

# DIGITALIZED PROCESSES: OPTIMIZING THE CUSTOMER EXPERIENCE THROUGH DIGITAL ANALYSIS AND DESIGN

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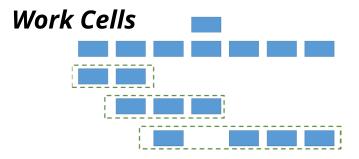
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# **NEED TO CHANGE BUSINESS MODELS**

Every one of these broadens the scope of any solution requirement



Disintermediation of trusted







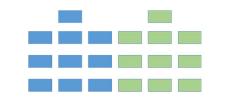
transactions





New resources AI and RPA











Connectivity



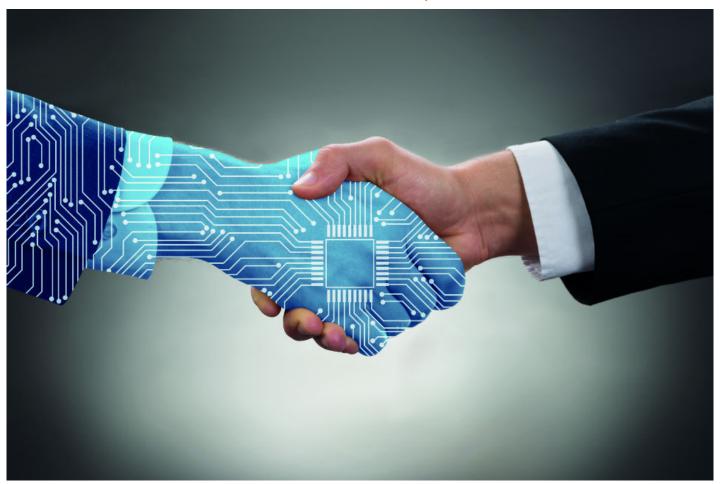






# **SO LET'S GET DIGITAL**

It's not this simple





# WHAT WE THINK DIGITAL IS

The world of digital opportunities

Product and Service

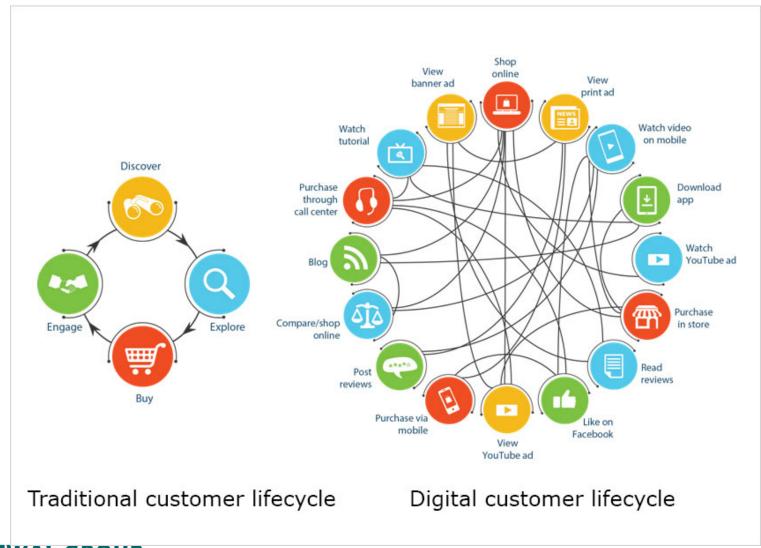
Technical Solution

Digital Channel

Stakeholders

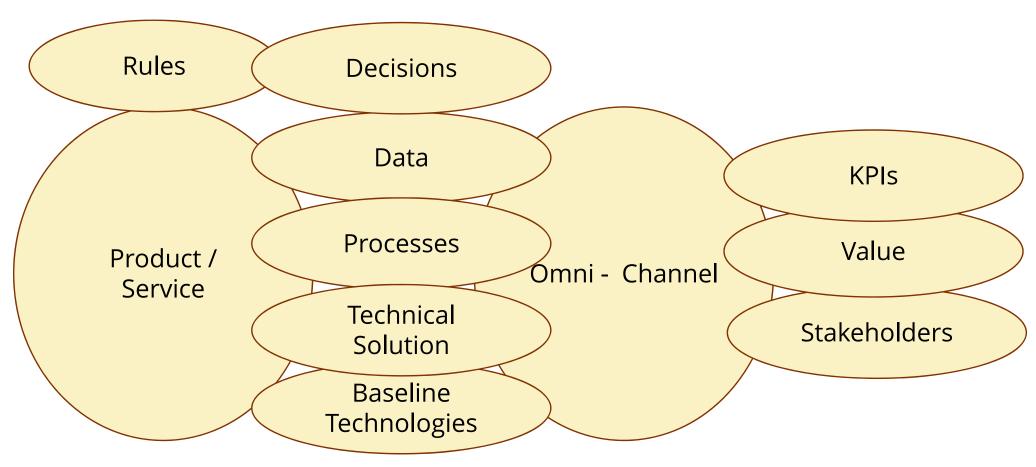


# DIGITAL CAN BE EXTREMELY COMPLEX

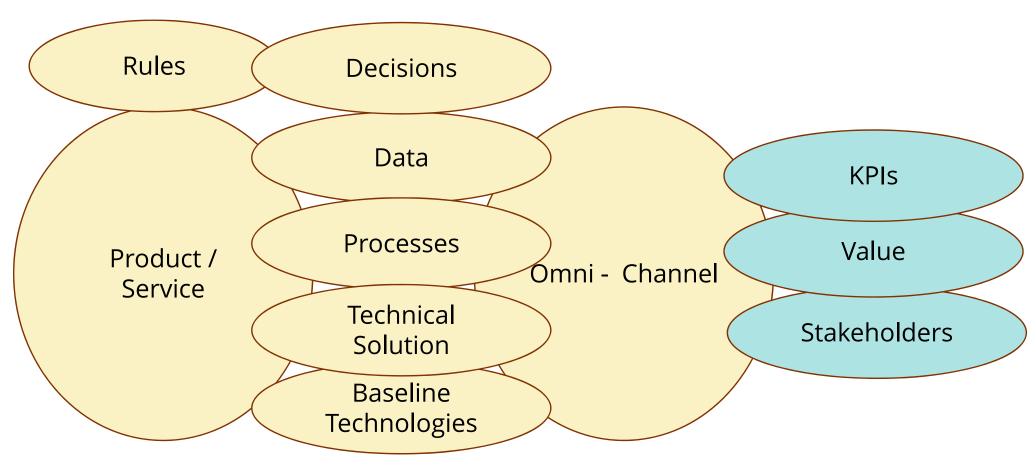




Many interacting components









# STAKEHOLDER SEGMENTATION

Segments may have differing service availability, SLAs,

promise, rules, etc.

Age

- Senior privileges
- Business loyalty
  - Frequent Buyers
- Buying power
  - Wealth



 Modeled representations of who service recipients are, what they are trying to accomplish, what goals drive their behaviour, how they think, how they buy and why they make buying decisions











