



Ajay Bhaga
Technology Lead

Connecting Hadoop + Big Data to IBM Campaign and IBM Interact



An aerial, black and white photograph of the Toronto skyline. The CN Tower is the most prominent feature on the left side. To its right is the Rogers Centre, a large stadium with a white, domed roof. The rest of the image shows a dense urban landscape with numerous skyscrapers and buildings. A blue rectangular box is overlaid on the right side of the image, containing white text.

Speaker Introduction: Ajay Bhaga

**Connecting Hadoop + Big Data to
IBM Campaign and IBM Interact**

Ajay Bhaga

- Technology Lead
- 40+ Unica Engagements across 25+ customers
- 9 years of Enterprise Marketing Management (EMM) Experience:
 - Senior Architect
 - EMM Technology Road Map Specialist
 - Agile development team lead for EMM customizations and add-on solutions



Client Spectrum

- Founded in 2005
- Specialize in IBM[®], Adobe[®] and SAS[®] Enterprise Marketing Management (EMM) Solutions
- 50+ full-time IBM[®], Adobe[®] and SAS[®] EMM consultants (350,000+ service hours)
- Offices in Montreal, Toronto, and Calgary



Agenda

**Connecting Hadoop + Big Data to
IBM Campaign and IBM Interact**

Agenda

1. Webinar Objectives
2. Common Questions by IBM Campaign & Interact customers
3. Unstructured Data Marketing Opportunities
4. Common Misconceptions
 - Relational Database vs. Hadoop + Big Data
5. Use Case
 - Mapping IBM Campaign & IBM Interact to Hadoop + Big Data

An aerial, black and white photograph of the Toronto skyline. The CN Tower is the most prominent feature on the left side. The city extends to the horizon under a sky with scattered clouds. A large, semi-transparent blue rectangle is overlaid on the right side of the image, containing the text 'Webinar Objectives' in white. In the bottom left corner, there is a white rectangular box containing the text 'Connecting Hadoop + Big Data to IBM Campaign and IBM Interact' in black.

Webinar Objectives

**Connecting Hadoop + Big Data to
IBM Campaign and IBM Interact**

Webinar Objectives

Today's Webinar

- Understand marketing opportunities for Big Data and Hadoop with your existing investment in IBM Campaign and/or IBM Interact.
- Demystify common Hadoop + Big Data related misconceptions.
- Mapping Hadoop related technologies to a financial industry use case for IBM Campaign and IBM Interact customers.

Webinar Objectives (Upcoming)

Upcoming IT Focused Webinar

- Hadoop: *Under the Hood* architecture review and technical detail.
- Comparison of Hadoop + Big Data ecosystem & concepts.
 - (e.g. Hbase, Hive, MapReduce, Spark, Kafka, etc.)

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Common Questions by IBM Campaign & Interact Customers

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Common Hadoop-related Questions for IBM Campaign & Interact Customers:

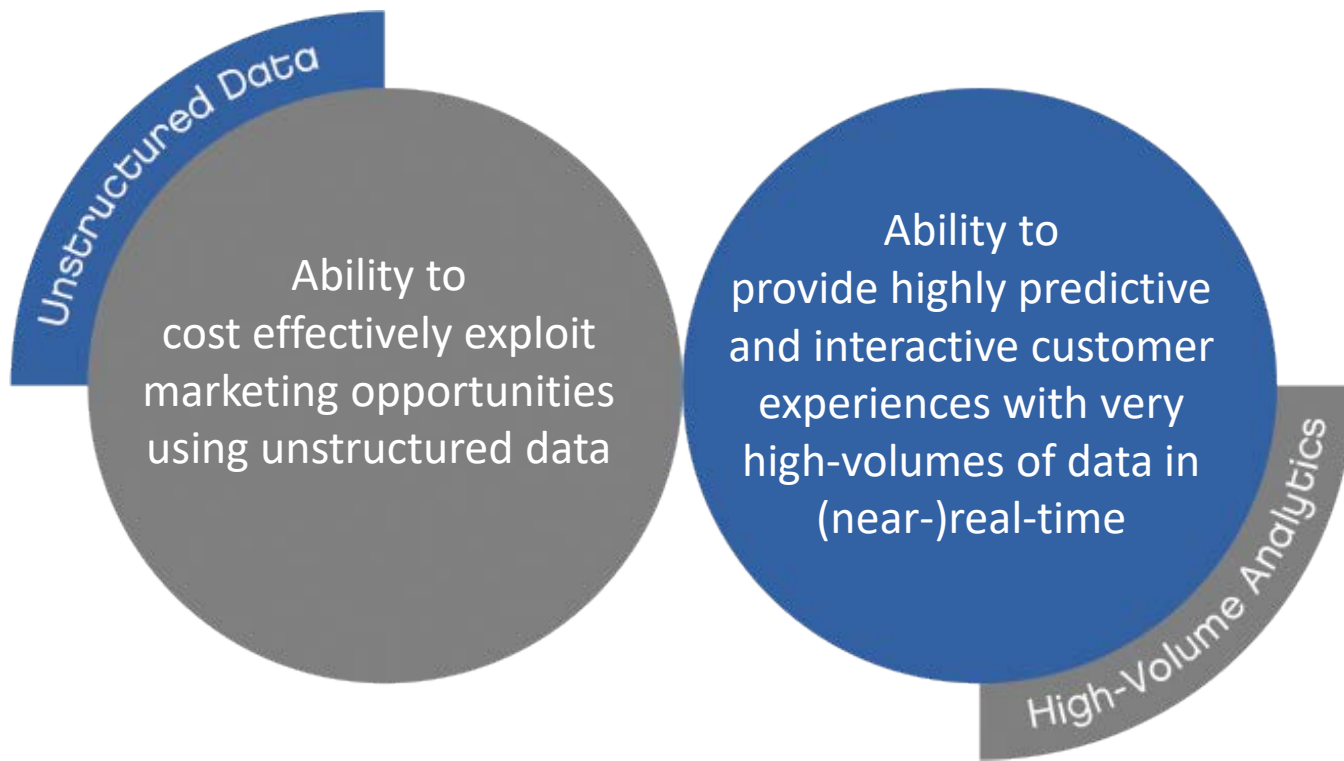
What types of new marketing campaigns does Hadoop + Big Data enable?

How are my industry peers using Hadoop + Big Data with IBM Campaign and IBM Interact?

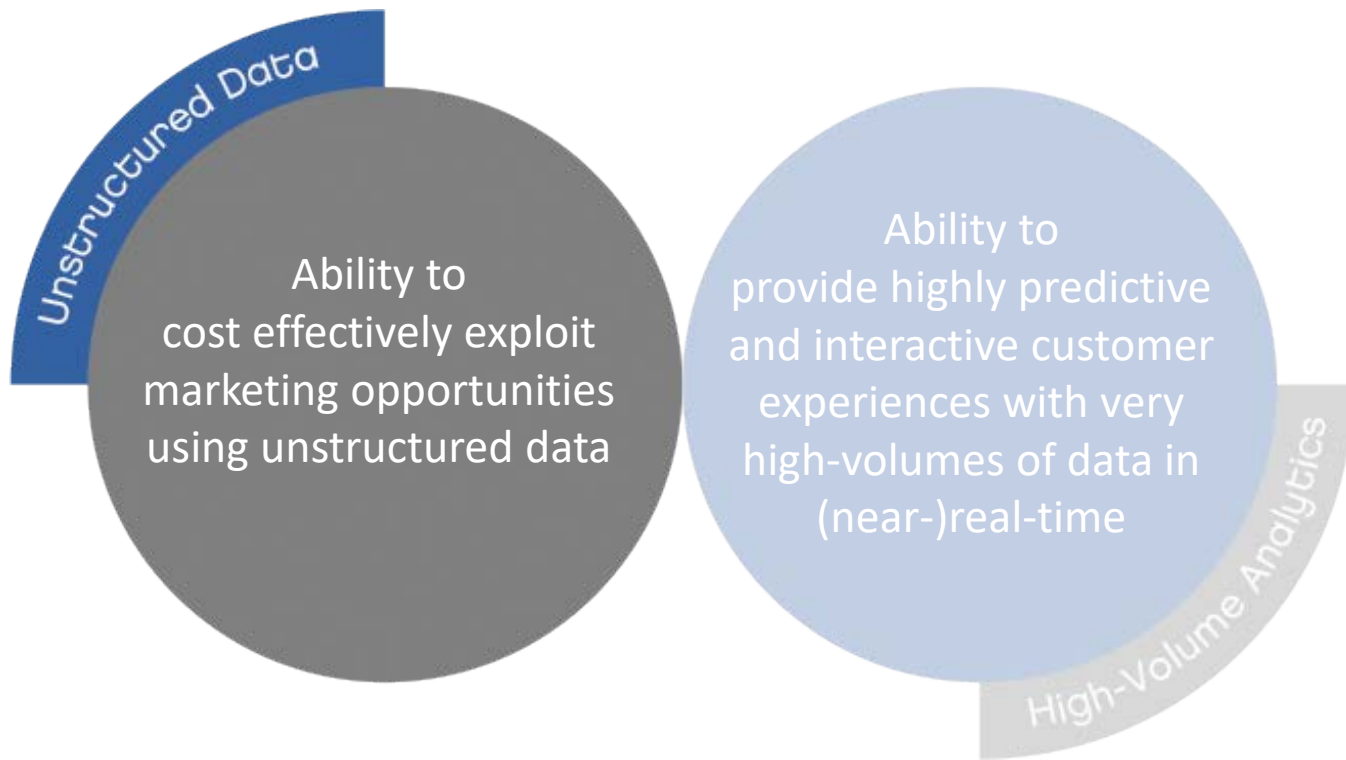
What's the difference between a Traditional Relational Database Data and Hadoop + Big Data?

