI optimization

- Low degree of learning processes due to no time to perform proper ex-post analytics
- **Retailers lack the high-level overview of promotions full ROI, including effects on customer shopping behaviour**

Ineffective promo methodologies

- No or limited methodology of promotion planning results in poor promotion efficiency of selected SKUs
- The effectiveness of each promotional mechanism, support, and placement are rarely tracked by retailers
- **Frequent application of suboptimal promo mechanics and overinvestments in price**

Source: PwC

RGT is an online Tool supporting Category Managers and other teams in taking data driven decisions during everyday promo planning process

Our Tool goals

Key purpose of the project is to implement the promo management toolkit with focus on:

- ☑ Automatizing the **promo planning process**

- ☑ Providing solution to **analyze promo performance**

- ☑ **Recommendation solution** to the level of promo attributes to support decision making process

- ☑ **Create data driven approach through automatization** of analytics to minimize the potential human error

- ☑ **Fully customized solution** to the level of region, format, assortment, and price segment

- ☑ Improve the efficiency of promo action in terms of **sales uplifts and optimized margins, etc.**

Resulting in:

- **Developing a one source of reliable and up to date data** that can be used for performance overview, KPI analysis and other business purposes

- A Tool designed to **support everyday work of a category manager** and eventually should be a **main source of insights related to the promo performance**

- An enterprise-class of software based on Microsoft Azure architecture powered by Microsoft Cloud

The aim of the Toolkit is to support all involved layers in the organization and to address their need for current and reliable data delivering insights

Key benefits for the users

Category Managers

- **One source of key sales and promo data**
- **Forecasting module** allowing to evaluate **multiple scenarios** and **optimize promo** approach accordingly
- **Insights module** with details on a store / SKU level like **promo uplifts, margins, promo mechanism or cherry picking**
- Optimisation logic covering optimal **promo mechanism, discount/price, promo support or promo product placement**
- **Dashboards with easy access** to historical and current **performance overview**
- Cross teams **cooperation and approval processes**
- **Monitoring module** allowing to **review current performance** of the ongoing promotions and comparison against the forecast
- **Competitive intelligence** inisghts

Management Team

- **One source of data** sales and promo data for all performance analysis
- **Easy access to global performance** overview with **option to deep dive** to a store format, store, category or single SKU level

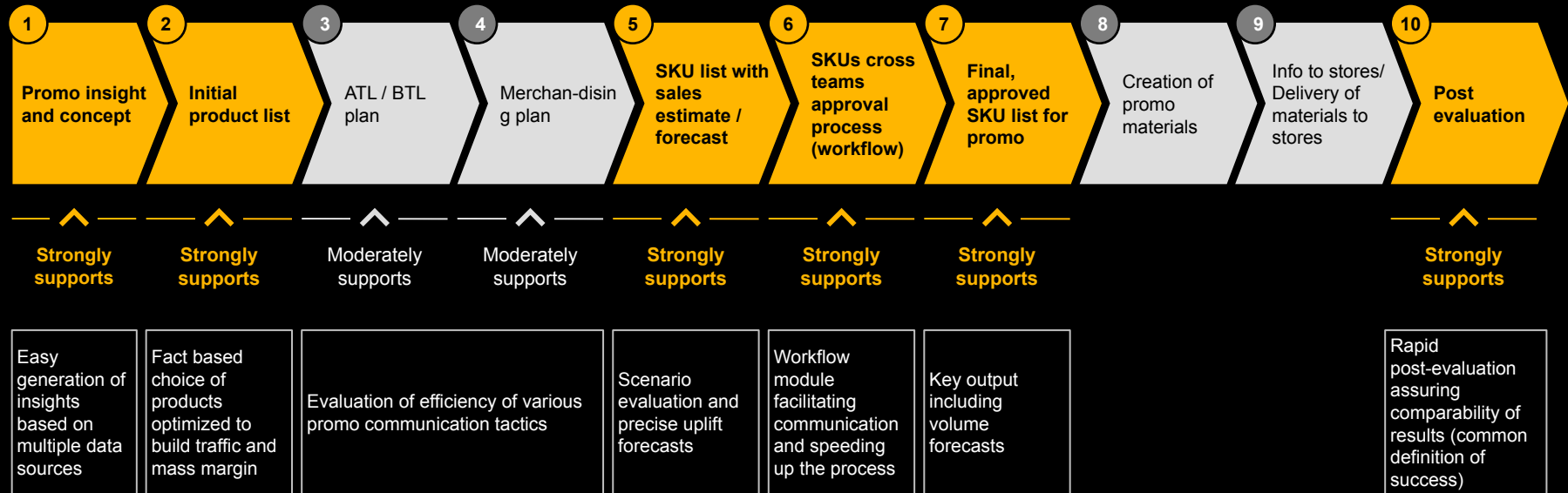| Revenue management	Purchasing	Logistics	Other

