



doolytic for Retail

Get success in your marketing strategies with predictive analytics



Are your campaigns weak? Fix up with five advanced solutions

How to be ready for the retail market?

In competitive markets, such as Retail, firms should develop strategies aimed at the growth and the loyalization of customer base. In other words, they need a sound and efficient structure of "loyalty marketing". Besides loyalty cards and points cards, one of the most strategic part of **loyalty marketing** – ables to generate value on the long term – is the **analysis of available data**. In this view, the use of **predictive analytics** allows to have a **clearer picture of**

consumers purchasings behaviours, to thoroughly **estimate consumers value** (both actual and potential value) and to **evaluate consumers response to marketing incentives**. doolytic has developed **five solutions** to help companies grow and retain their customer base:

- Time to next purchase
- Market Segmentation
- Recommendation Engine
- Promo Performance
- Sales and Demand Forecast.



Big data discovery for the data scientist in all of us



Solution: Time to next purchase

Marketing activity has to focus on **consumers** and strives for the customization of offering and promotional campaigns. Customization does not only rely on the type of product offered but also on the timing of offering. **Knowing if and when customers will come back it is crucial** for improving the scope and the placement of **direct marketing**, increasing its performance both in terms of **redemption and cost-reduction**.

Which results can you obtain?

The **availability of information** on the probability to come back and **the time to next purchase** (in days) for each client **allows** to:

- Model the timing of promotional campaigns.
- Implement targeted actions when consumers took long time to come back.
- Increase retention of the customer base.
- Increase efficiency of marketing activities.

How it works

MACHINE LEARNING



Create **machine learning algorithms** on data previously transformed during data preparation or directly on detailed data.

SCRIPTING LANGUAGES



Generate **regression and classification models** and do cluster analysis using their preferred **scripting language (R, Python, Scala)**.

DASHBOARD



Access indexed results through **self-service dashboards**.

TAKE ACTION IN THE RIGHT TIME IS STRATEGIC TO:



SET PROMOTIONAL CAMPAIGNS

ACT WHEN LONG TIME PASSES

INCREASE RETENTION

INCREASE EFFICIENCY



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Solution: Market Segmentation

The development of strategies aimed at the growth and **retention of customer base hinges on market segmentation**, i.e., identification of **groups of customers who have similar needs and similar purchasing behaviours**. The analysis of customer care behaviours and characteristics has several benefits: **better understanding of customers' needs** (and, consequently, of their potential), **better identification of market's opportunity**, **better definition and placement of marketing campaigns**. And, last but not least, it leads to an increase in customer satisfaction and customer base's retention.

Which results can you obtain?

Defining and characterizing customer profiles allow to:

- Customize marketing activities increasing their efficiency both in terms of redemption and cost-reduction.

- Improve customers purchasing experience, increasing customer satisfaction and customer base loyalty;
- Support the cultural process of firms who want to set the customer at the core of their action.

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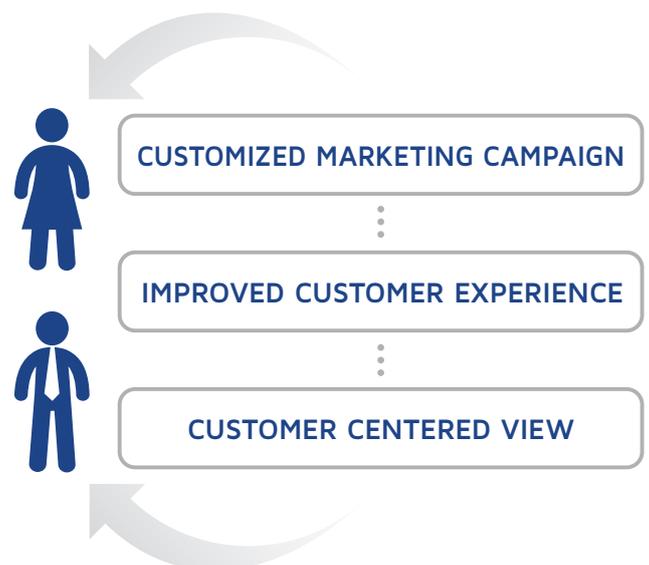


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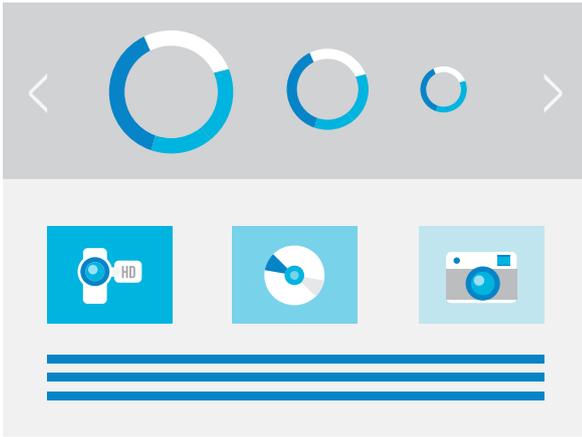


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Solution: Recommendation Engine

Generates **targeted recommendations** for specific users and **identifies targets to whom propose specific products**. Recommendation Engine allows to devise 1to1 marketing actions and to **propose products in line with the observed purchasing habits**. The use of this instrument enables the **personalization of consumer experience**, it **enlarges the overview of available purchasing choices** (up/cross selling), leading to an **increase in customer satisfaction** and, consequently, of the **customer base loyalty**.

Which results can you obtain?

Through the **analysis of purchasing behaviours**, recommendation engine allows to:

- Customize clients' experience and increase the overview of available purchasing choices.
- Increase the customization and the efficiency of marketing activities.
- Bring out purchasing behaviours who are otherwise difficult to detect.

How it works

DOOLYTIC RECOMMENDER



Uses **modern algorithms** able to give **real-time responses**. These algorithms **build and update offline data matrix** having a reduced dimensionality compared to the original problem, in order to **generate recommendations** – both on the consumer and product side – updated with the business changing.



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Solution: Promo performance

Among the strategies aimed at the growth and retention of the customer base, **direct marketing and promotional campaigns** are particularly important and **evaluating their performance is crucial**. Therefore, managers in charge of defining marketing strategies need to understand if promotional activities have been successful. More specifically, they are interested in disentangling **which part of the observed effect is due** (as a causal link) **to marketing strategy** and which is, instead, **due to other external factors**.

Which results can you obtain?

Impact evaluation of marketing strategies allows to:

- Streamline the promotional activity exploiting campaigns who are efficient and getting rid of (or redesigning) those who are not (or who are only partially efficient).
- Improve resources allocation and increase efficiency of the promotional activity.

How it works

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Sales & demand forecast

The **lack of accurate and industry specific forecasts** might have **dramatic and costly effects** on the entire supply chain. Poor forecasting effects are **stock outs or high inventory, obsolescence, low service level, rush orders, inefficient resource utilization and bullwhip** ("bullwhip effect") propagating through the upstream supply chain.

Which results can you obtain?

A proper demand forecasting model:

- Generates accurate and robust forecasts.

- Increases the efficiency of supply chain's planning activities: from the production planning, to the warehouse management and the distribution activity.

How it works

WIDE



Complements traditional **demand and supply chain forecasting**.

COMPLETE



Takes **additional external factors into account**, such as traffic conditions, weather forecasts, calendar events, sensor data.

ACCURATE



Leverages "**ensemble and consensus methods**" algorithms for ensuring that the best model is used for each specific combination of input factors. Every prediction is cross-validated and labelled by rating quality and forecast accuracy.

LOW SERVICE LEVEL



OUT OF STOCK



BULLWHIP EFFECT



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