What has changed?

What Has Changed?



What Has Changed?

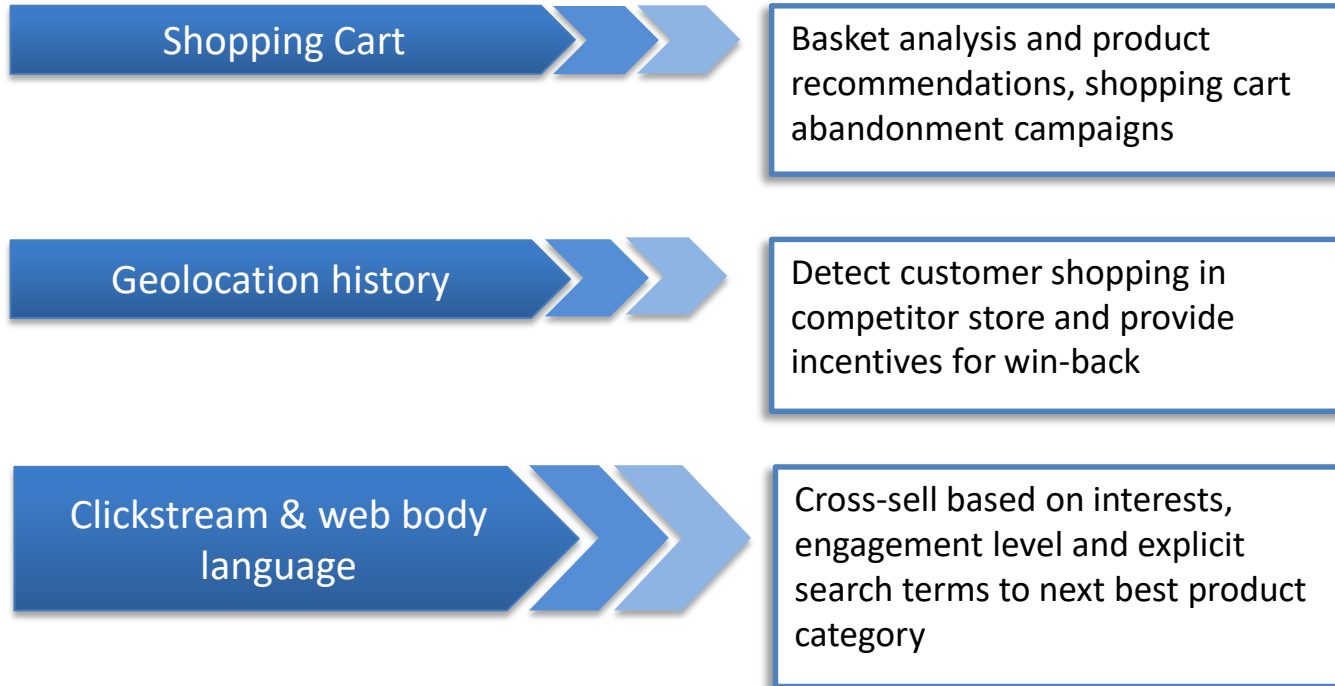


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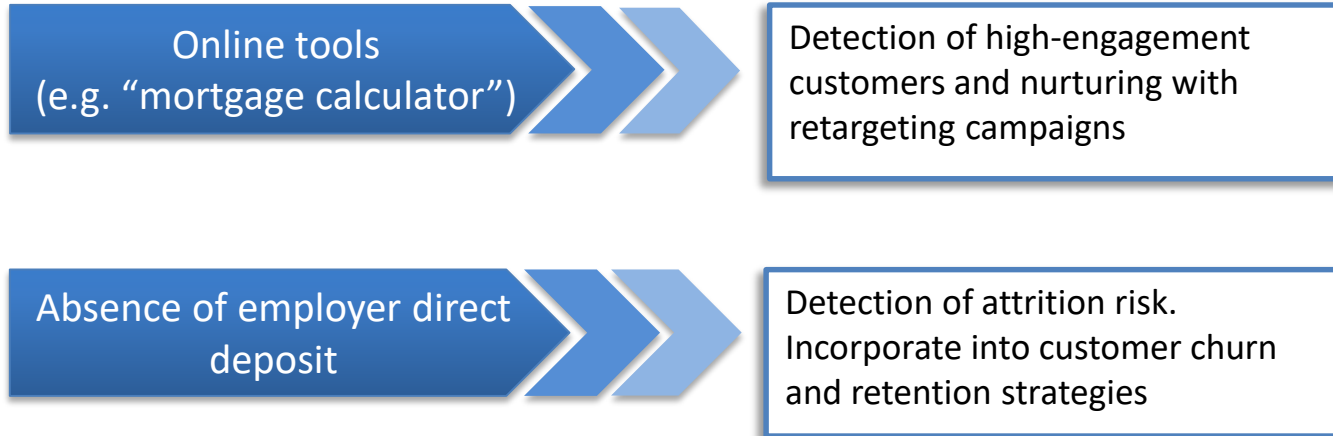
Unstructured Data Marketing Opportunities

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IBM Campaign and IBM Interact**

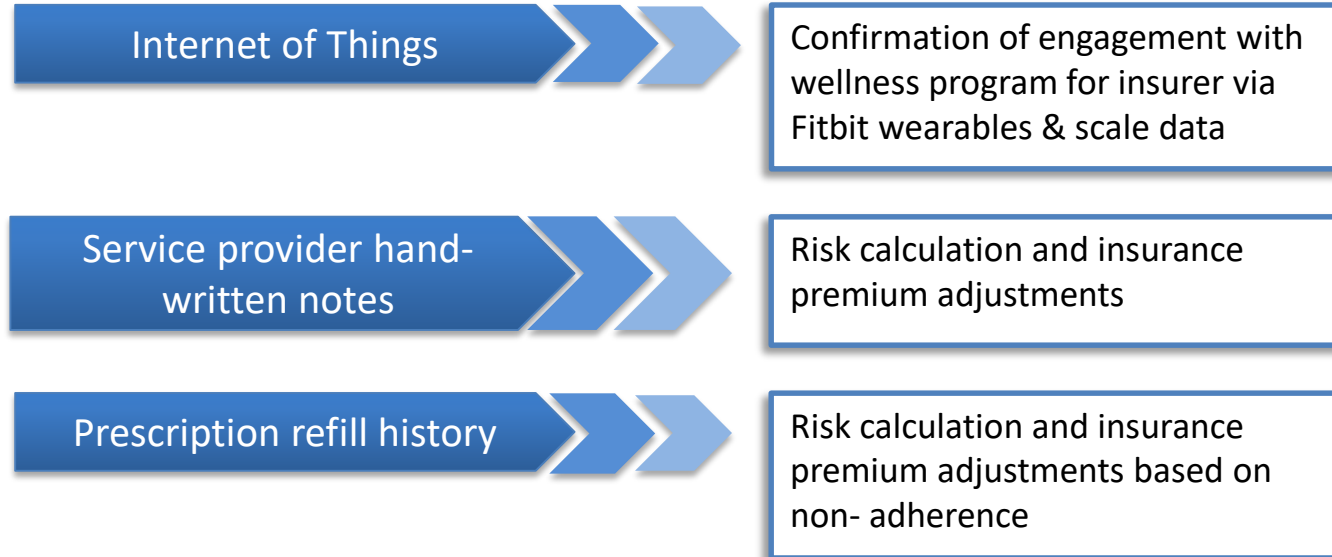
Unstructured Data Examples for Retail



Unstructured Data Examples for Finance



Unstructured Data Examples for Health



Unstructured Data Examples for Travel/Loyalty

Survey Results

Determine Net Promoter Score over time and apply nurturing campaigns

Social media activity

Detection of brand advocates vs. risks for sentiment analysis

Facebook postings in affluent customer groups

Allow for offering of more appropriate products to customers (e.g. premium products to premium customers)