# STAKEHOLDER PERSONALIZATION

- At extremes, segments are of one
- Means more personal information, paths, rules, permissions and registrations
- To enhance customer experience you must identify the customer, deliver personalized content and honour their preferences
- The user must have a sense and trust of our understanding





# STAKEHOLDER VALUE ATTRIBUTES: WHO CARES?

# There must be a relevant stakeholder

- All aspects are potentially important
  - Exchanged Items
  - Expected Outcomes
  - Experience
- Full value comes from full realization

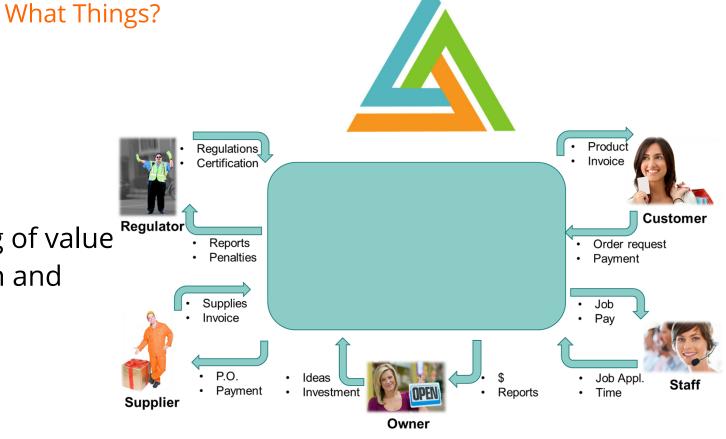




# ASPECTS OF BUSINESS VALUE: WHAT'S IMPORTANT TO STAKEHOLDERS?



- Tangible things the beginning of value
- Products, Services, Information and commitments
- Items should be countable
- Items are not assessments



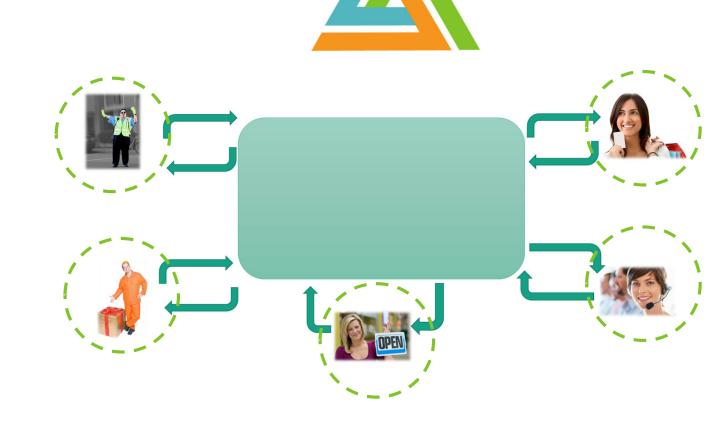


# ASPECTS OF BUSINESS VALUE: WHAT'S IMPORTANT TO STAKEHOLDERS?

What Benefit?

# **Expectations of benefit**

- What important stakeholder needs will be achievable by receiving the items?
- What can the recipient do in their world that they could not do before
- Falling short leads to relationship failure





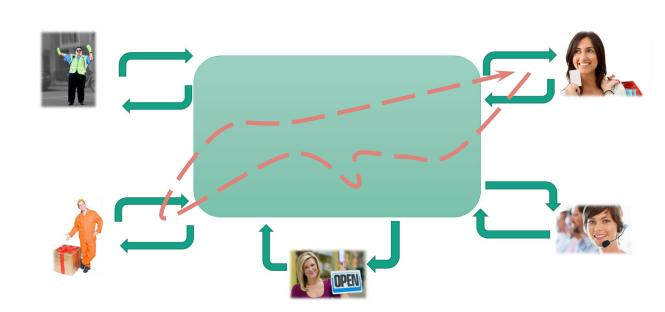
# ASPECTS OF BUSINESS VALUE: WHAT'S IMPORTANT TO STAKEHOLDERS?