- **Easy access to forecasts with built in analytical engine**
- **Prompt access** to the information about **planned promotions**
- **Easy access to key KPIs and performance overview**

Toolkit fits into the typical promo management and planning process and supports all key analytical and workflow areas

Areas of the promo proces supported by the toolkit

1 Promo insight and concept	2 Initial product list	3 ATL / BTL plan	4 Merchan-dis-ing plan	5 SKU list with sales estimate / forecast	6 SKUs cross teams approval process (workflow)	7 Final, approved SKU list for promo	8 Creation of promo materials	9 Info to stores/ Delivery of materials to stores	10 Post evaluation
Strongly supports	Strongly supports	Moderately supports	Moderately supports	Strongly supports	Strongly supports	Strongly supports			Strongly supports
Easy generation of insights based on multiple data sources	Fact based choice of products optimized to build traffic and mass margin	Evaluation of efficiency of various promo communication tactics		Scenario evaluation and precise uplift forecasts	Workflow module facilitating communication and speeding up the process	Key output including volume forecasts			Rapid post-evaluation assuring comparability of results (common definition of success)

In most cases no manual work required to run the promo preparation and execution process

Technology in Retail Growth Toolkit

Mariusz Brach, PwC Senior Manager

From technical perspective RGS is required to serve low latency analytics results on large volumes of data, including ML to relatively small number of end users

Retail Growth Toolkit – assumptions and tech requirements

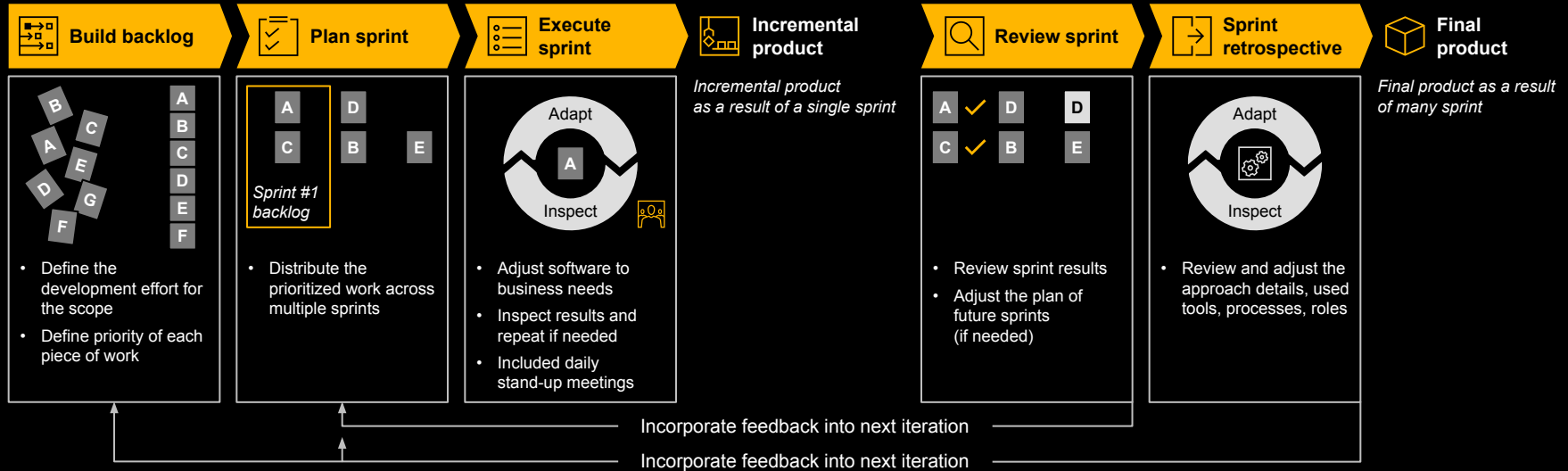| Assumptions |
| --- |
| Development in cloud |
| Batch data ingestion (e.g. daily), no real-time / stream analytics |
| Web application with user-friendly web browser GUI |
| User authentication and authorization based on Active Directory |