Unstructured Data Examples for Insurance

Video content & viewing statistics

Detection of high-engagement customers and nurturing with retargeting campaigns. E.g. watched full educational video on life insurance product

Inbound call center recordings

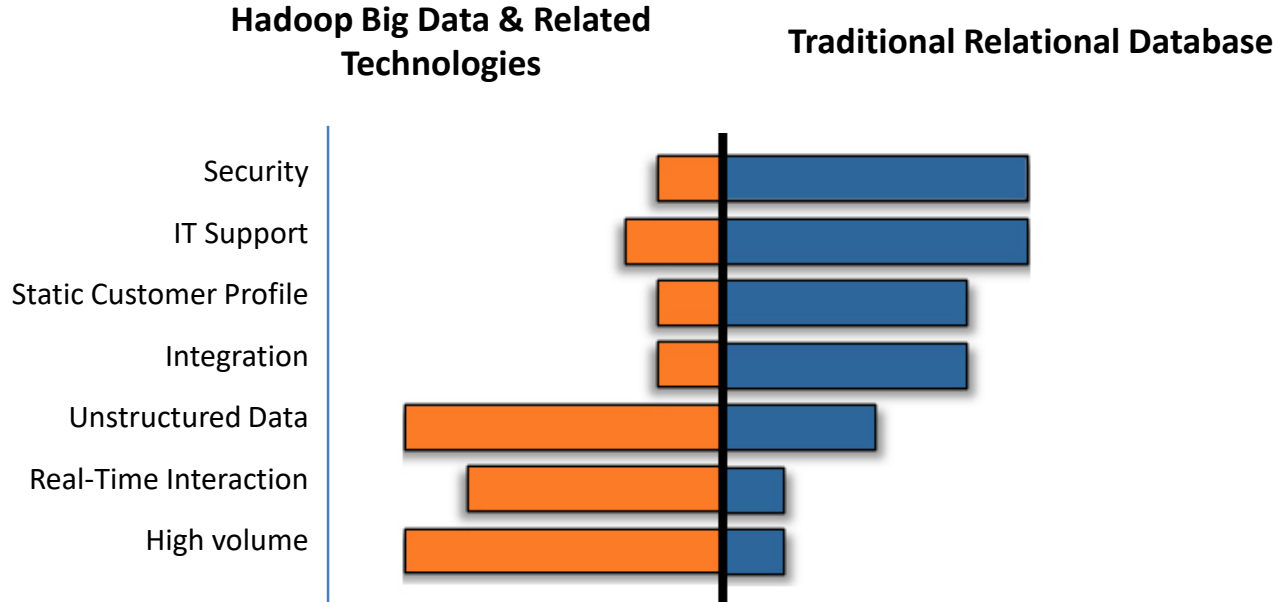
Assess customer mood and apply retention or win-back strategies. For example, customer who is upset during their first claim experience



Common Misconceptions

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Big Data vs. Relational Database



Examples of challenging questions for Hadoop

“Does the customer have a credit card?”

“Can I market to this customer?”

“I see the customer has two debits and one credit on their account. What is the customer’s current balance?”

“Should I send my communication in English, French or Spanish?”

“What products or services does this customer currently have with us?”

Schema “On Read” vs. Schema “On Write”

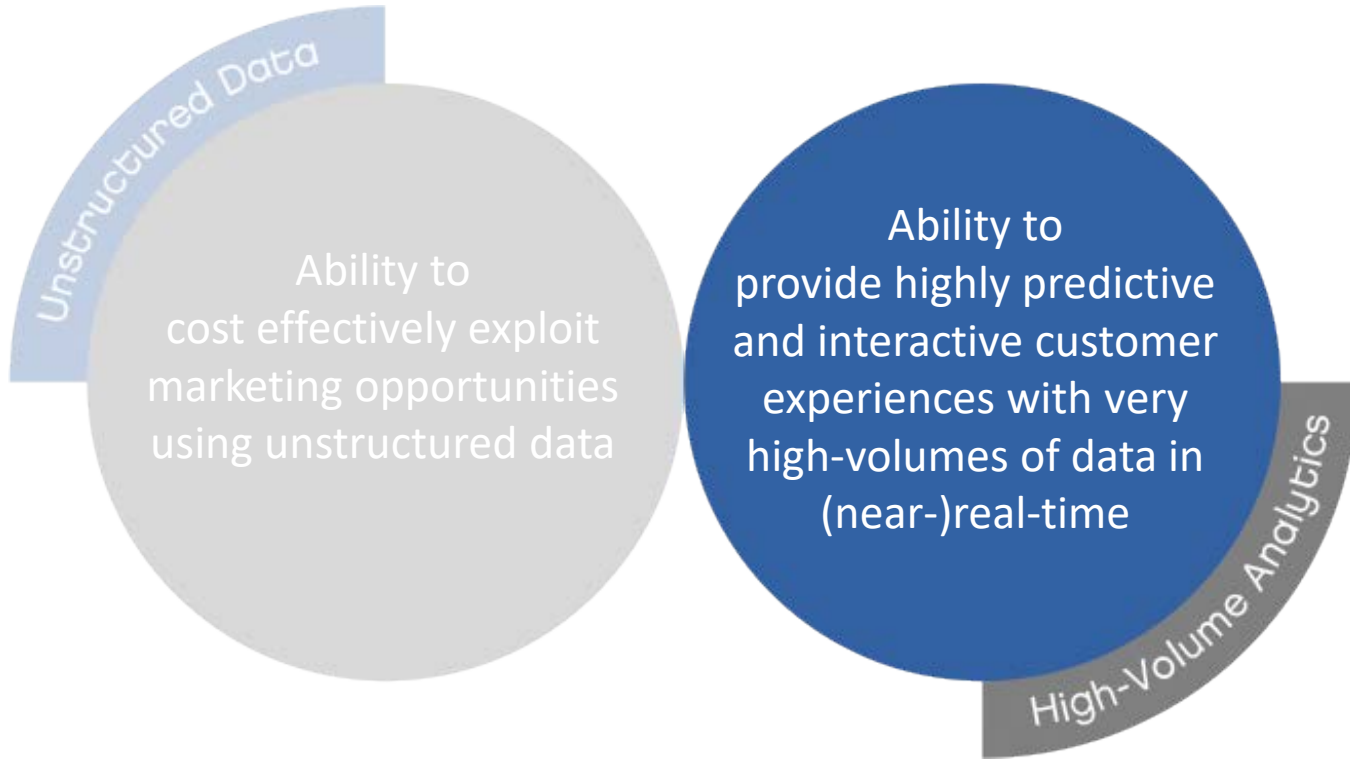
Relational Database

- Schema “On Write”
- Rules, constraints & cleansing done by DBAs and modelers

Hadoop + Big Data

- Schema “On Read”
- Rules, constraints & cleansing done by diverse users

What Has Changed?



An aerial photograph of a city skyline, likely Pittsburgh, featuring several prominent skyscrapers and a river in the background. A large blue rectangular overlay is positioned in the center-right of the image, containing white text. The text reads "Use Case:" in a large font, followed by "A Visitor's Journey at Acmebank.com" in a smaller font.

Use Case:

A Visitor's Journey at Acmebank.com

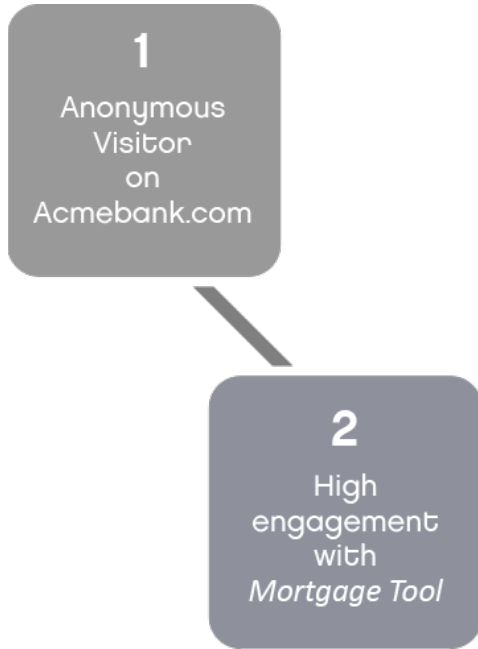
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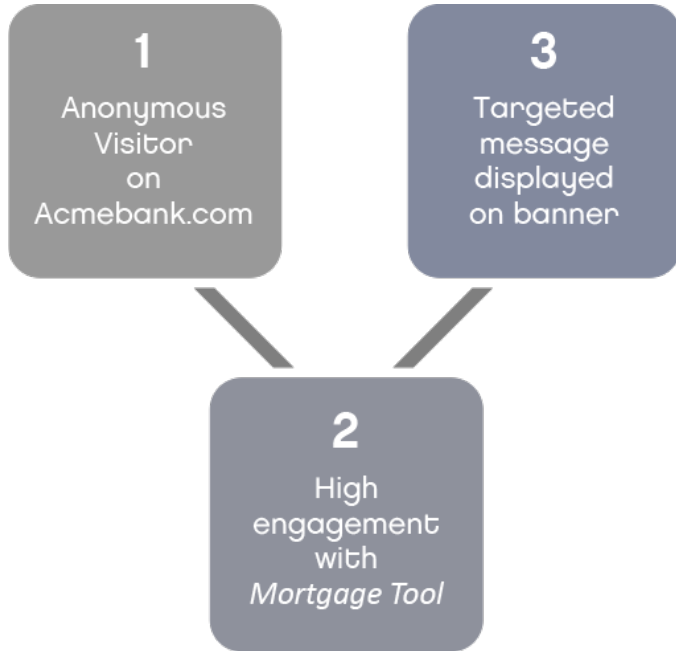
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Acmebank.com