What Experience?



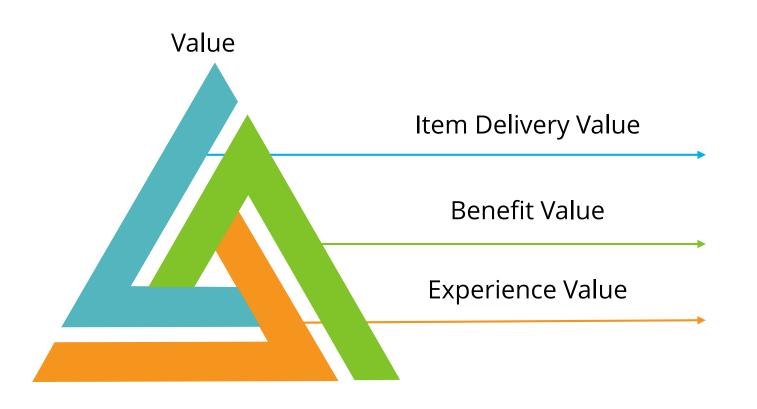
# **Experience of interaction**

- How did they feel while interacting with us?
- **How** we and they drive services
- How we and they interact with each another
- How we can differentiate when Exchanges and Expectations are similar in the industry





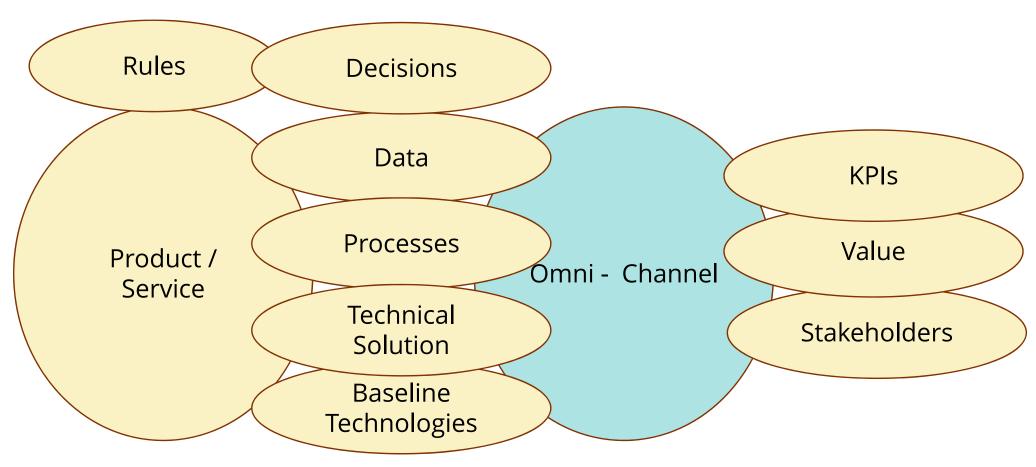
# CONSOLIDATED VALUE - EXCHANGES, EXPECTATIONS AND EXPERIENCES IS THE BASIS FOR MEASUREMENT



Measures - KPIs









# POTENTIAL DIGITALIZATION CAPABILITIES— OMNI CHANNEL

Customer sees the organization as one channel with ability to change the touch point to any

channel anytime, anywhere in the process

- Mobile
- Call centre
- Web / Social
- In person on site
- E-mail
- Remove barriers
  - frictionless in going from one stage to another
- Must always know where you are
  - Pickup where you left off
- Must always know how you are doing
  - Measurement data
  - Analytics





- Millennial influence
  - Bringing devices into stores
  - Social media while watching TV
  - Buying that clothing while the actor is on the stage
  - Buy online pickup and return at store

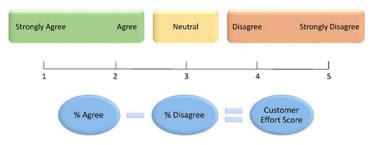
# **ATTRIBUTES OF EXPERIENCE**

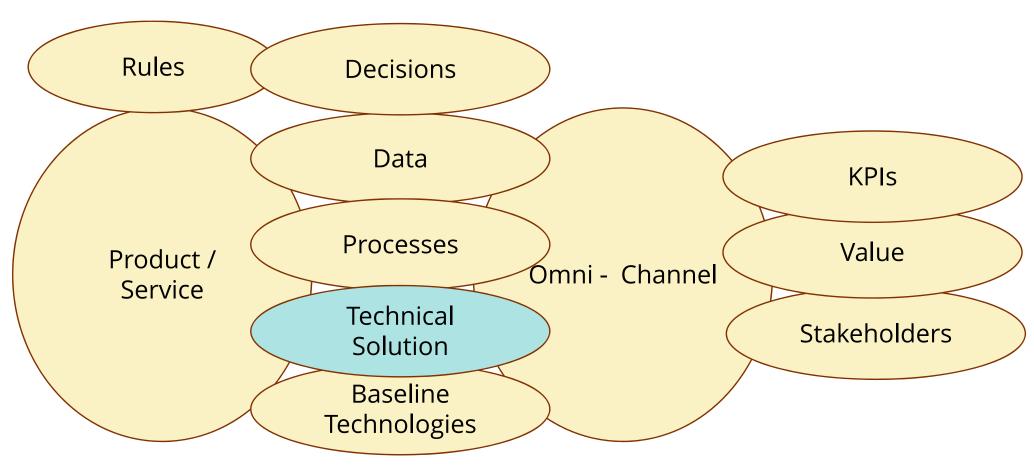
Design the experience before the technology

