

# 1966 Product Overview: Business Analytics with Business Flow

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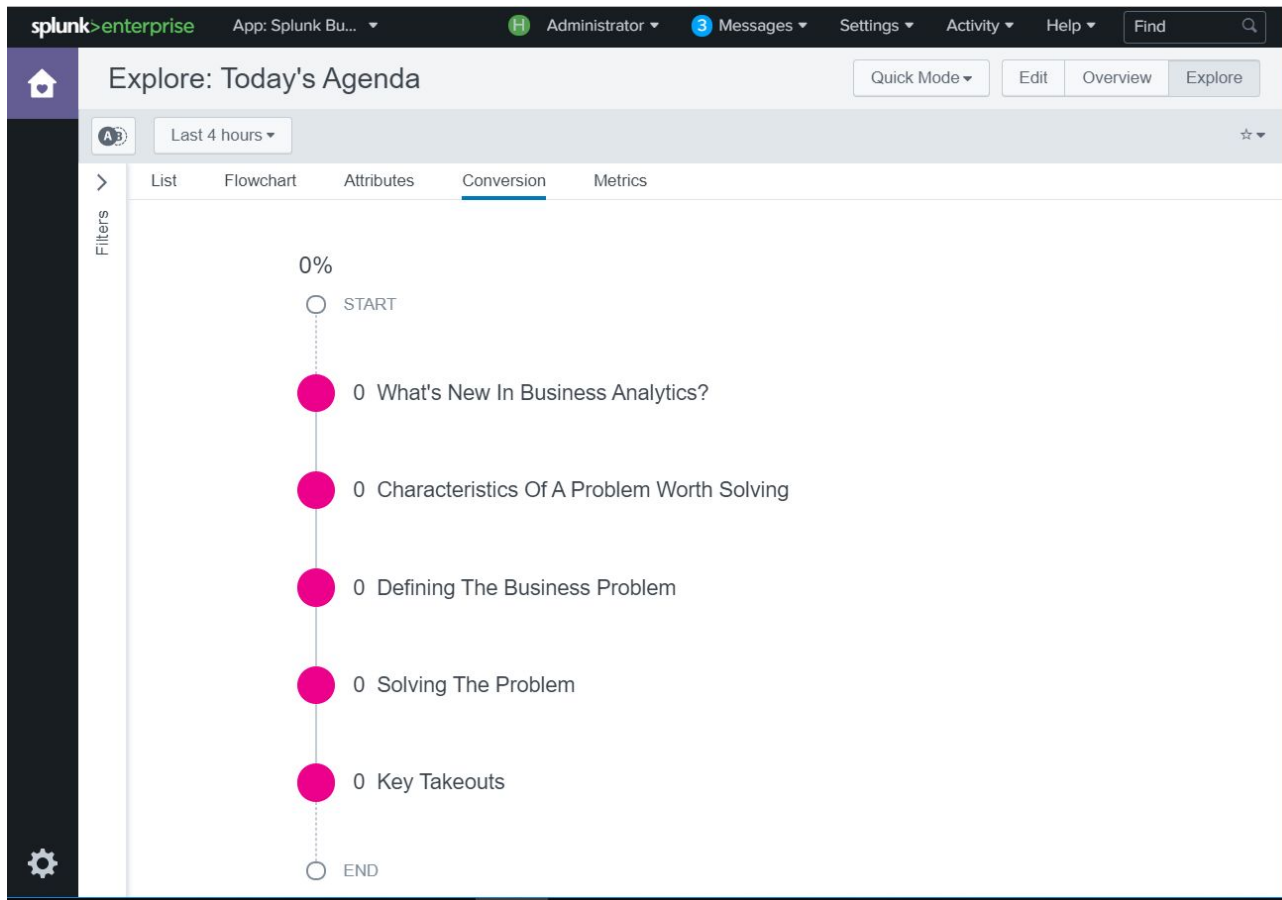
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# Agenda



# 1. 2130 What's new in Business Analytics: A quick recap

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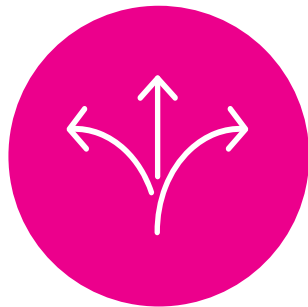


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# Every LOB is Now Powered by Applications