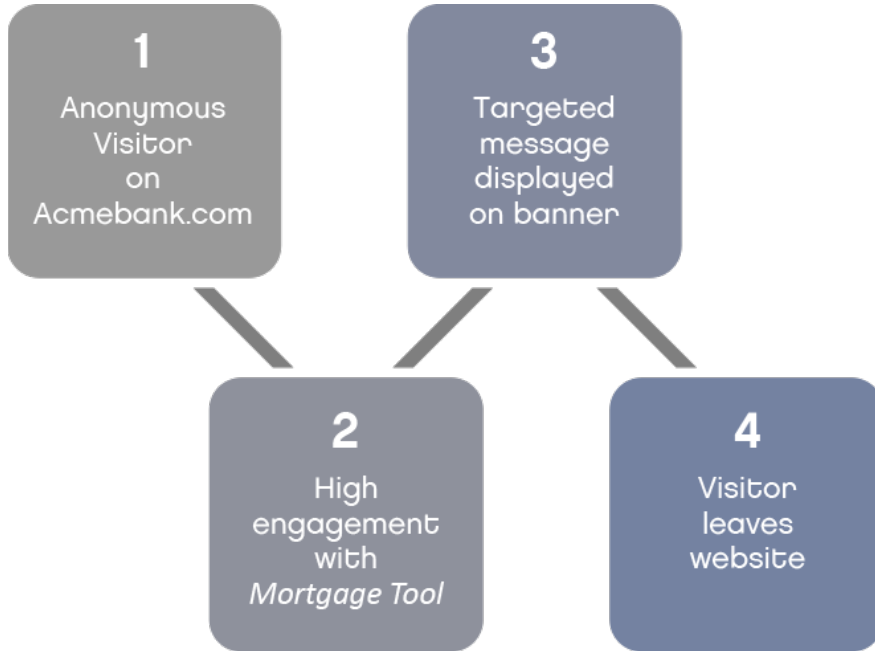
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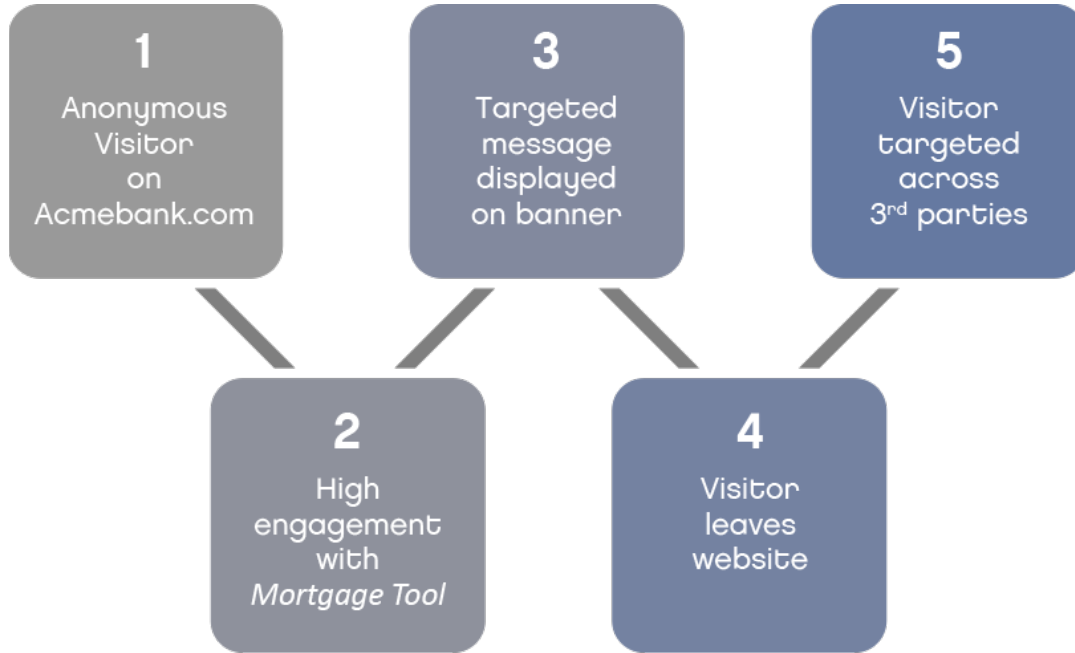
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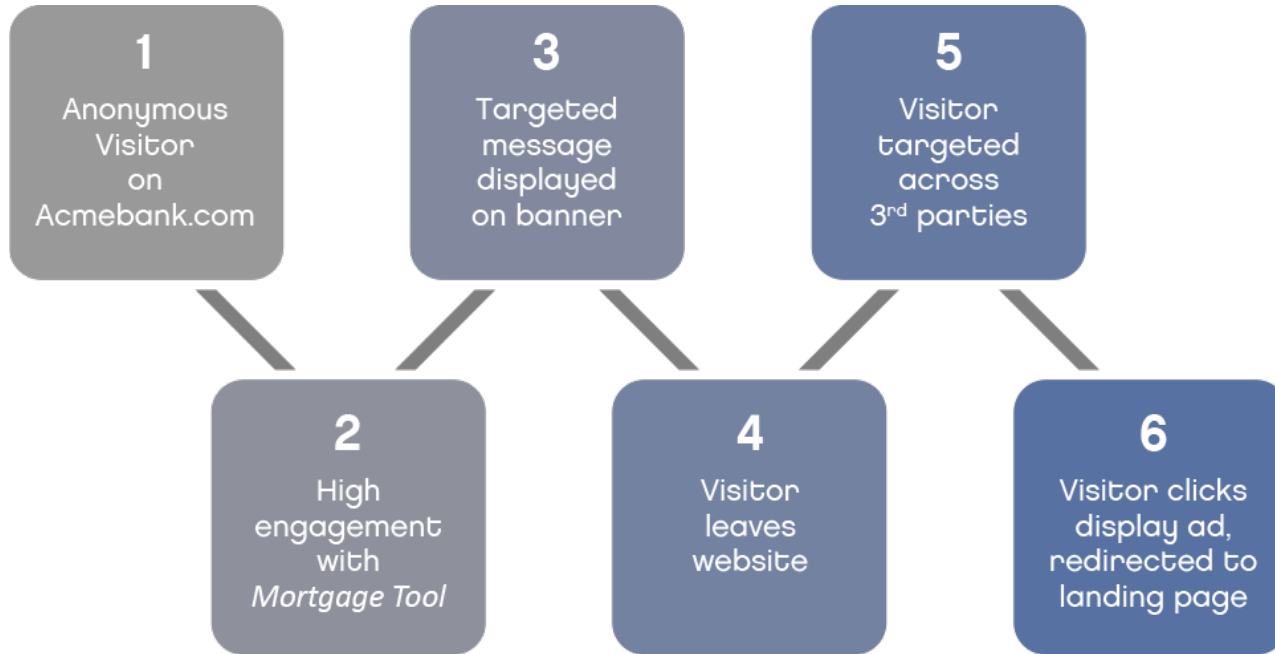
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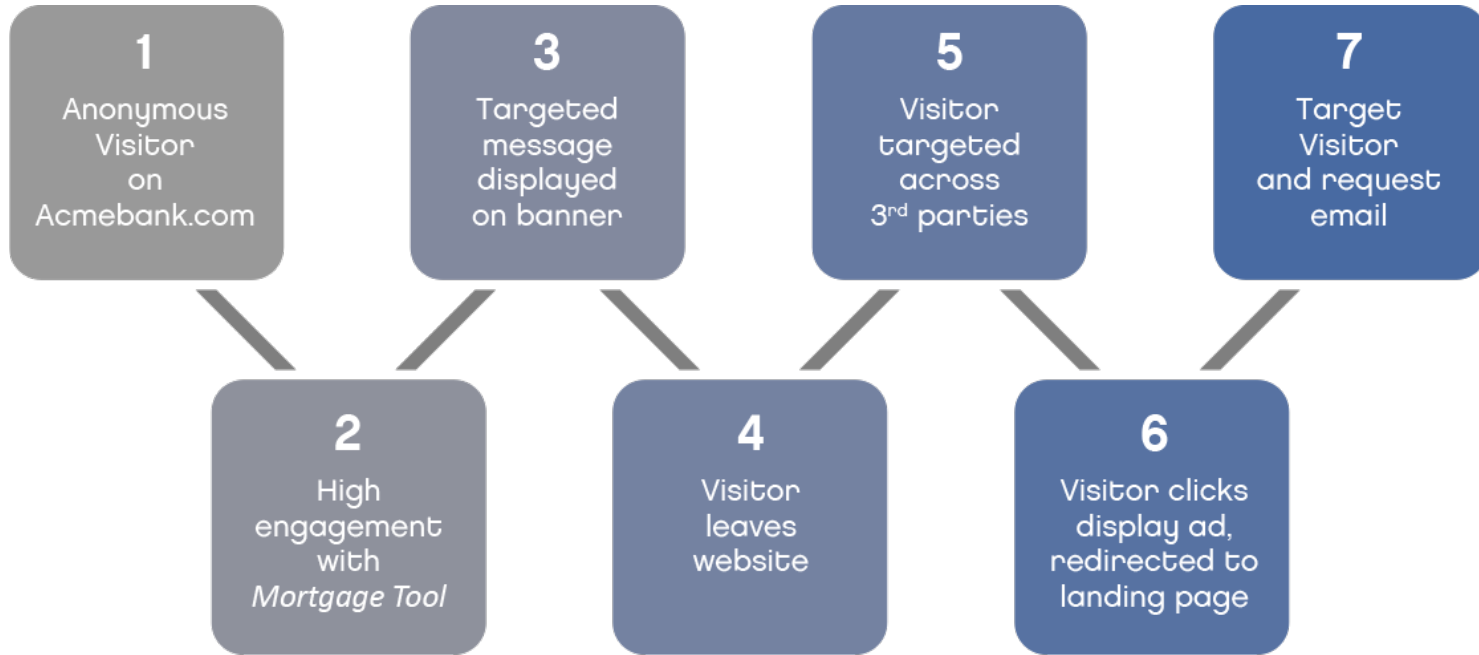