- Experience customers in their world
- How did you feel?
- How easy was it?
- Accessibility
- Usability
- Safety
- Consistency across channels and over time
- Customer efficiency











# RANGE FROM ROBOTICS TO FULL AI

Mimics Human Actions	Augments Human Judgement	Augments Human Intelligence	Mimics Human Intelligence	
RPA (Robotics)	Chatbots	Cognitive Agents	Real Al	
Rules based	Data based			
Standardize	Improve		Re-conceive	
Task Level	Value Stream Level			
Structured Data		Unstructured Data		
Descriptive analytics	Diagnostic analytics	Predictive analytics	Prescriptive analytics	



## WHAT IS RPA?

#### **Robotic Process Automation is**

- Process automation technology that replicates human interactions with websites and systems by:
  - Extracting, adjusting and recording data through screen-scrubbing technology
  - **Operating screens** to execute pre-configured workflows
  - Making structured decisions through preconfigured business rules
  - Applying simple data quality checks and adjustments (e.g. data standardization), based on pre-configured business rules
  - Invoking other systems and services, and exchanging data with them, based on preconfigured business rules





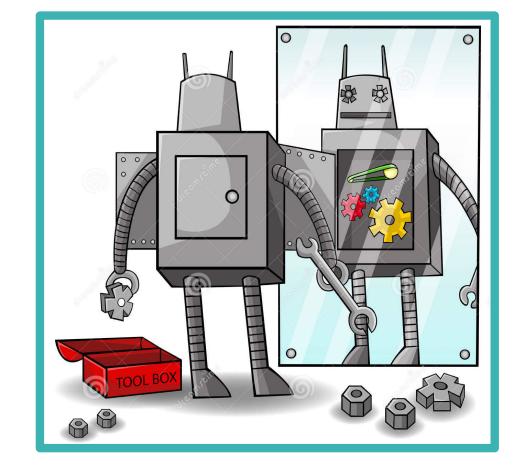
# AI AUGMENTS RPA CAPABILITIES

#### What AI can do:

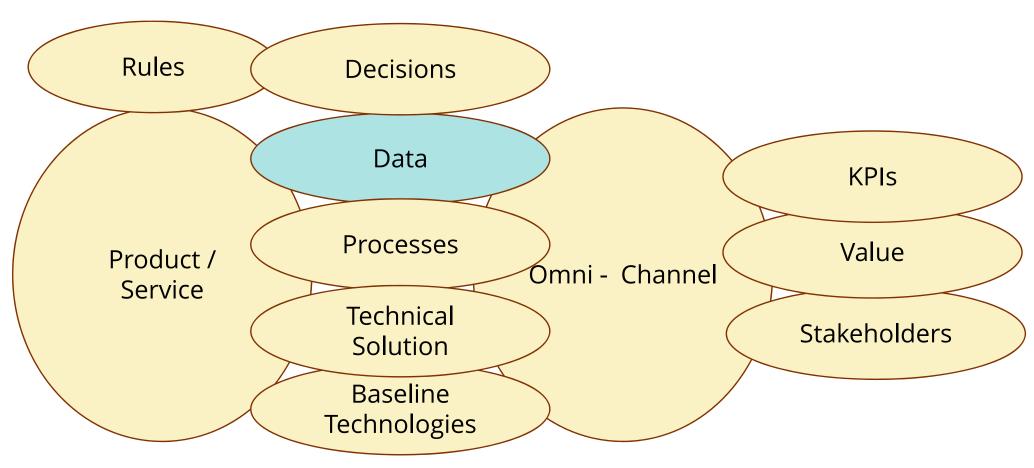
- Analyze large datasets for patterns
- Adapt to similar tasks through reinforcement learning
- Make decisions, based on categorizations
- Identify components of images and screens
- Rudimentary voice recognition
- Semi-scripted responses (e.g. bots)

#### What AI struggles with (for now):

- Natural language recognition
- Self-learning
- Natural communication (texts or voice)
- Unsupervised operations



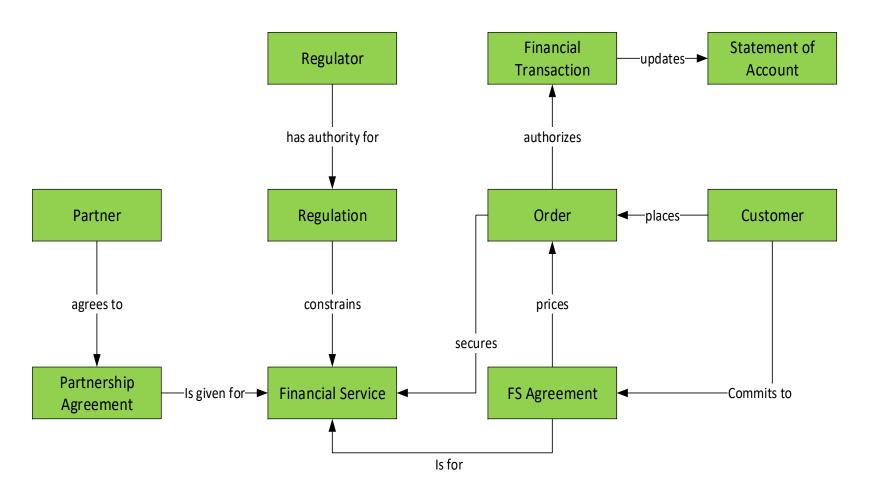






# DIGITALIZATION MUST TACKLE ALL BUSINESS CONCEPTS IN SCOPE \*

The concept model is the foundation for the data requirements **Nouns, verbs and definitions** 





# THE CRITICALITY OF THE DATA FOUNDATION

# Be data ready

 Al can only learn from the data that's put in front of it. The good news is that you don't need tons of data to get started.
 But if that data isn't ready, applying analytics will be futile; results will be misleading, and more work will be created.