Generating Millions of Events per Day



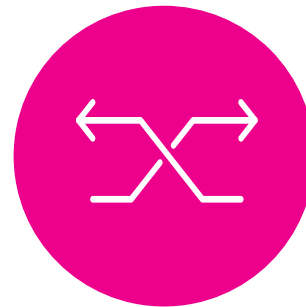
Supply Chain



Customer  
Service



Sales



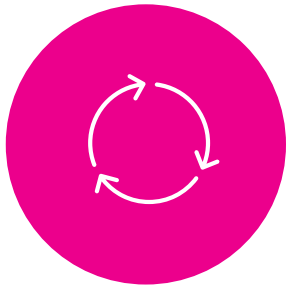
Logistics



Finance

**EVERY LOB IS NOW A “DIGITAL BUSINESS”**

# Gaining Transparency Into Complex, High Volume Processes is Challenging



Processes are  
fluid, need to  
constantly update  
and model data



Data spans  
disparate  
systems, difficult  
to collect



Processes lack  
real-time  
visibility, slow  
feedback loop

# What if Your Data Could Tell You...



If processes are actually  
operating and performing  
as expected



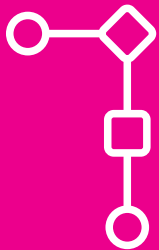
Where you have  
incomplete processes or  
unexpected delays



How conversion rates and  
performance differs from  
one cohort to another



# Introducing Splunk Business Flow (SBF)



End-to-end process  
discovery through  
event stitching



Investigate  
drill-down with  
exploration interface



Side-by-side  
A/B comparison  
of process flows



Conformance  
checking and  
deviation notifications

## SPLUNK BUSINESS FLOW

splunk>enterprise

splunk>cloud

## 2. Characteristics of a problem worth solving

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# SBF can be used to improve business processes and customer journeys

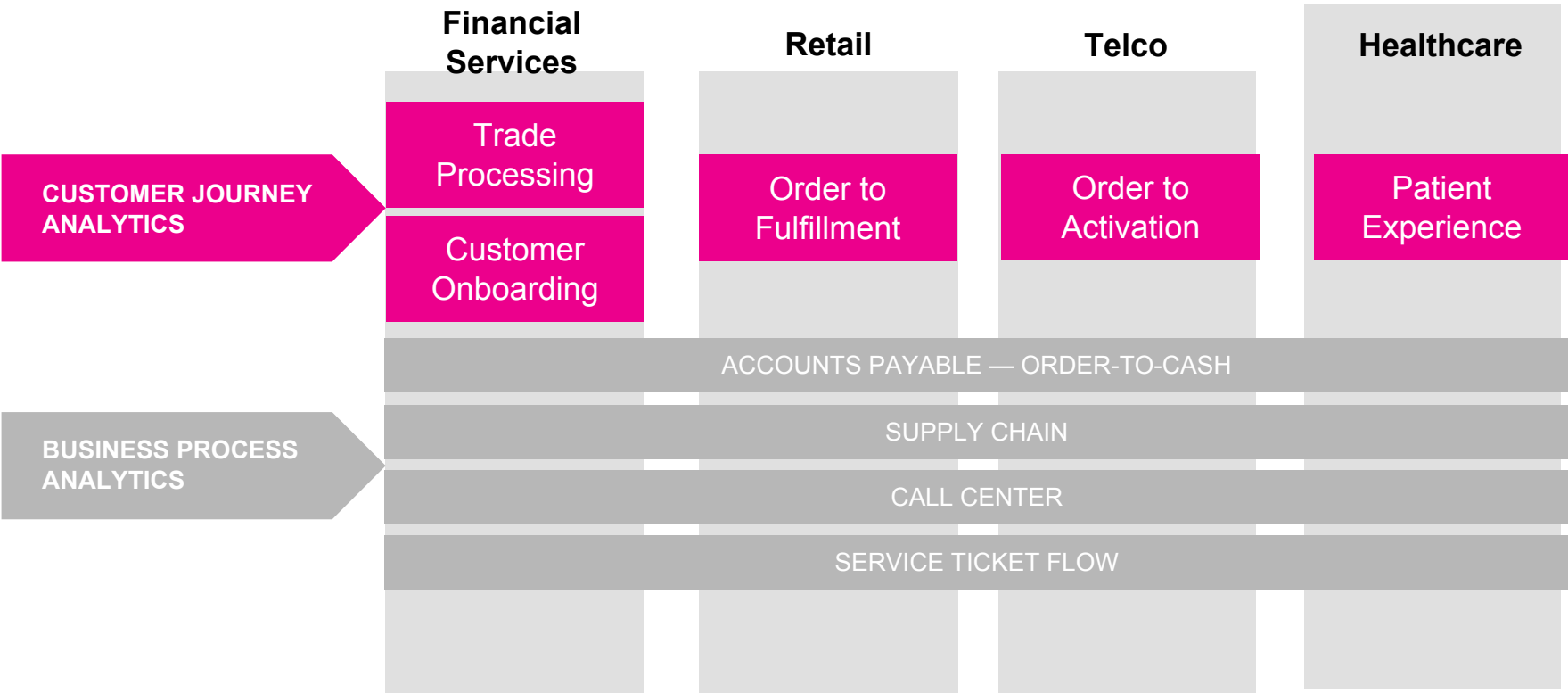
“A **business process** or business method is a collection of related, structured activities or **tasks** by people or equipment which **in a specific sequence** produce a service or product for a particular customer or customers. Business processes occur at all organizational levels and **may or may not be visible to the customers.**”