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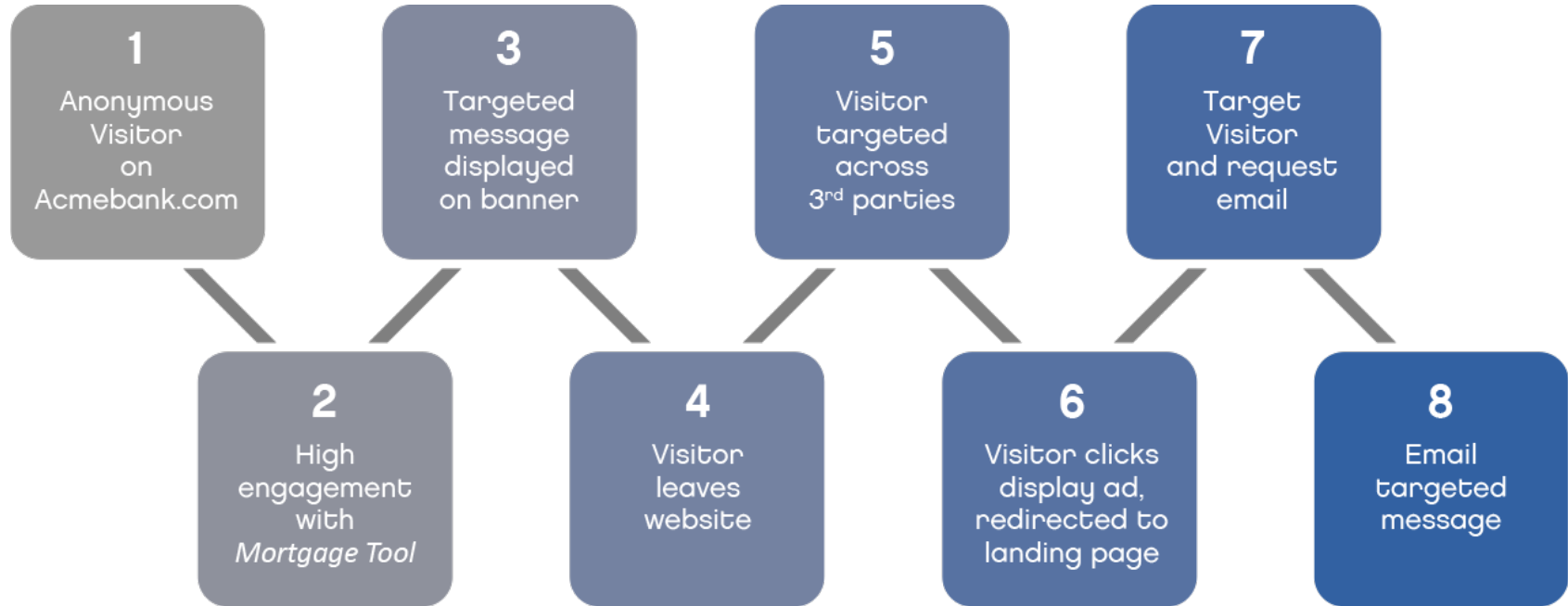
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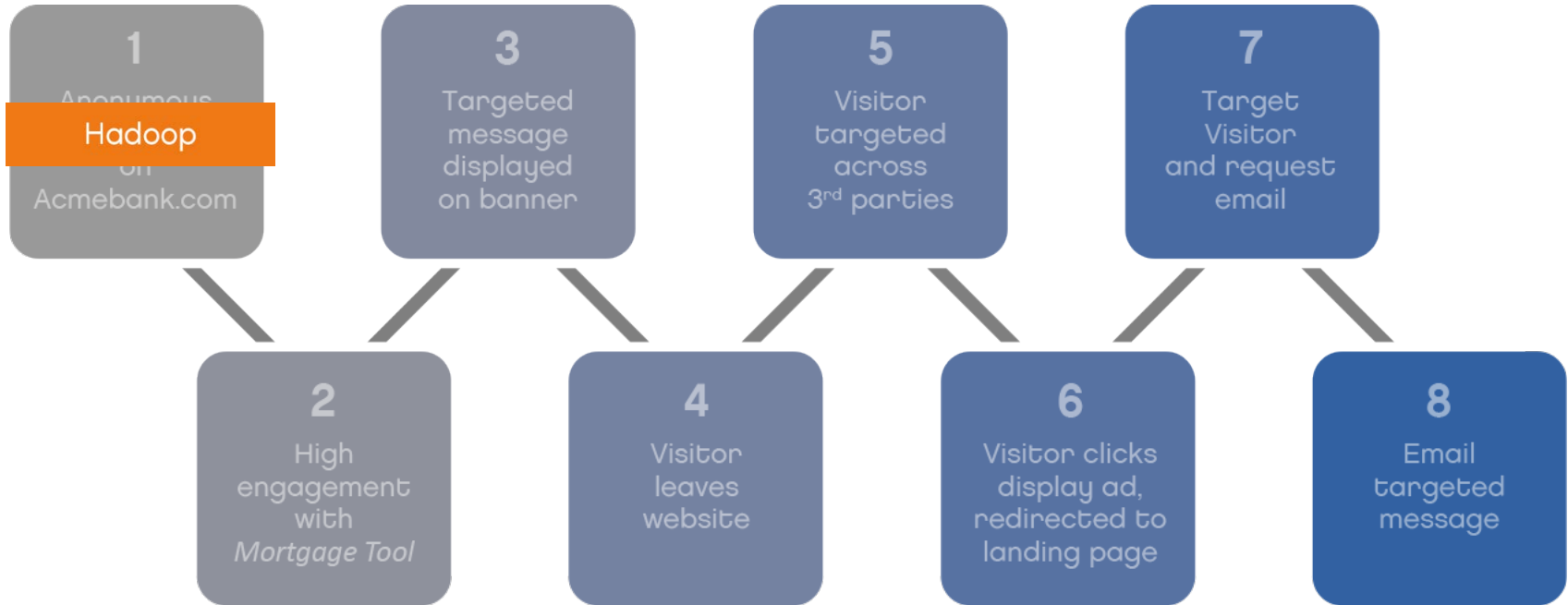
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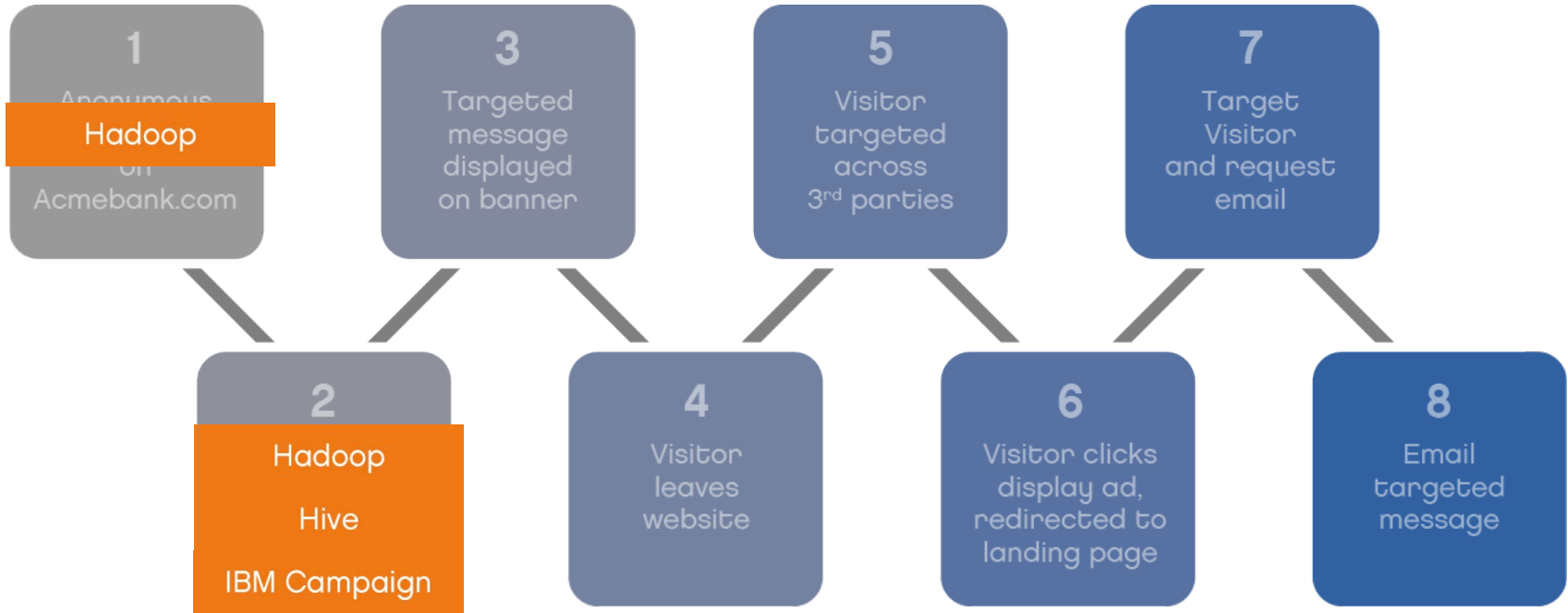
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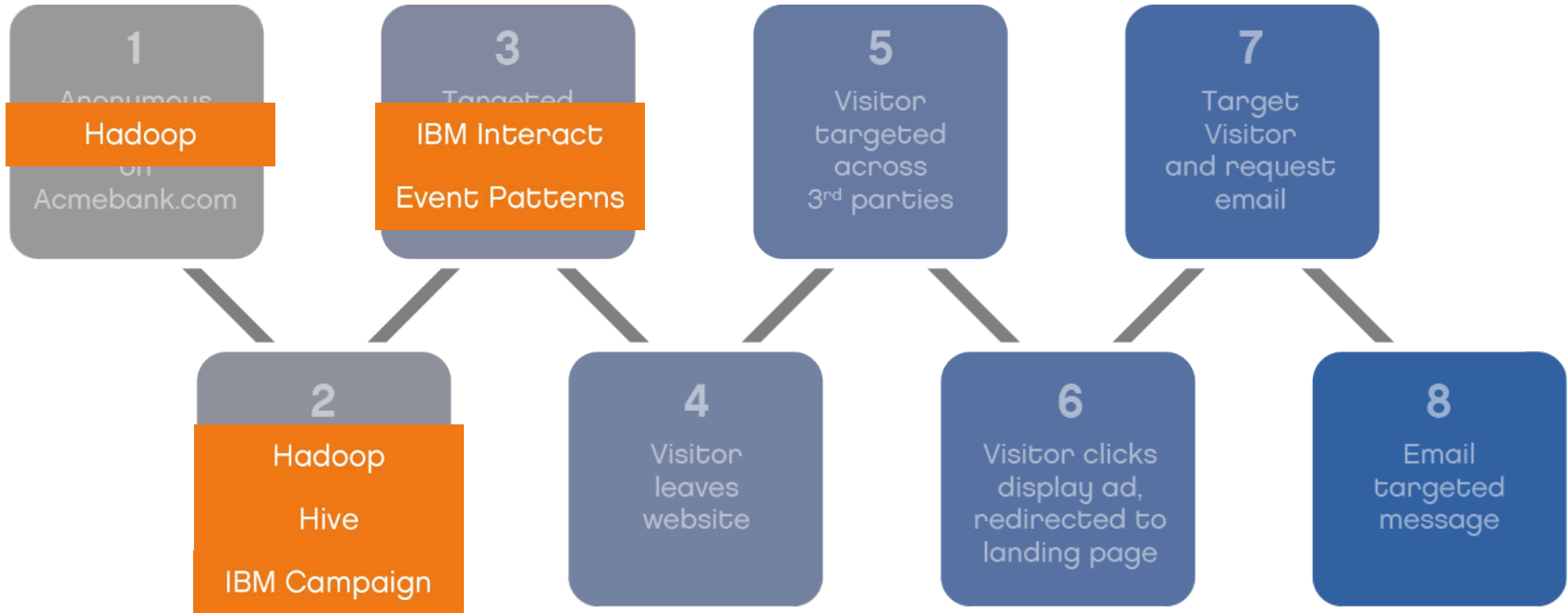
