Managing customer value in multi-brand setting: the case of dining out industry

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1. Introduction

2. Theoretical background

3. Company and data description

4. Metrics

5. Preliminary findings

6. Experiment design

7. Final thoughts and discussion
As competition increases...

... maintenance and development of existing customers becomes the crucial basis of competitive advantage

... the significance of defensive marketing strategies is growing

... multi-brand solutions seem to be the relevant strategy, especially when we apply marketing tactics which influence customer switch within brand portfolio (Kim, 2009)
Variety seeking orientation means that the possibility of purchasing a specific brand reduces the possibility of buying the same brand in future consumption situation (Kahn, 1995; Ratneshwar and Mick, 2005)
Taxonomy of varied behavior

Explicable

Derived variation

Multiple needs
- Change in the feasible set
- Change in tastes
- Change in constraints
  - Multiple users
  - Multiple situations
  - Multiple uses

Direct variation

Interpersonal motives
- Distinction
- Affiliation

Intrapersonal motives
- Desire for the unfamiliar
- Alteration among the familiar
- Information

Change in constraints

Change in the choice problem

Multiple situations

Multiple users

Change in the feasible set

Change in tastes

McAlister and Pessemier, 1982

#variety-seeking_behavior #VSB_drivers
Taxonomy of varied behavior

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Change in constraints
Change in tastes
Change in the choice problem

Multiple uses
Multiple situations
Multiple users
Company profile

Leading casual dining chain: 200 restaurants across 10 major Russian cities

“House of brands” portfolio type — 6 brands + planned extension of brand portfolio

Bonus loyalty program, common for all brands, more than 1 mln. customers in the program

General marketing strategy — develop profitable customers with respect to their VSB

Main touch points: SMS, email and push notifications in LP application

#exisiting_customers  #multibrand_portfolio  #personalization
### Pre-test phase

<table>
<thead>
<tr>
<th>Number of brands, in which a particular customer is marked as High PCV</th>
<th>Customer contribution to the gross chain revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High PCV</td>
</tr>
<tr>
<td>3 and more</td>
<td>3.7%</td>
</tr>
<tr>
<td>2</td>
<td>17.6%</td>
</tr>
<tr>
<td>1</td>
<td>27.9%</td>
</tr>
<tr>
<td>0</td>
<td>0.8%</td>
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</tbody>
</table>

#empirical_evidence  #HighPCV  #variety-seeking
Data description

• Transaction data on individual level since 2015

• Survey data of ‘mono-brand customers’ — those, who spent more than 50% of total spendings in one brand and less than 5% in any other:

  72 000 customers totally, random sampling for approx. 52 000 respondents, response rate 3.2%, final number of responses — 1 700.

• Experiment sampling — same segment randomly divided into experimental (approx. 52 000) and control (approx. 20 000) groups.
Metrics

Transaction data

1. General metric of VSB — modified HHI — the sum of the squares of the spending shares across various domains: meals, restaurant locations, “within week”.

2. HHI across brands (close to 1 for this segment).

3. Variation of duration, meal price, number of items in the check.

Survey data

1. HHI across cuisines — the sum of squares of the visit shares within total restaurant visits as perceived by respondent.

#VSB_metrics  #HHI
Findings

Transaction data

<table>
<thead>
<tr>
<th>variable</th>
<th>min</th>
<th>median</th>
<th>max</th>
<th>mean</th>
<th>sd</th>
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</thead>
<tbody>
<tr>
<td>HH_within_week</td>
<td>0.000</td>
<td>0.410</td>
<td>1.000</td>
<td>0.461</td>
<td>0.194</td>
</tr>
<tr>
<td>HH_meal</td>
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<td>0.244</td>
<td>1.000</td>
<td>0.269</td>
<td>0.109</td>
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<td>HH_location</td>
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<td>HH_brand</td>
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<td>1.000</td>
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<td>SD_NumItems</td>
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<td>3.618</td>
<td>3.466</td>
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<tr>
<td>SD_AvItemPrice</td>
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<td>86.358</td>
<td>1,732.977</td>
<td>98.461</td>
<td>68.243</td>
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<tr>
<td>SD_VisitDuration</td>
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<td>23.320</td>
<td>1,036.619</td>
<td>46.221</td>
<td>92.322</td>
</tr>
</tbody>
</table>

#VSB_metrics #HHI #distribution
Findings

HH_cuisines

#survey_data  #HHI_cuisines
Insights

• Metrics built on transaction data and metrics built on survey data are not correlated.
  • None of the observed VSB metrics could allow for prediction of the variety seeking behavior within the multibrand portfolio of the chain.
• Data is enough to describe VSB, but not enough to drive it.
### Experiment

- **Gamificated promotion offer to take the gourmet trip**
  - personalized: we offer “non-preferable brands”
  - targeted at the segment of profitable customers
- **August, 10 — September, 20**

Aim - offer the stimuli for variety seeking and get the reaction and then analyze it through the lens of VSB metrics.

#experiment #reaction_on_the_stimuli
Select the cuisine and visit a restaurant
One meal is free of charge

Answer a question about this cuisine

Get the bonus

Grand Prix random selection

#gamification  #complicated_tactic
Preliminary results

• Number of participants — approx. 2500 (5% of the experiment group)

• Rather high conversion rate to the first stage

• Dependent variable: activation in the game ("I agree" button)

• Independent variables: VSB metrics and control variables.
# Preliminary results

<table>
<thead>
<tr>
<th>OR coefficient std.error</th>
<th>z.value</th>
<th>p.value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>-2.473</td>
<td>0.166</td>
</tr>
<tr>
<td>HH_within_week</td>
<td>0.699</td>
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</tr>
<tr>
<td>HH_meal</td>
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<tr>
<td>HH_location</td>
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<td>HH_Brand</td>
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<td>SD_NumItems</td>
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<tr>
<td>SD_AvItemPrice</td>
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<td>0.001</td>
</tr>
<tr>
<td>SD_VisitDuration</td>
<td>1.000</td>
<td>-0.000</td>
</tr>
</tbody>
</table>

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Pseudo R-squared: 0.062
Log-likelihood: -9372.148, AIC: 18772.296, BIC: 18896.536
Chi-squared: 1242.293 df(13), p.value < .001
Nr obs: 52,801
Control variables: Num_Checks, Recency, Frequency, Avg_Discount, Avg_NumItems, Avg_Origsum

# regression #relation #results
Your questions, comments and ideas are welcome!

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