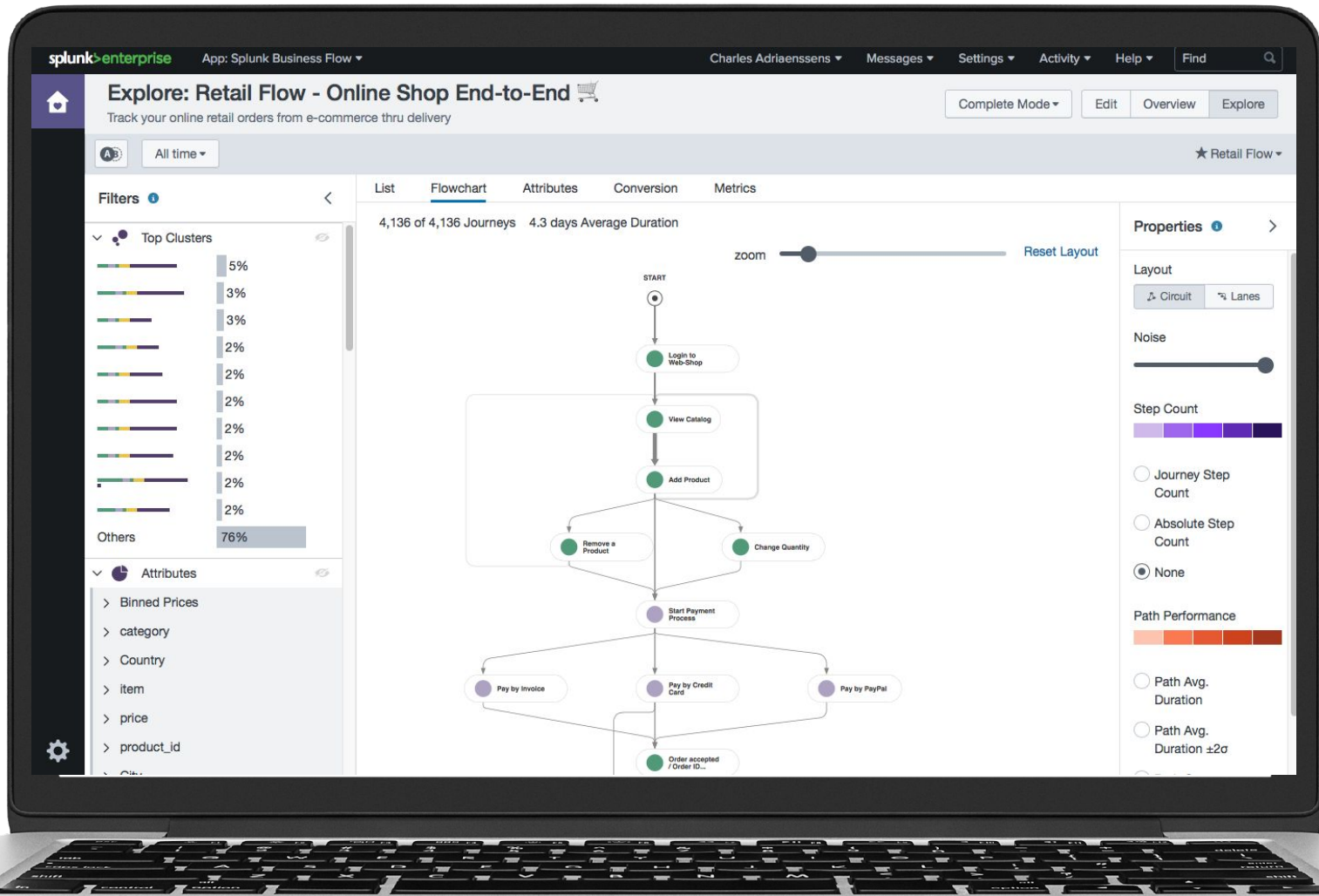
– *Source Wikipedia*

“The **customer journey** is the series of interactions between a customer and a company that occur as the customer pursues a specific goal. **(The journey may not conform to the company's intentions.)**”

– *Source: Forrester*

# Customer Journey : Vertical Use Case Examples





# Otto Group

The image shows a person's hands holding a smartphone, with a laptop and a computer mouse visible in the foreground. Overlaid on the image is a white circle containing the text 'otto group' in red. To the right of the circle are three circular icons: a document, a smartphone, and a network diagram. The background is a blurred office setting.

