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[Big]-Data Analytics for Businesses

Understand the world. Expand your world.

Why this class? My three goals

1. "Big Picture": Develop your intuition about identifying data analytics opportunities and their implementation challenges

2. "Medium Picture": learn how to approach data analytics projects

3. "Dirty Hands": Learn how to perform, read, and use key data analytics methods.

The *Iterative Process Cycle*
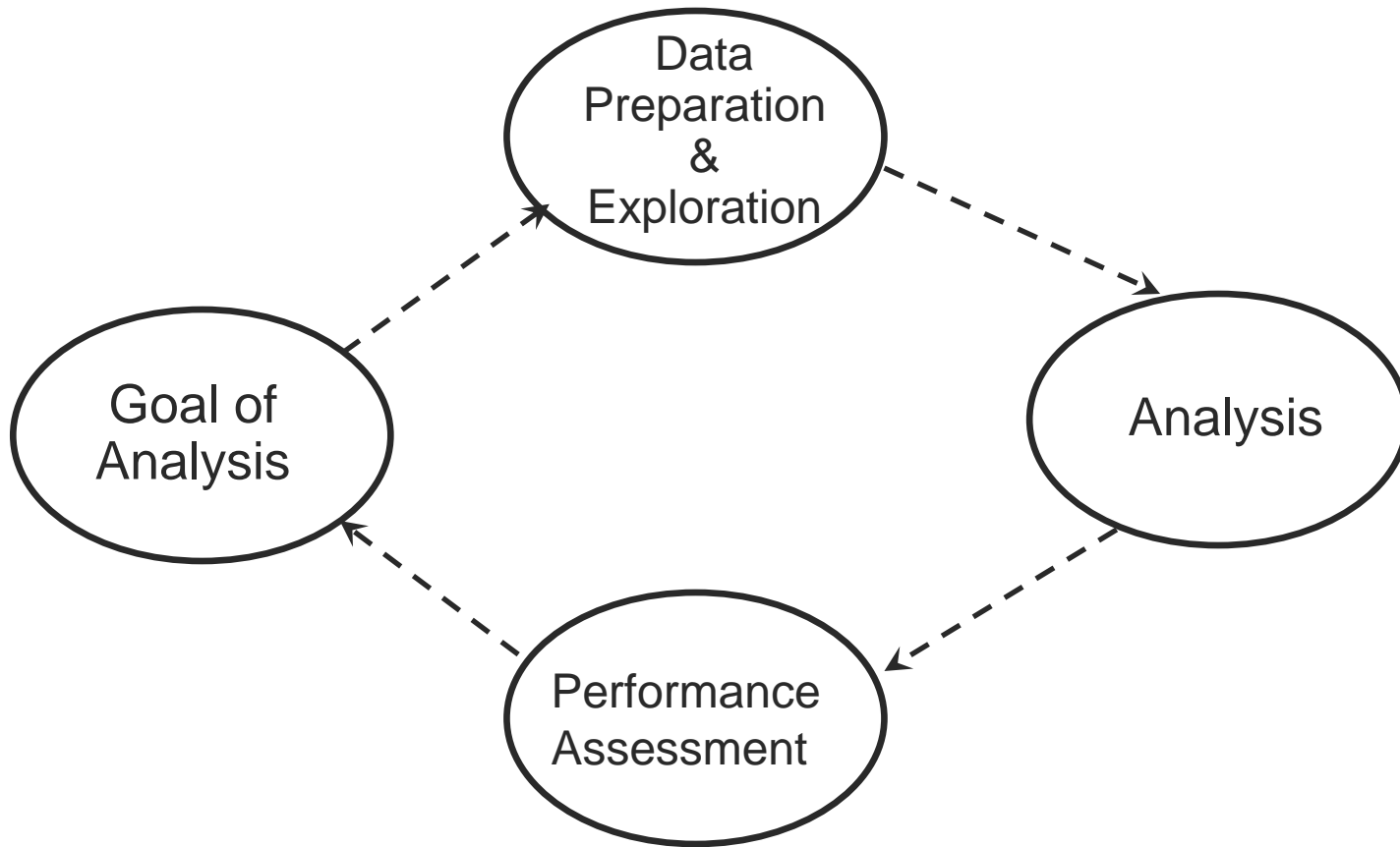
Basic Types of Questions and Tools

1. <u>Market Basket Analysis:</u> which pairs of products are typically sold together? – "On Friday evenings, shoppers who buy diapers also buy beer".