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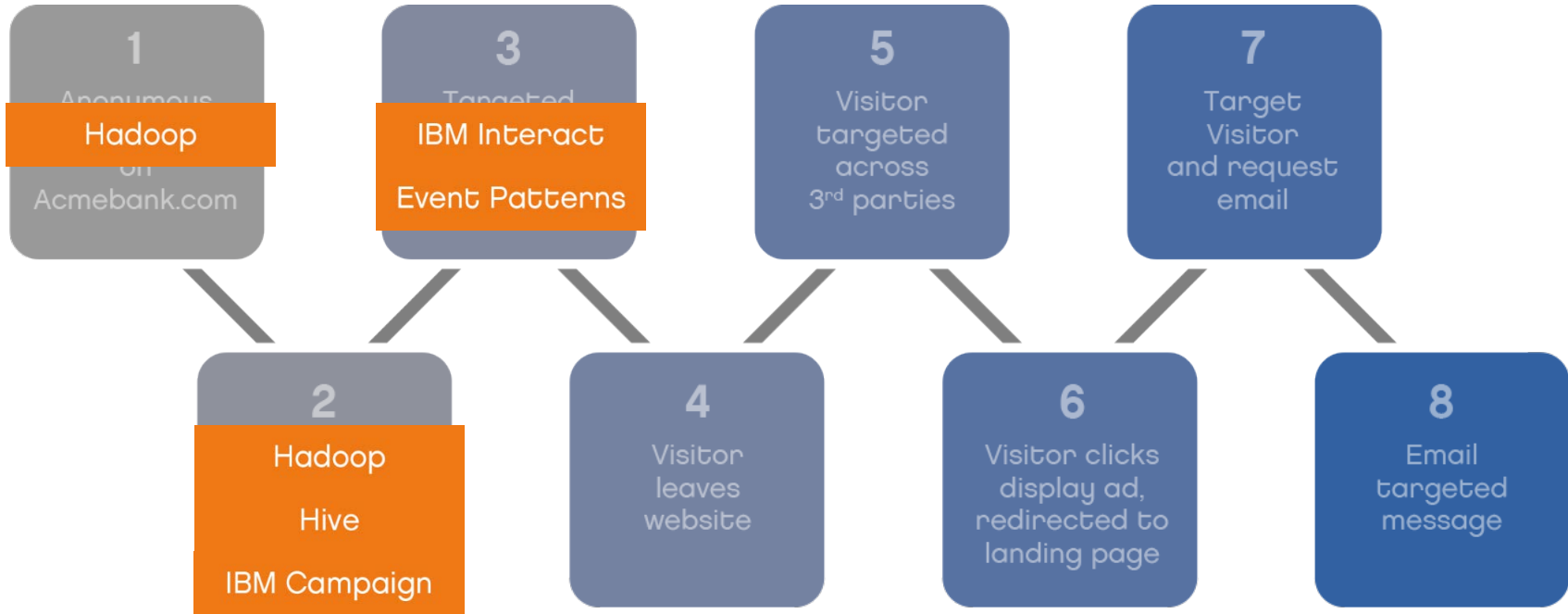
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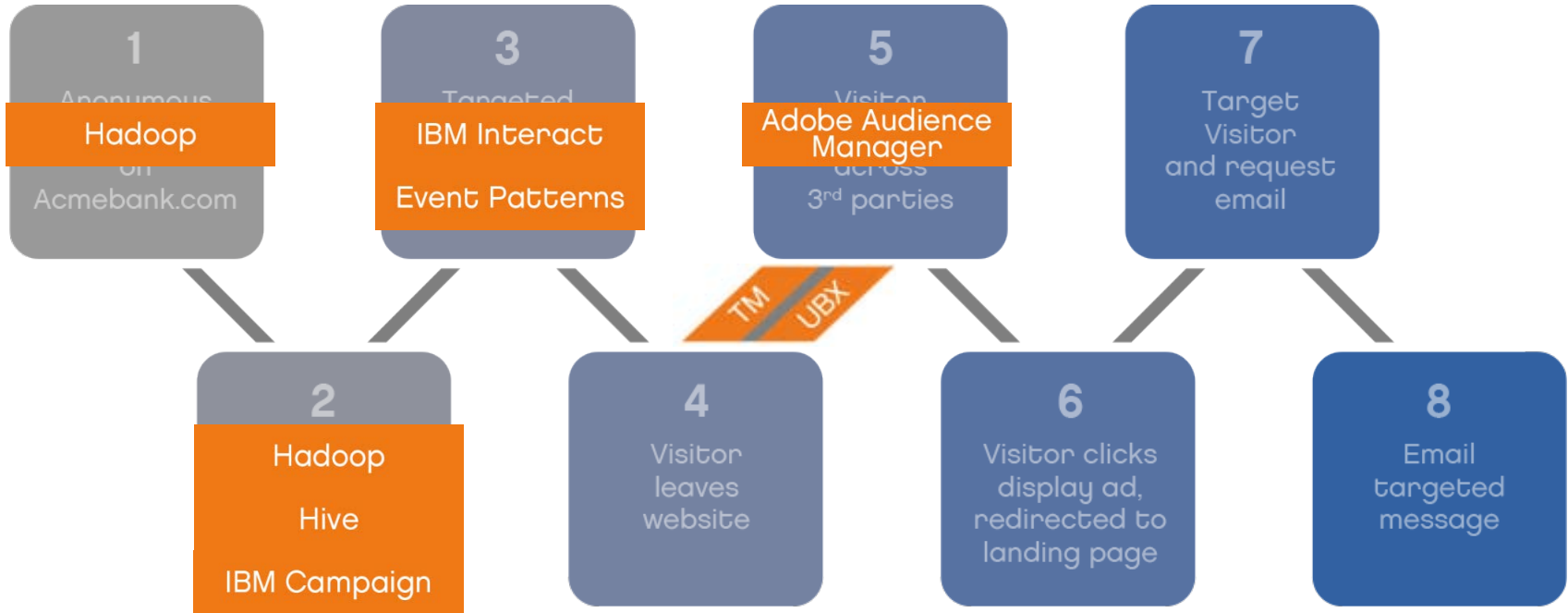
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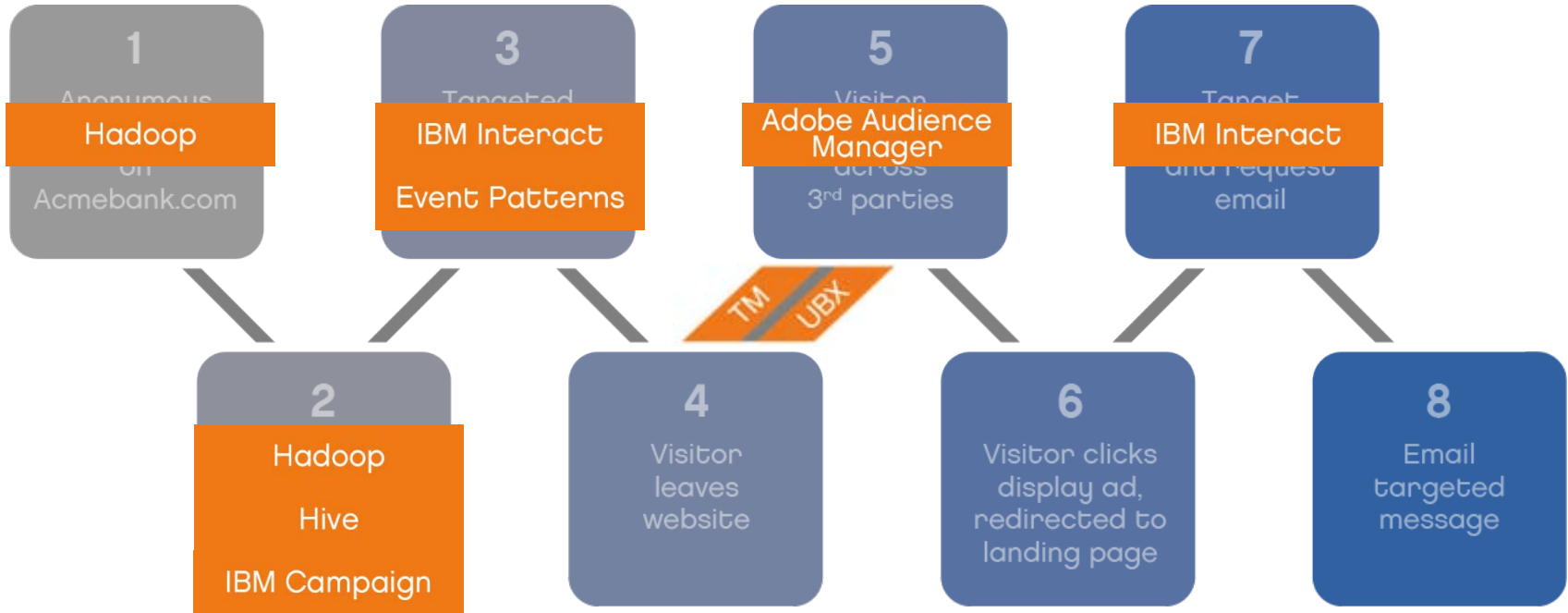