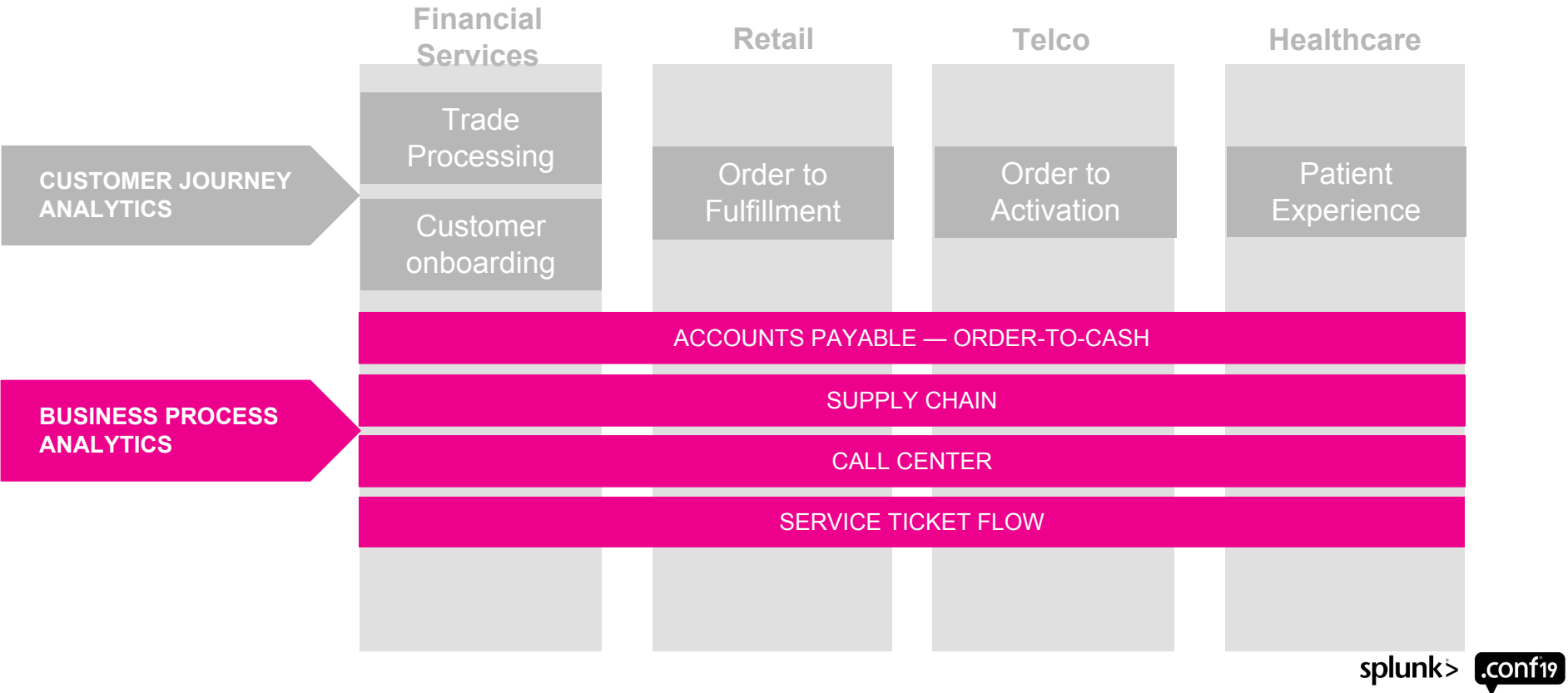
*otto group*

With Business Flow, it's the first time that we can have a look into the living system. It's like you're using an X-Ray machine into your software. Business Flow can help us find out where are we losing time and losing time often means losing money."