Technical requirements
Receipt line level data (~1bn of rows)
Forecasting module based on machine learning – predicting daily SKU sales given promo terms (offline training + online inference)
Dashboards based on analytics of non-aggregated data – low latency required
~30 end users (for single tenant)

Agile approach allows for flexible planning and realization of requirements, reasonable involvement of staff and ongoing validation of deliverables
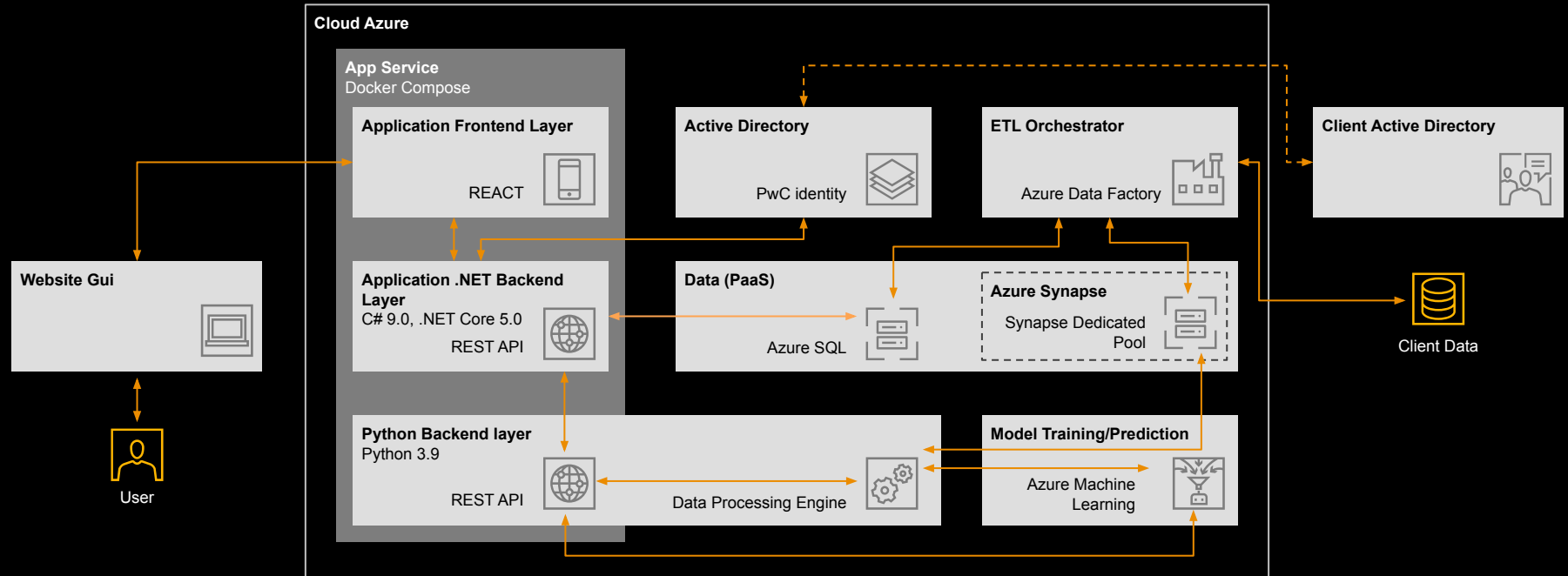
Build backlog

- Define the development effort for the scope
- Define priority of each piece of work

Plan sprint

Sprint #1 backlog

- Distribute the prioritized work across multiple sprints

Execute sprint

Adapt

Inspect

- Adjust software to business needs
- Inspect results and repeat if needed
- Included daily stand-up meetings

Incremental product

Incremental product as a result of a single sprint

Review sprint

- Review sprint results
- Adjust the plan of future sprints (if needed)

Sprint retrospective

Adapt

Inspect

- Review and adjust the approach details, used tools, processes, roles

Final product

Final product as a result of many sprint

Incorporate feedback into next iteration

Incorporate feedback into next iteration

Comments

For RGT PwC applies Water-Scrum-Fall approach which combines elements of Waterfall and Agile – Waterfall is used for Feasability, Analysis and Deployment while Scrum for Development and UAT. For certain implementations Scrum is used for Analysis and Deployment as well

Retail Growth Toolkit follows a decoupled architecture based on cloud components with Azure Synapse as a cornerstone of the data layer

Retail Growth Toolkit – architecture

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Thank you