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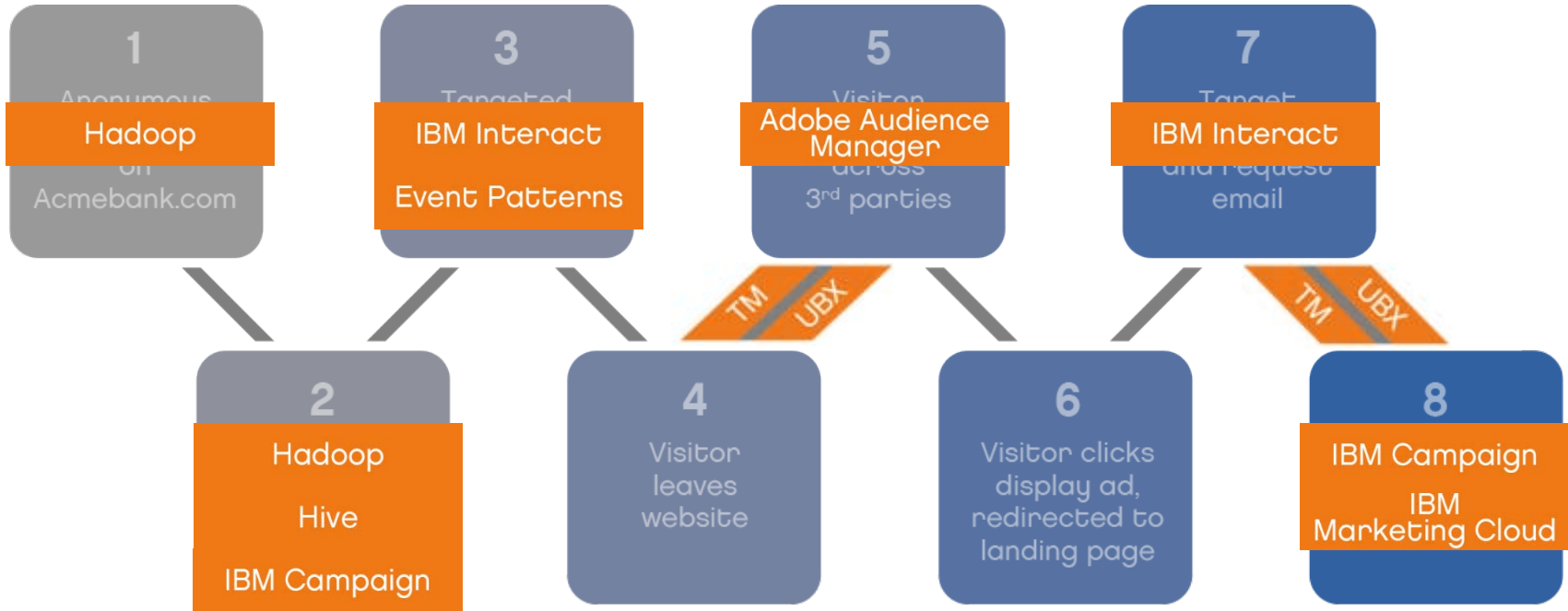
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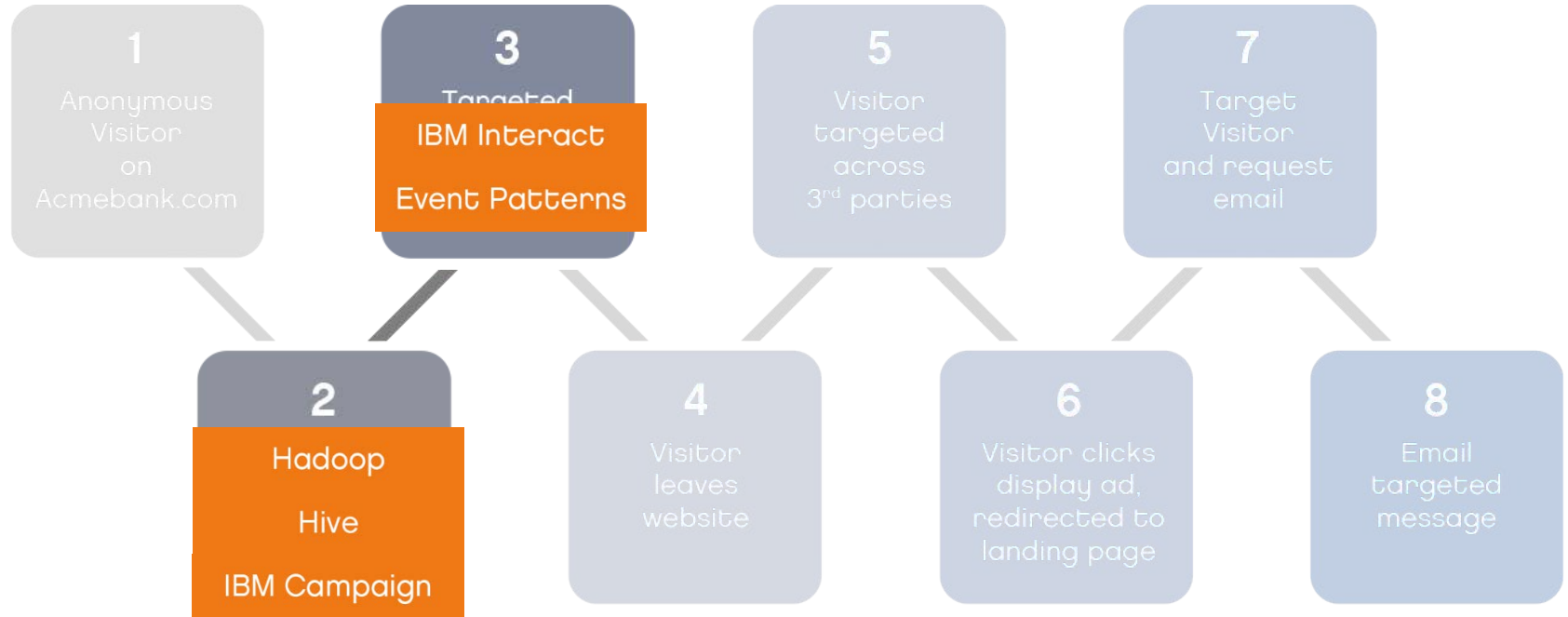
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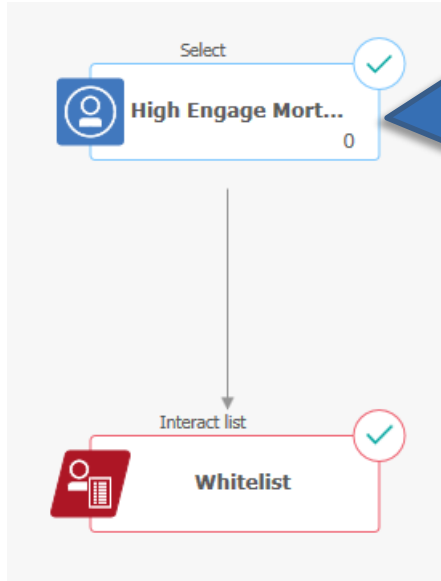
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IBM Campaign Integration with Hadoop/Hive