**Product Manager, Otto Group**

- ▶ Gain end-to-end visibility into operations across the customer experience
- ▶ Investigate complex customer order issues without delays
- ▶ Track current order status across multi-tiered enterprise systems

# Business Process : Use Case Examples





# 3. Defining the business problem

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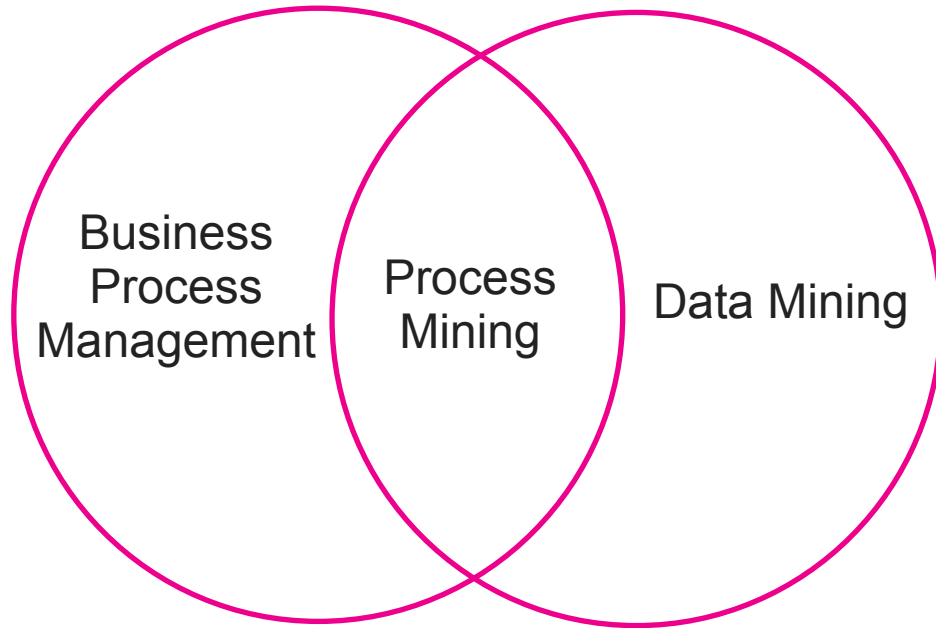
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# What is process mining?



Process Mining is a process analysis method that aims to **discover, monitor and improve real processes (processes not assumed)** by extracting knowledge easily from available event logs in the systems of current information of an organization

**Source: wikipedia**



Reduced  
Cycle  
Times?

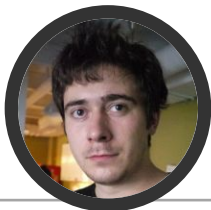
Higher  
Completion  
Rates?

Reduced  
Fallout?

Fewer  
Bottlenecks

With the explosion of **digital transformation**, many organisations are struggling to deliver operational excellence

# Who should be involved?



**Data Architect**  
“Splunk Expert”



**IT Business Apps**  
“Data Admin”



**LOB Process**  
Improvement Analyst



**LOB Business**  
Operations Analyst

## Role

## Responsibility

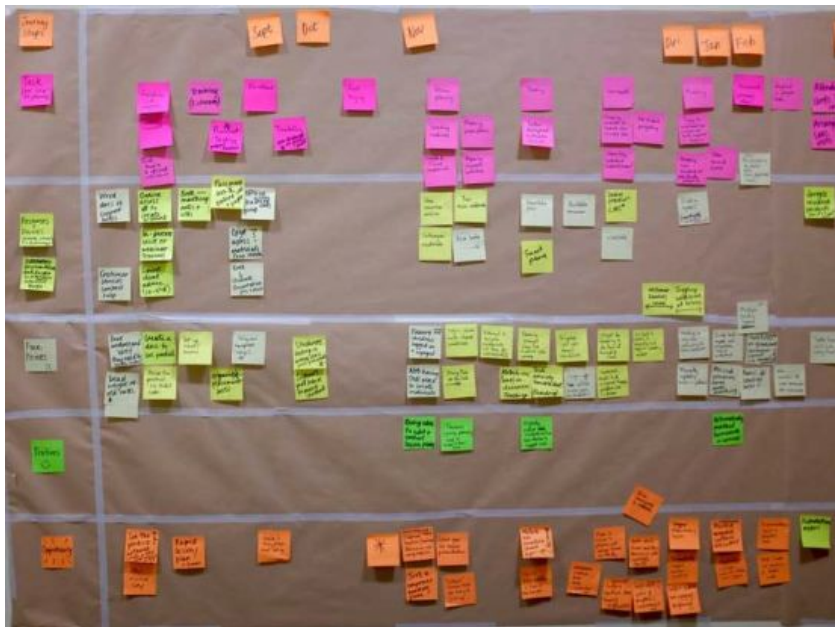
Understands the value and administration of Splunk

Administers critical business applications from which logs can be extracted

Identifies defects, eliminates waste, and streamlines inefficiencies in processes