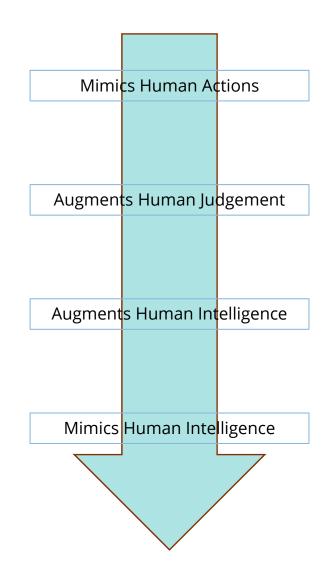
 This is a critical step - take the necessary time to ensure data sets are ready





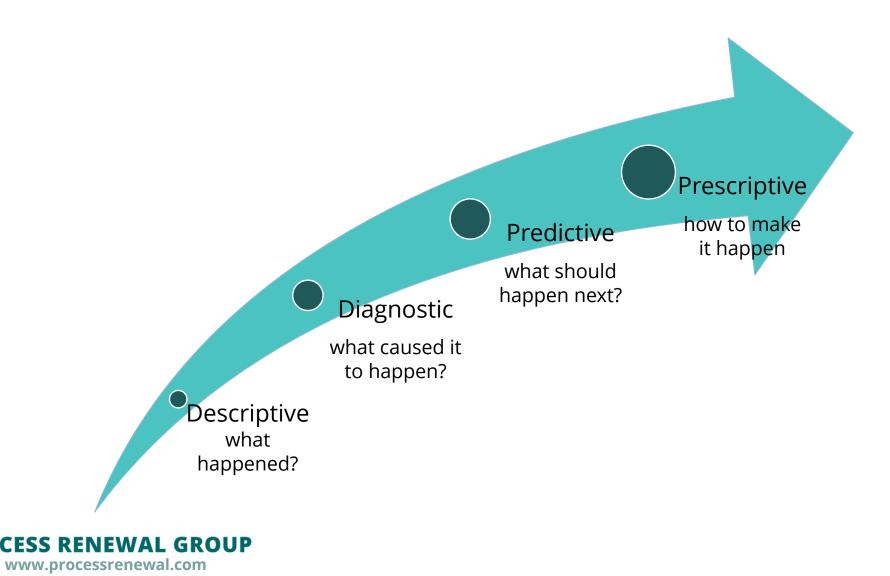
# STRUCTURED AND UNSTRUCTURED DATA

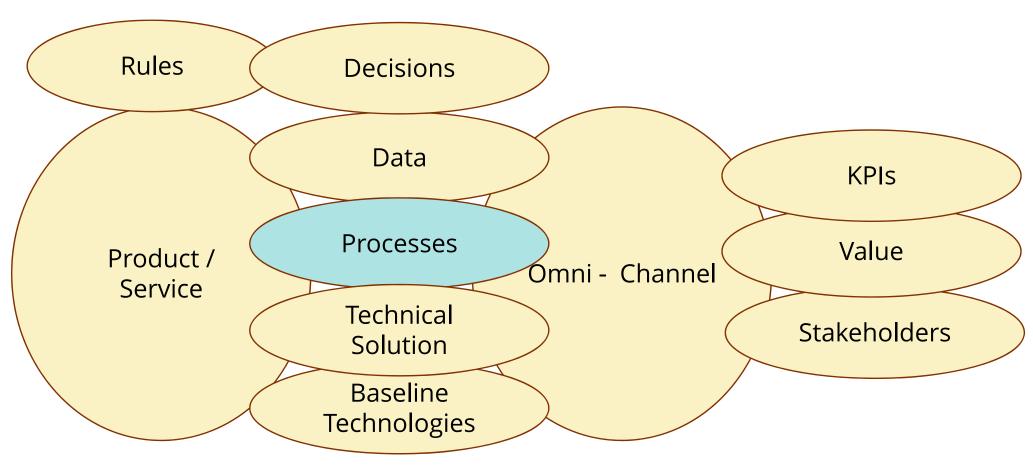
- Structured
  - Systems of Record
    - ERP
    - CRM
    - Transactions
  - Partner data
- Unstructured
  - Documents
  - Images/Video
  - Web screens and data
  - Social media / blogs





# **DATA ANALYTICS POTENTIAL**

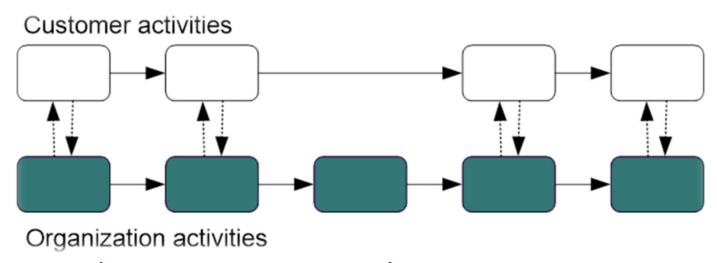






## **SERVICE STYLE PROCESSES**

Strong candidates for digitalization: No fixed flow, event driven & automated decisions



- The focus is on the interactions with customers.
- In service processes, each customer interaction could drive a different path depending on the progress of the process.
- In digital the customer is one of the process performers or are we just a part of their process?