The screenshot shows the "Select process configuration" dialog box with the following details:

- Source:** Cell size limit, General
- Specify the criteria of records to select:**
 - Input: hive_mortgage_tool_weblog1
 - Select all Cookie IDs
 - Select Cookie IDs with
 - Advanced...
- Expression:**

Field name	Oper.	Value	And/Or
downpayment	>=	60000	AND
Engagement_Score	>=	85	AND
Days_Since	BETWEEN	0,21	
- Select based on:** hive_mortgage_tool_weblog1
- Available fields:** hive_mortgage_tool_weblog1, cookieid, time, amortperiod, term, rate, houseprice
- Buttons:** Text Builder, Formula helper, Check syntax, Test query, <- Use, Profile, Derived fields...
- Footer:** OK, Cancel, Help

IBM Campaign Integration with Hadoop/Hive

New table definition: Specify whether the new table is a flat file or database table.

Create new file
 Map to existing file
 Create new table in selected database
 Map to existing table in selected database

Select data source

Database name	Type
DBO	DB2
testRunDataSource	DB2
UA_SYSTABLES	DB2
Hive_Cloudera	BigDataODBC_Hive

Back Next Cancel Help

New table definition: Specify fields for the new table

Source table: hive.mortgage_tool_weblog

Source table fields

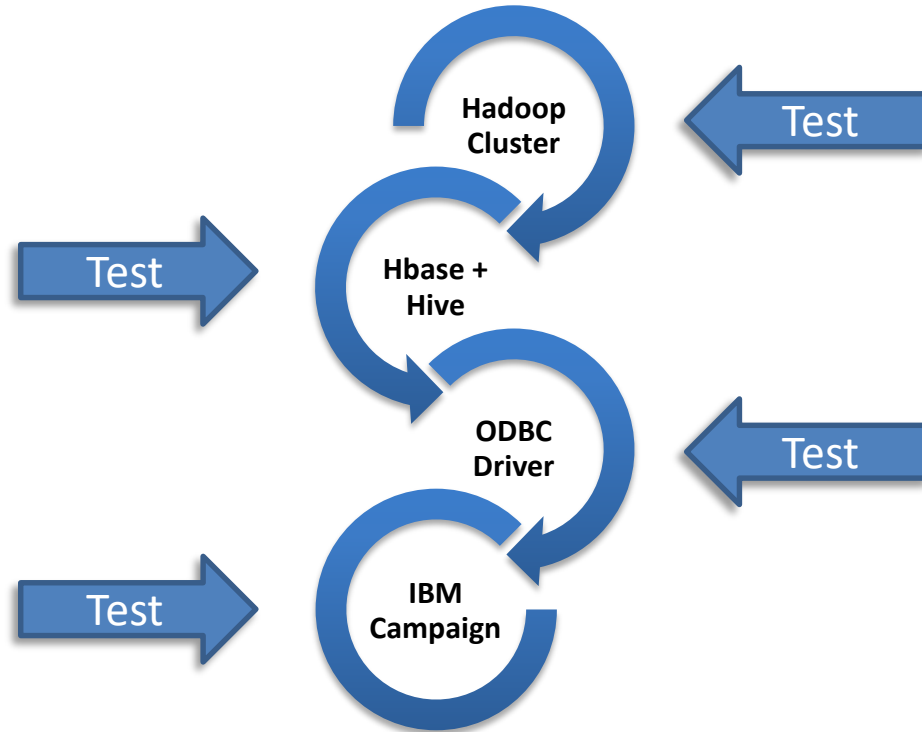
Field name	Field type
cookieid	Numeric
time	Text
amortperiod	Numeric
term	Numeric
rate	Numeric
houseprice	Numeric
downpymnt	Numeric
payfreq	Text

New table fields

Field name	Field type
cookieid	Numeric
time	Text
amortperiod	Numeric
term	Numeric
rate	Numeric
houseprice	Numeric
downpymnt	Numeric
payfreq	Text

Back Next Cancel Help

Troubleshooting Hadoop / IBM Campaign



Thank You!

Questions?



Further Questions

- We will be providing a follow up email
- We will be making a recording available
- Meet us at IBM Amplify in Las Vegas (March 20 -22)
- For additional questions, email us at:
sales@munvo.com