Provides reporting and visibility on key performance metrics to decision makers

# Defining the end-to-end process / journey



- All possible steps
- Identification of data sources / owners
- Key attributes (for analysis)
- KPIs

# Translating Insights into Business Value

Example insights from the Retail / Order To Fulfillment Use Case

Insight	Business Value
Identification of unexpected loops	Time saving by identifying / unblocking
Identification of unfulfilled orders	Reduced fulfillment costs
Reduction of 'pick failures'	Higher first time pick volumes, reduced costs / compensation
Manual intervention during process causing delays	Decreased fulfillment costs and call centre escalations
High variance in time between orders released and fulfilment	More orders delivered on time, reduced fulfillment costs



**Improved  
customer  
experience  
and business  
profitability**

## Key Success Criteria

1. Are event level data available which can be correlated to build the end-to-end journey / process?
2. Do we know enough about the journey / process to derive insights that lead to improvements?
3. Can we deliver tangible business value?

# 4. Solving the problem

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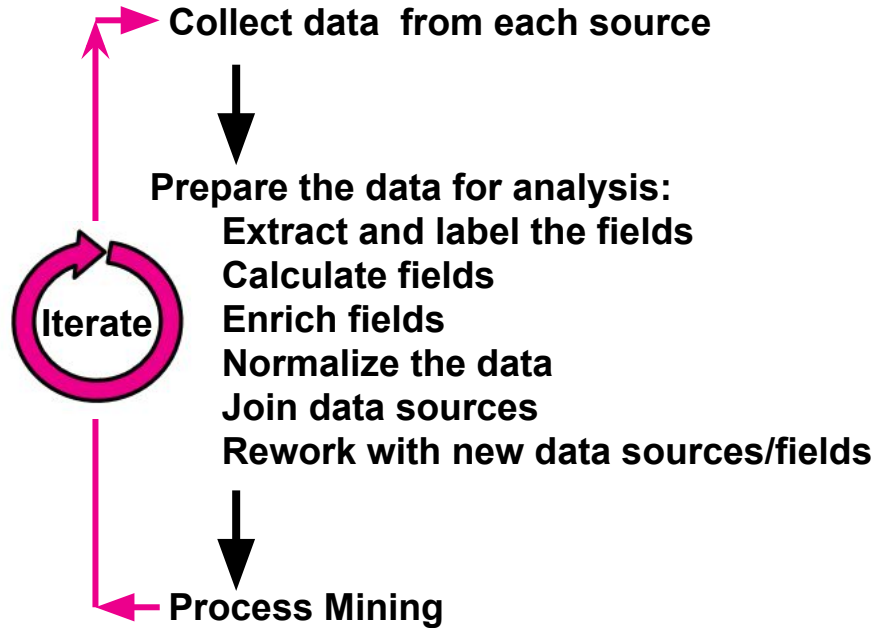
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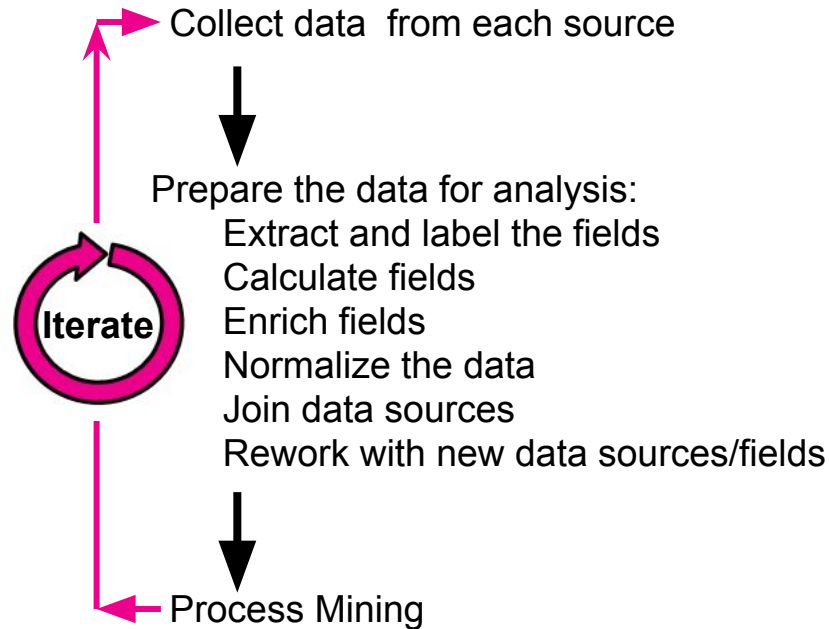
# Before The Mining Starts