# FIND A DIGITAL PROCESS PATTERN

- Compare similar models from organizations with similar issues but in different industries
  - E.G. is reserving a room like retail ordering?
- Benchmark practices of different industries with similar patterns
  - E.G. is a hotel visit like a car share?
  - Is pet care like a car share or room rental?
  - One source, no capital, highly data centric









# DESIGN PROCESSES AROUND THE CUSTOMER MOMENTS OF TRUTH

- Mortgage Application
  - Did you approve me?
  - Did you fund me at closing?
- Transit
  - Did I get my schedule for my trip
  - What is the current schedule?
  - Did the vehicle arrive as promised?
  - Did I arrive at my destination on time?
- Retail
  - Can I find what I am looking for?
  - ...

Find all customer experiences with the process - not just technological ones - human ones too

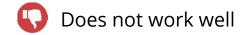




# **BANK CUSTOMER EXPERIENCE JOURNEY MAP**

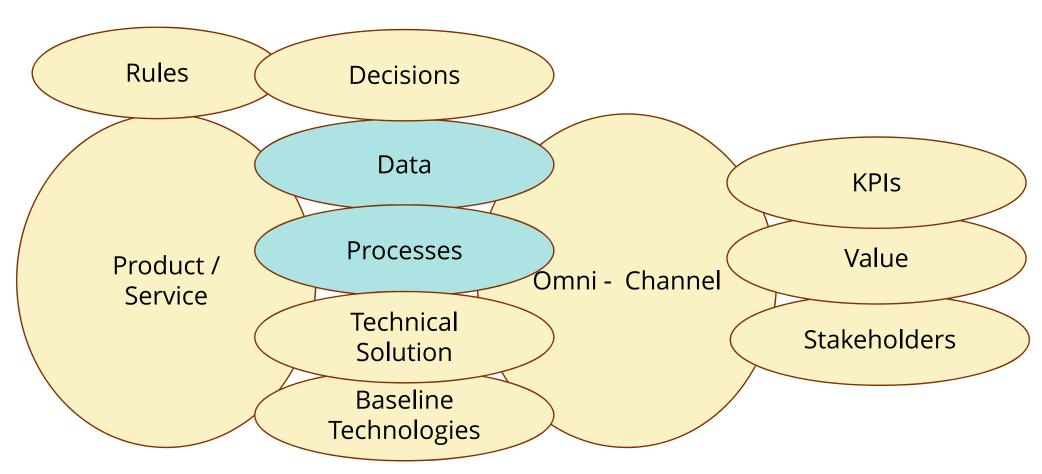
Stage	Promote	Qualify	Agree	Deliver	Mitigate	Evaluate
Customer Actions	Pay attention, contraction recognize	Request, provide information	Sign up for services	Transact business	Report issue solve problems	Reconsider relationship
Goal / Value	Find relevant services of interest	Become able to participate	Gain agreement for service relationship	Get what I asked for as expected	Avoid issues, resolve fast and right	Keep good relationship, abandon bad ones
Our Actions	Advertise, Run campaigns, social media marketing	Follow up requests, match services to interests	Offer services, negotiate, sign agreements, setup system	Execute transactions as agreed, get paid, report	Avoid fraud transactions, settle complaints, claims	Review customer profitability, discontinue service
Channels / Touch Points	Social media, TV ads	In person, phone, e- mail	Phone, in person	Omni	Phone	Personal
Satisfaction	Neutral, not noticed	Slow, rules different for each agent	Too slow to sign up. Lose services to others	Switch between channels not smooth	Poor, Find risks too late, annoying	Neutral, easy to bail
Improve- ments	Better social media presence needed	Get rules consistent	Accelerate, eliminate non value added work	Work off of one data source. Clean up data	Put in better diagnostics and automate	Evaluate our client leakage





