B2B Software: Role of Decision Drivers

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B2B Software Solutions

Packaged Software Solutions
Integration Services

B2B software solutions: Highly customized experience goods

Great financial stake
Long-term commitment

Prospective customer actively seek information on products and vendors

B2B Purchase Drivers literature

Information-Related Drivers
e.g., customer referrals
Biyalogorsky et al. ‘01;
Salminen, Moeller ‘06

Feature-Related Drivers
e.g., price
Johnston, Lewin ‘96;
Weitz, Bradford '99

Both?

Research Question
How do information-related drivers AND feature-related drivers play a role in B2B software purchase decisions?

Agenda
• Background and Research Question
• Research Model and Hypotheses
• Research Approach
• Results
• Conclusions and Discussion

Research Model

INFO-RELATED
Customer References
Expert Network Recommendations
Demonstration Team Presentations

FEATURE-RELATED
Price Performance
Functionality
Sales Team Service

B2B Software Purchase Decision

CONTROLS
Company Demographics
Region
Industry
Segment
Competitor Performance
Customer References
Expert Network Recommendations
Demonstration Team Performance
Price Performance
Functionality
Sales Team Service

Company Demographics

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Research Hypotheses

H1: Customer references positively influence B2B software purchases
H2: Expert network recommendations positively influence B2B software purchase decisions
H3: Demonstration team presentations positively influence B2B software purchase decisions
H4: Price performance positively influences B2B software purchase decisions
H5: Functionality positively influences B2B software purchase decisions
H6: Sales team service positively influences B2B software purchases
H7: Relationship between sales team service and B2B software purchase decisions is positively moderated by customer references

Research Approach

Operationalization of Drivers
- Dependent variable: Binary coded
- Independent variables: Measured through single-item measures
- Controls: Coded into categorical dummy variables with 10-point Likert-type scales

Data Collection
- Surveying prospective customers sampled from multinational B2B software vendor’s CRM
- Random selection of 669 participants from customer database (customers from 2-year period between 2003 and 2005
- Elimination of 265 cases
  Sample of 404 subjects (customers and non-customers)

Data Analysis

Logistic Regression

\[
\text{Prob(Purchase)} = \frac{e^Z}{1+e^Z}
\]

\[
Z = B_0 + B_1X_1 + B_2X_2 + \ldots + B_PX_P
\]

Prob(Purchase) = Probability of purchase
B_0 = Intercept
B_1…P = Driver coefficients
X_1…P = Values of drivers
P = Number of drivers

Model Fit: Hosmer and Lemeshow Chi-Square
Likelihood-Ratio
Nagelkerke Test
Cox & Snell Test

Survey Participants (in %)

<table>
<thead>
<tr>
<th>Status</th>
<th>Customer (35), Non-Customer (66)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region</td>
<td>EMEA (42), North America (27), Latin America (22), Asia-Pacific (9)</td>
</tr>
<tr>
<td>Segment</td>
<td>Large Enterprise (50), SME (50)</td>
</tr>
<tr>
<td>Industry*</td>
<td>Mining / Construction / Manufacturing (50), Transportation / Services (23), Wholesale / Retail Trade (12), Finance / Insurance (12), Public Administration (5)</td>
</tr>
</tbody>
</table>

* Based on SIC codes

N = 404
Logistic-Regression: Model Fit

-2 Log Likelihood: 166.458
Chi-Square: 333.390
Cox & Snell: 0.562
Nagelkerke: 0.792
 Hosmer-Lemeshow: 0.975
Correctly Classified: 92.3 [% > 54.5 (req.)]

Model Fit ✔

Logistic-Regression: Hypotheses

<table>
<thead>
<tr>
<th>β̂_{adj}</th>
<th>T</th>
<th>Hypothesis</th>
<th>Result</th>
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</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.859</td>
<td>0.159</td>
<td></td>
</tr>
<tr>
<td>Customer References</td>
<td>0.582*</td>
<td>3.383</td>
<td>H1 (+)</td>
</tr>
<tr>
<td>Demonstration Team Presentations</td>
<td>0.216</td>
<td>0.498</td>
<td>H3 (+)</td>
</tr>
<tr>
<td>Functionality</td>
<td>1.690***</td>
<td>27.198</td>
<td>H5 (+)</td>
</tr>
<tr>
<td>Sales Team Service</td>
<td>1.735***</td>
<td>22.051</td>
<td>H6 (+)</td>
</tr>
<tr>
<td>Customer References X Sales Team Service</td>
<td>0.721***</td>
<td>10.710</td>
<td>H7 (+)</td>
</tr>
</tbody>
</table>

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Conclusions

Information-related drivers at least complementing, if not outperforming feature-related ones
attracting prospective customers, intensifying successful relationships with existing customers
External expert recommendations playing stronger role than customer references
Importance of information source for prospective customers

Discussion

Research Design
Generalizability of research featuring customized and complex software solutions of single vendor?

Research Findings
- Customer references merely reassuring purchase decisions?
- Effect of non-anonymous information disclosure in B2B online environments?
- Vendor competition impacts information-related drivers and decision complexity?

Questions, Comments, Complaints?

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Thanks for your attention!
Selected References