Data Collection and Preparation – 80% Of the Effort





# Process Mining Without Splunk



## Different Technology For Each Step

Extract data from each machine/data source using custom code or third party tool

Run batch jobs to collect the data  
USE ETL tool or custom code to transform the data and load into a database based on database design criteria  
Rework each time new sources or fields are added  
Run batch jobs to refresh the data for analysis  
Separate tool to monitor the performance of batch jobs  
Separate data mining tool for quality and compliance analysis

Process visualization tool only as current as the last data load  
Separate tool for custom dashboarding  
Separate tool for notifications and alerts

# Process Mining With Splunk !

## Integrated Splunk Technology

Splunk technology forwards data from each source

Splunk indexes the data

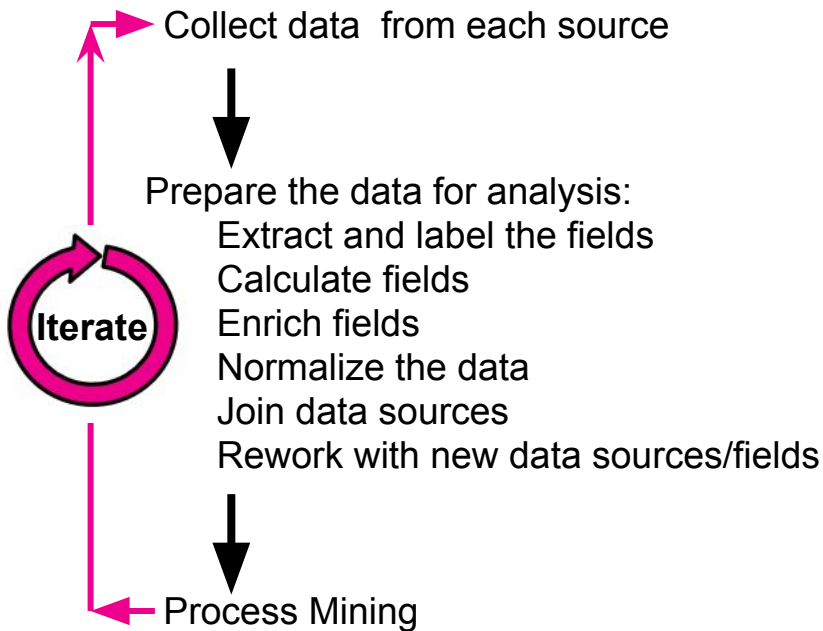
Splunk commands extract, calculate, enrich, normalize, and join data in real time

Splunk commands add new data sources and fields

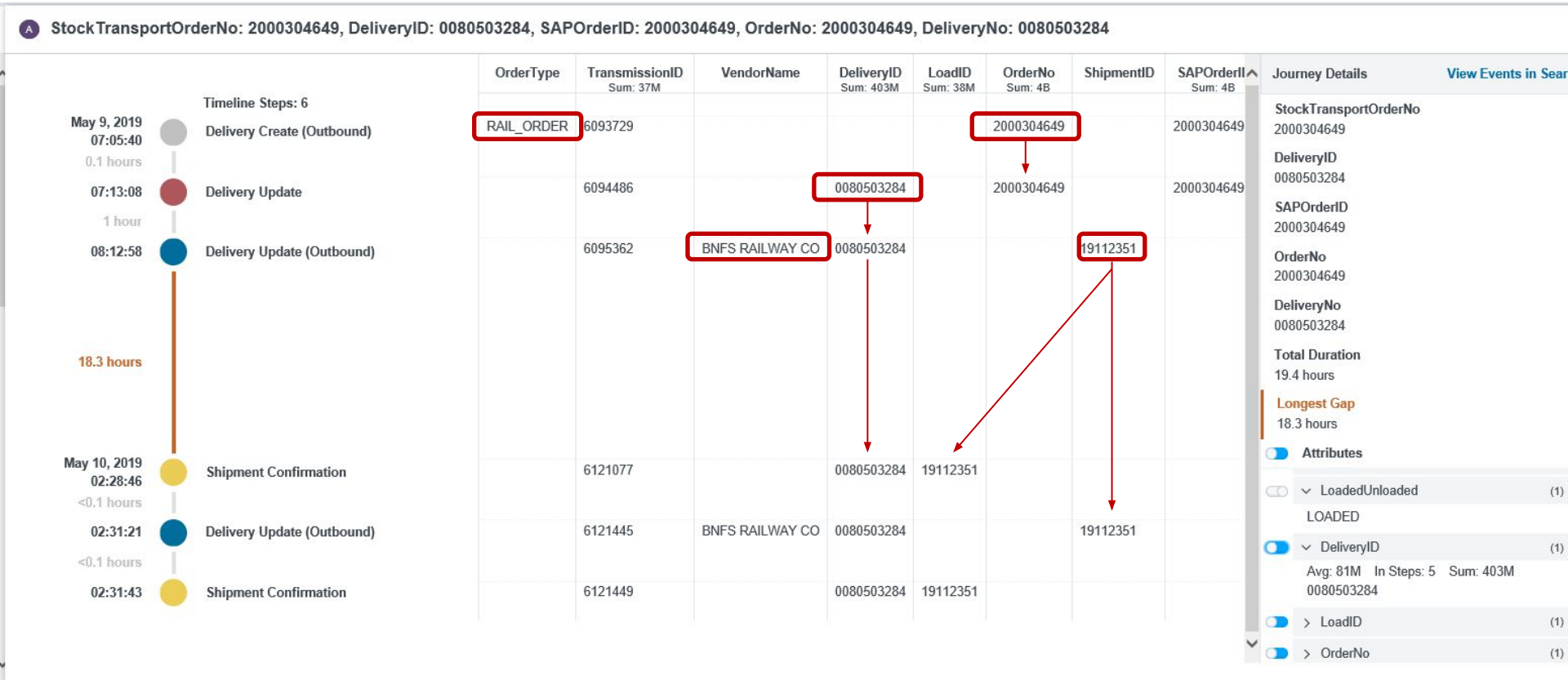
Splunk monitors the entire data pipeline and notifies if there are disruptions