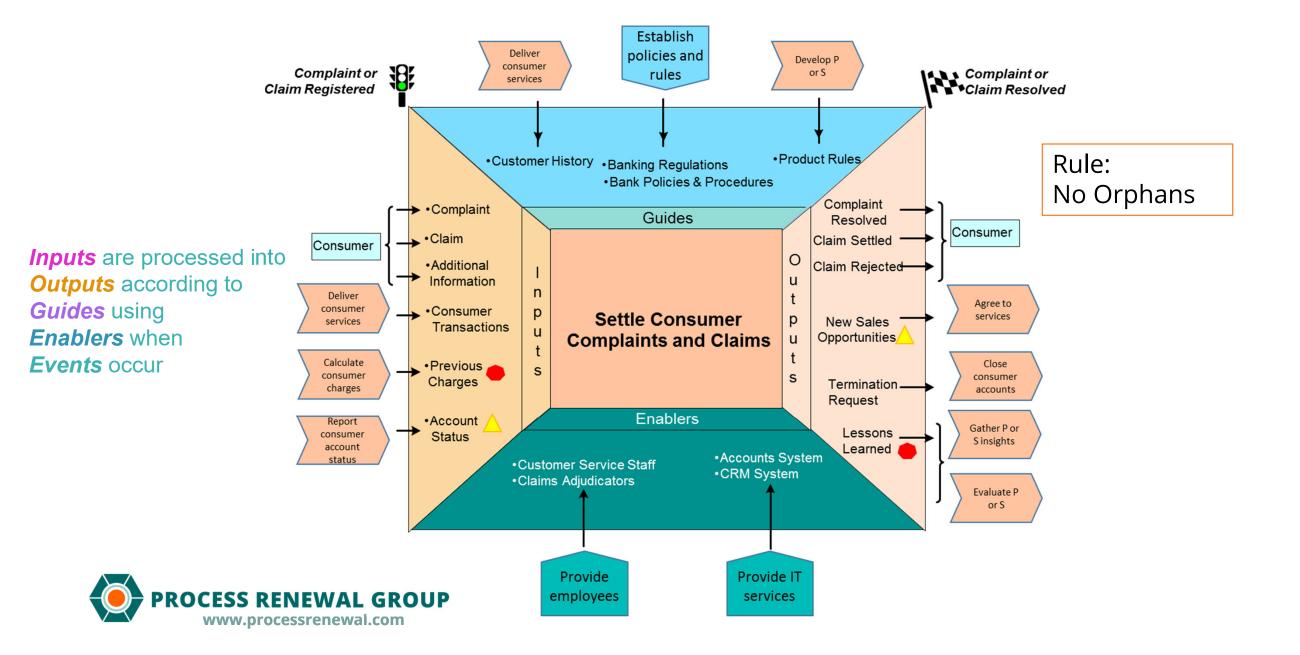








# PROCESSES CONNECTIVITY: IGOE SCOPE EXAMPLE



Coupons

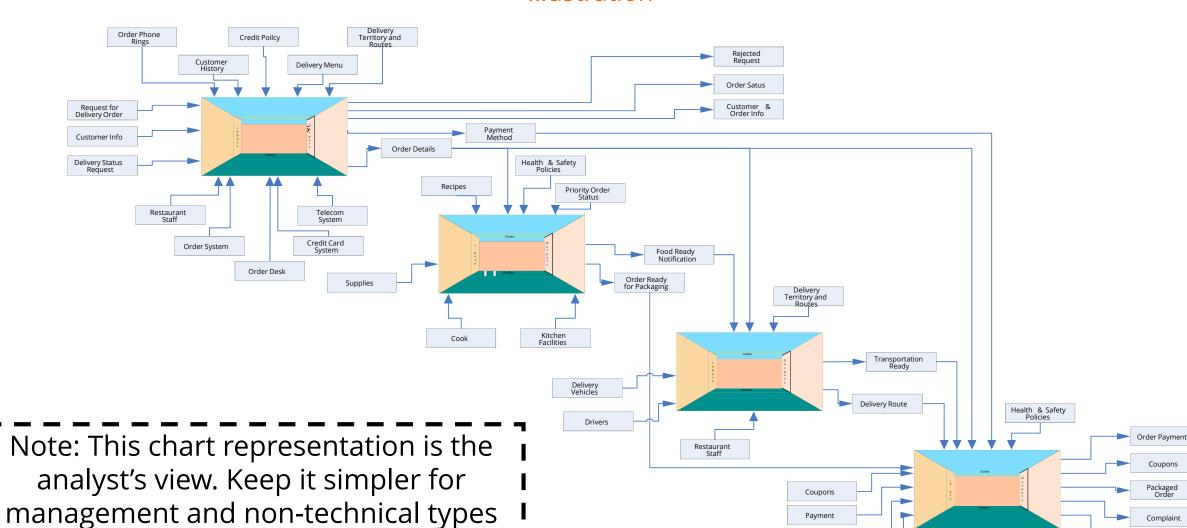
Complaint

Returned Order

Delivery

# PRODUCE OVERALL PROCESS DATA FLOW FOR THE PROCESS

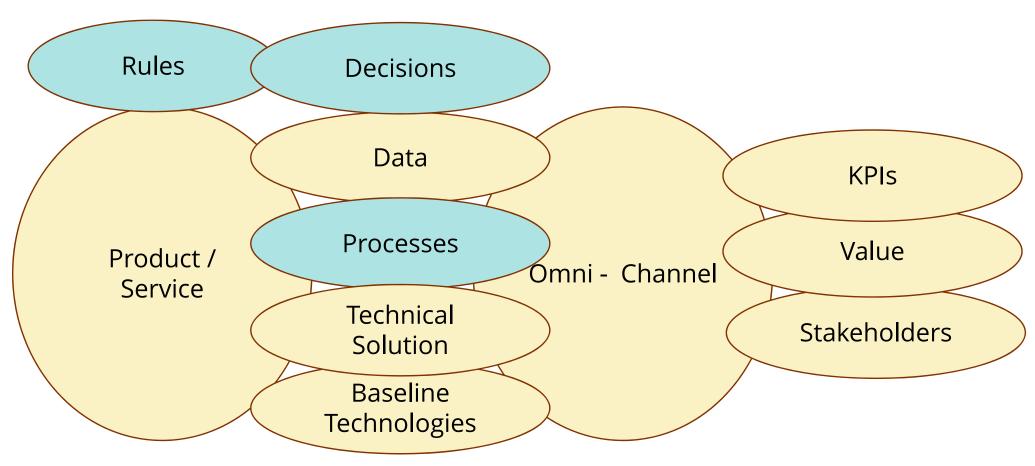
Illustration



Complaint

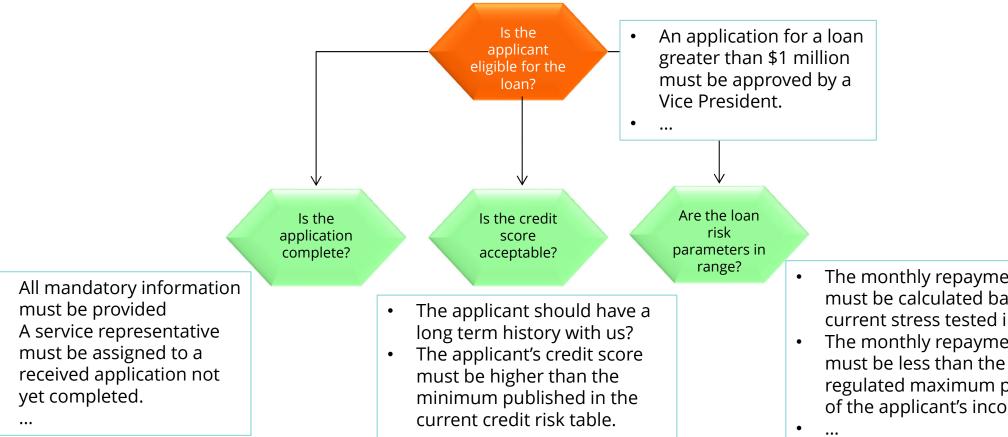
Rejected Order



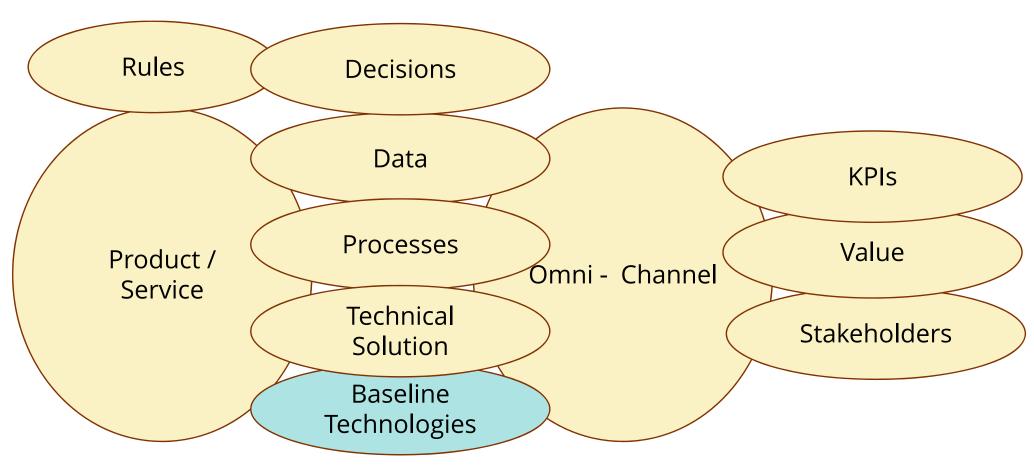




# INTEGRATION OF BUSINESS DECISIONS WITH BUSINESS RULES



- The monthly repayment amount must be calculated based on the current stress tested interest rate
- The monthly repayment amount must be less than the current regulated maximum percentage of the applicant's income.





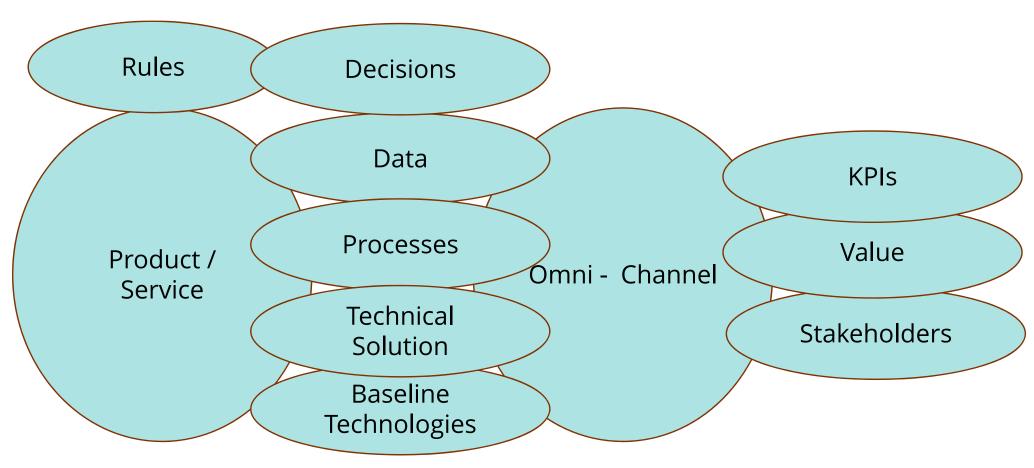
# **DIGITALIZATION BASE CAPABILITIES**

#### Identify design enablers

- BP flow execution seamless orchestration of capabilities
- Collaboration tools for synchronous and asynchronous communication
- Performance and human feedback and learning
  - status and performance data capture and availability
- Social media integration
- Connect to backend systems of record



# **HOW DIGITALIZATION IS DONE DIFFERENTLY**





## **DIGITAL STRATEGY \***

- Stage 1 existing value stream automation digitization of internal operating model
- Stage 2 digitize the ecosystem interactions –transforms the business through technology – digitization with the customer
- Stage 3 –transform the business through re-imagining it digitalization of the business model
- Stage 4 organizational agility
- \* Rosemann, M., Kowalkiewicz, M., & Dootson, P. (2017). Digital Strategy of the Future. PwC Chair in Digital Economy.



# **DIGITAL PROCESS DESIGN**



