57% Important business data is not captured

42% Data is cumbersome and not user-friendly

75% Time wasted from data discrepancies
TOWARDS THE SENTIENT ENTERPRISE
A COMPANY AS A SINGLE ORGANISM
FIVE STAGES

1. AGILE DATA WAREHOUSE
2. BEHAVIORAL DATA PLATFORM
3. COLLABORATIVE IDEATION PLATFORM
4. ANALYTICAL APPLICATION PLATFORM
5. AUTONOMOUS DECISIONING PLATFORM
A platform does not refer to hardware but rather a capability that is inclusive of people, process, and technology to achieve agility.
The agile data platform moves traditional central DW structures to a balanced decentralized framework built for agility.
Loosen roadblocks, democratize data, breakdown silos and analyze data at massive scale
2x duplicated data by User1

User2 analyzing the old data

Data duplicated in data silo
EFFICIENT SANDBOX

Security Governance Privacy Dev Ops Data Management Data Access...
RECORDING ALL ACTIVITIES

Track every touchpoint at which users request and use data.
<table>
<thead>
<tr>
<th>Layer</th>
<th>Description</th>
<th>Users</th>
<th>Business Analysts</th>
<th>Power Users</th>
<th>Data Scientists</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Datalab: Virtual Sandboxes &amp; Prototypes</td>
<td></td>
<td></td>
<td></td>
<td>User Owned</td>
</tr>
<tr>
<td>4</td>
<td>Presentation: Application Specific Views</td>
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<td></td>
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<tr>
<td>3</td>
<td>Aggregational: BU Specific Rollups</td>
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<tr>
<td>2</td>
<td>Calculation: Key Performance Indicators</td>
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<tr>
<td>1</td>
<td>Integration: Integrated Model at Lowest Granularity</td>
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<tr>
<td>0</td>
<td>Staging: 1:1 Source Systems</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Layered Data Architecture

- **Datalab**: Virtual Sandboxes & Prototypes
- **Presentation**: Application Specific Views
- **Aggregational**: BU Specific Rollups
- **Calculation**: Key Performance Indicators
- **Integration**: Integrated Model at Lowest Granularity
- **Staging**: 1:1 Source Systems

Levels:
- **0**: Staging
- **1**: Integration
- **2**: Calculation
- **3**: Aggregational
- **4**: Presentation
- **5**: Datalab

Coupling:
- **Tightly Coupled**
- **Loosely Coupled**
- **Non-Coupled**
CHALLENGES

SILOED IT

OUTDATED ANALYTICS

+200 DATA MARTS
OUTCOMES

One agile data environment
Improved decision-making
New data-centric culture
FIVE STAGES

BEHAVIORAL DATA PLATFORM

From transactional to behavioral data. Value comes from behaviors rather than transactions.
Use patterns and context in human and machine behavior to predict performance and inform new strategies.
TRANSACTIONAL DATA
BEHAVIORAL DATA

BEHAVIORAL PATTERNS

10 to 100X HIGHER DATA VOLUMES

@mohansawhney
CUSTOMER BEHAVIOR

Customer is charged a fee

Customer contacts the call center

Customer searches the web for bank policies

Account transactions declined

Customer interacts with the bank in person

Customer cancels his account and leaves the bank
CUSTOMER BEHAVIOR

GUSTS

SQUALLS

WINDS

MACHINE BEHAVIOR

AIR DENSITY &
AIR TEMPERATURE

Low level short
duration turbine
directional changes

Medium level
turbine directional
changes

Highest turbine
directional changes

AIR DENSITY &
AIR TEMPERATURE

Low level short
duration turbine
directional changes

Medium level
turbine directional
changes

Highest turbine
directional changes

MACHINE BEHAVIOR

CUSTOMER BEHAVIOR
Sensor data that is collected from the wind parks

Wind power capacity
Wind speed at hubs
Gearbox readings
Hydraulic measurements
Turbine brakes quality

All readings are analyzed to get the optimal pitch on the blades
CHALLENGES

STAY RELEVANT

UNDERSTAND BEHAVIOR

PROTECT REVENUE EROSION
Predictive modeling for customer churn  
Data-driven pricing campaigns  
Avoided millions in loss
FIVE STAGES

COLLABORATIVE IDEATION PLATFORM

LinkedIn for analytics. From centralized metadata to crowd-sourced collaboration. Social interactions connect the data within the enterprise.
INNOVATE AND WORK TOGETHER

Foster an analytics environment where many different people can collaborate on data and share ideas.
Who are my best customers?

We've compiled the most relevant answers to your query

Possible answer: Companies with 10-20k employees, founded after 2003

Profit Margin
31.2 %
from sales in this segment

VIEW & EDIT QUERY

Similar searches to this search
- Who are my loyal customers? John J. searched at 9:31 AM
- Who are my profitable customers? Mary S. searched Tuesday
- What are the customer segments? Barry O. searched Monday

Related Questions & Answers conversations similar to your search
- Where does customer data live? Milly P. asked at 8:24 AM
- What defines "best" customer? Mary M. asked yesterday
- How do you calculate CSI? Oliver R. asked last week

Related Data App Engines
app engines powering your query
- Segmentation Engine ran at 6:05 AM
- CRM Data Sync 256 MB

Related Streaming Data Sources
data feeding this query
- software.ecommerce.com updated just now 21.2K Records
- IPhone App 2.5 M Records
Who are my best customers?