Analysis based on current data

Splunk dashboards for custom analysis and alerting



# Challenge: Correlating Across Data Sources



# Challenge: Who Is The Data Expert ???

The screenshot displays the Splunk Search interface for a search named "Splunk\_conversationID by Call Type". The search is configured with the following parameters:

- Search:** `1 index="phdapl_logs"`
- Sample Size:** 10,000 events
- Max Duration:** 15 Minutes
- Hide default fields:** (19)

The interface is divided into three main sections for field selection:

- Correlation IDs:** 1 selected. The search field is "Search Correlation IDs...". The list shows 109 of 109 items. The selected item is `data.jsonPayload.conversationID`.
- Steps:** 1 selected. The search field is "Search Steps...". The list shows 109 of 109 items. The selected item is `data.jsonPayload.conversationID`.
- Attributes:** 4 selected. The search field is "Search Attributes...". The list shows 109 of 109 items. The selected items are `data.jsonPayload.conversationID`, `data.jsonPayload.duration`, `data.jsonPayload.errorCode`, and `data.jsonPayload.error`.

The bottom of the interface shows a list of fields for selection, including `app`, `attributes.logging.googleapis.com/timestamp`, `bytes`, `cached`, `data.insertId`, `data.jsonPayload.authChannel`, `data.jsonPayload.backendResponseTime`, `data.jsonPayload.caller`, `data.jsonPayload.clientIP`, `data.jsonPayload.contentLen`, `data.jsonPayload.conversationID` (checked), `data.jsonPayload.direction`, `data.jsonPayload.duration`, `data.jsonPayload.err`, `data.jsonPayload.error`, `data.jsonPayload.errorCode`, `data.jsonPayload.handler`, `data.jsonPayload.headers.Accept`, `data.jsonPayload.headers.Accept-Encoding`, `data.jsonPayload.headers.Accept-Language`, `data.jsonPayload.headers.Access-Control-Allow-Headers`, `data.jsonPayload.headers.Access-Control-Allow-Origin`, `data.jsonPayload.headers.Akaatomr`, `data.jsonPayload.headers.Akadogtm`, `data.jsonPayload.headers.Akamai-Bot`, `data.jsonPayload.headers.Akamai-Origin-Hop`, `data.jsonPayload.headers.Api-Session-Id`, and `data.jsonPayload.headers.Auth-Channel`.



# 5. Key Takeouts

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## Key Takeaways

1. Get the right people involved as early as possible
2. Constantly be thinking of how to deliver business value
3. Don't be afraid to experiment with your data. Refine, refine, refine!



# 6. Want to learn more?

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# Want to learn more about Splunk Business Flow?

1. Attend the SBF Technical Workshop with Tom Martin and Dirk Beerbohm (BA2138, today 13.45).
2. Hear how Deutsche Bahn have been successful using SBF (BA1191, today 15.00).
3. Visit the Splunk Business Flow booth.

# Interested in Splunk Business Flow?

Fill Out Our Survey To  
Get More Information  
From the Splunk  
Product Team

<http://bit.ly/2kjBoXm>

# Q&A

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