We've compiled the most relevant answers to your query

```sql
SELECT * FROM (S)
FROM (S)
ON odr
ON cust
ON sel
STARTNO
MAXITER
Y
WHERE X
ORDER BY

RUN QUERY FIND SIMILAR

Similar searches to this search

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John J. searched at 9:31 AM

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Mary S. searched Tuesday

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Barry G. searched Monday

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Oliver R. asked last week

Related Data App Engines
app engines powering your query

Segmentation Engine 382 MB

Related Streaming Data Sources
data feeding this query

software.ecommerce.com 21.2 K

Query Suggestions
Pinned Questions

Where does customer data live?
The idea is to create an app that the marketers can use by extending the customer influencer index model that calculates customers influence based on relations.

What is the definition of ‘best’ customer?
There are many ways to calculate “best” customers. Calculations can be based on total spend over lifetime, purchases within the last 3 months, frequency of shopping, products purchases or a number of different methods.

All Questions

Where does customer data live?
The idea is to create an app that the marketers can use by extending the customer influencer index model that calculates customers influence based on relations.

by Milly P. on 8:24 AM
29 views 3 answers

What is the definition of ‘best’ customer?
There are many ways to calculate “best” customers. Calculations can be based on total spend over lifetime, purchases within the last 3 months, frequency of shopping, products purchases or a number of different methods.

by Mary M. on yesterday at 2:31 PM
15 views 2 answers

How do you calculate CSI?
CSI refers to customer satisfaction index that measures the customer sentiment with our products and services. Customers who are satisfied are likely to spend 2.6 times more than customers who are not. Our customer satisfaction index is calculated based on a number of sources.

by Oliver R. on Thurs at 9:42 AM
42 views 5 answers

→ MORE
Where does customer data live?
by Bella T. today at 8:24 AM

The idea is to create an app that the marketers can use by extending the customer influencer index model that calculates customers influence based on relations identified across multiple channels. I created a customer network based on information from twitter, facebook, linked in, transactions, and households. This model uses page rank to assign score to each node identified by the customer id. Visual output based on a sigma graph and the code is below:

```
SELECT * FROM SELECT 
  (CB as Table AS 'edges' PARTITION BY callingnumber 
  on out_table AS 'nodes' PARTITION BY customerID 
  on (select country) from cust_table AS 'socialIndexValue' DIMENSION 
  STATISTICS (callsnumber) | SOURCE (callnumber) CUMULATIVE | 5% | 
  ORDER BY pagerank desc; 
```

As you can see, we can identify clusters known as communities and influencers within various communities. I'm building an app that allows end users to select parameters such as product of interest and run the app. Program logic will build a customer network, identify influencers, but I want to overlay this with customer sentiment models based on a specific product. Also the final output will include customers, ID, preferred channel and contact information.
FIVE STAGES

**ANALYTICAL APPLICATION PLATFORM**

Analytical apps. From static applications and ETL to agile self-service apps. From extraction of data to enterprise listening.
Bring the app-style economy into the enterprise and give everyone access to analytics they can use right away – at scale.
APP IDEA
FROM A NON-EXPERT

APP FRAMEWORK

APP

DEPLOY

HOUR 1  HOUR 2  HOUR 3  HOUR 4  HOUR 5  HOUR 6  HOUR 7  HOUR 8  HOUR 9  HOUR 10

@mohansawhney
FIVE STAGES

1. Predictive technologies and algorithms. Decision making with the help of automated algorithms.
TIME WASTED SIFTING THROUGH DATA

90%
ALGORITHMIC APPS

Cleansing and refining sources identifying signals and patterns

90% TIME SPENT ON DECISION MAKING

Data Presented Simply

Messy Data
AUTOMATED TRADING
CHALLENGES

ACHIEVING VISION THROUGH ANALYTICS

CREATING NEXT-GEN CAR EXPERIENCE

TAP INTO IoT AND AoT
AI for self-driving cars
Pioneered safety innovations
Shift towards “Transportation-aaS”
Undetected Problem (Minor)

Undetected Problem (Major)
Problem Detected
(Solved)
Crisis Averted

REVENUE

Q1 Q2 Q3
The Agile Data Warehouse moves traditional central DW structures to a balanced decentralized framework built for agility.

**SHIFTS OF THE FIVE STAGES**

1. **Analytical Apps.** From static applications and ETL to agile Self Service Apps. From Extraction of Data to Enterprise Listening. LinkedIn for Analytics.
2. **Behavioral Data Platform.** From Transactional to Behavioral Data. Value comes from behaviors rather than transactions.
3. **Analytical Application Platform.** Analytical Apps. From static applications and ETL to agile Self Service Apps. From Extraction of Data to Enterprise Listening.
4. **Collaborative Ideation Platform.** LinkedIn for Analytics. From centralized Meta Data to Crowd Sourced Collaboration. Social interactions connect the data within the enterprise.
5. **Autonomous Decisioning Platform.** Predictive Technologies and Algorithms. From focusing only 10% of time on decision making and 90% of sifting through data to 90% of decision making with the help of automated algorithms.
Evolution of Business Operations Management

Automate selected processes to create embedded products

Create new monetization approaches to capture product benefits

Optimize automated processes through embedded analytics
Embedded Product Management

**Discover**
- Identify repeatable patterns across service engagements
- Triage opportunities for automating selected repeatable processes

**Develop**
- Develop a prototype for an embedded product that automates a selected process
- Add analytics and machine learning to the product
- Evolve towards Robotic Process Automation

**Monetize**
- Create transaction or outcome-based business models
- Select leading-edge clients to pilot the product and business model
- Scale across client base
Evolving the Business Model

- Inputs-Based Pricing
- Transaction-Based Pricing
- Outcome-Based Pricing

Capturing Benefits from Automation
Capturing Benefits from Analytics
Thank you