2. <u>Factor Analysis:</u> Finding important dimensions ("factors") that summarize your data, and visualizing your data

3. <u>Clustering:</u> What are the main types of customers we have?

4. <u>Discriminant Analysis:</u> How can we differentiate between the "high value" and "low value" customers?

Questions You Might Hear…

Growth & New Opportunities

Market Structure

Product Development

Channel Deployment
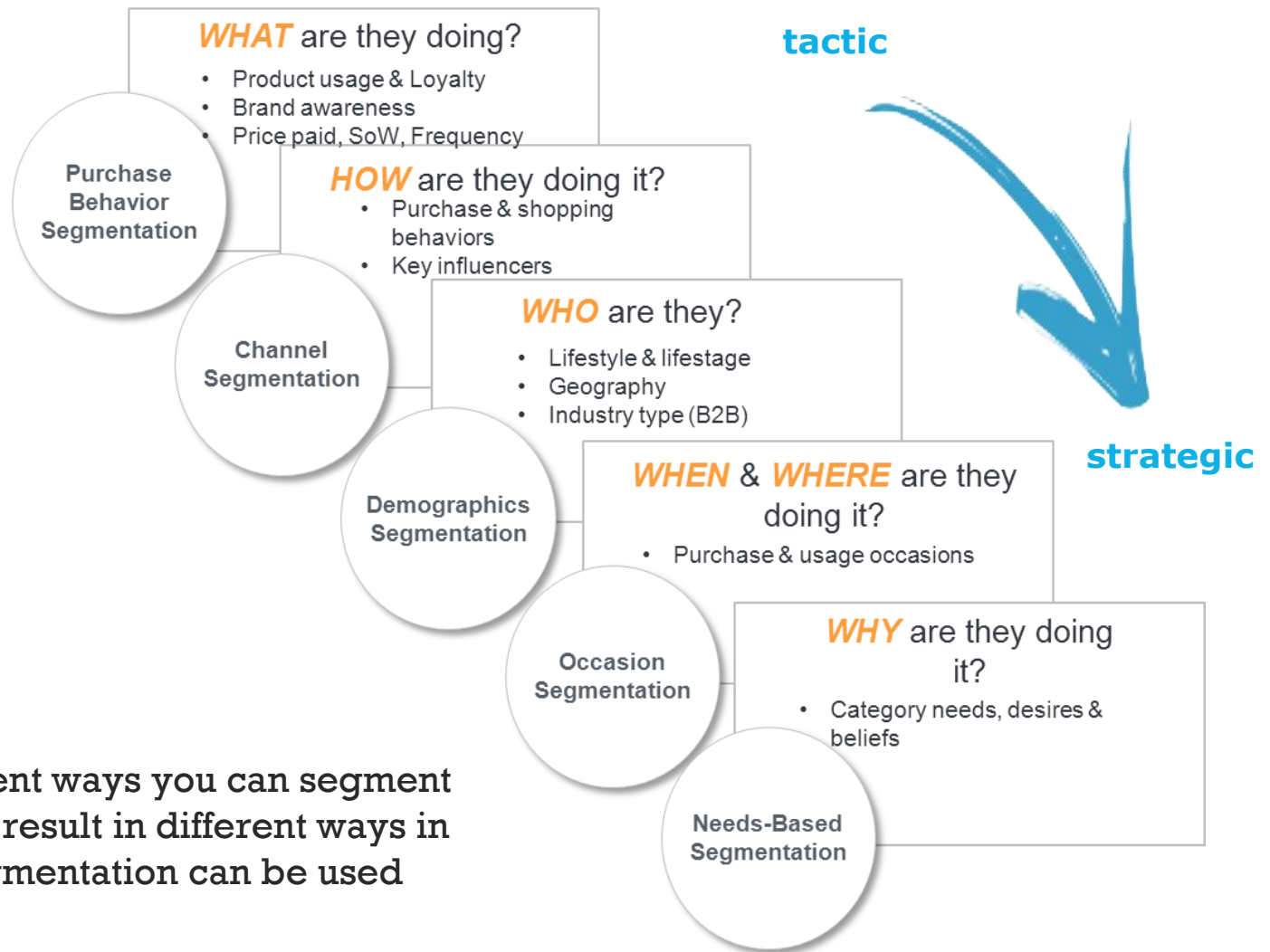
Resource Allocation

Retention & Acquisition

Marketing Activities

Pricing

Different Types of Data Used

WHAT are they doing?
- Product usage & Loyalty
- Brand awareness
- Price paid, SoW, Frequency

Purchase Behavior Segmentation

HOW are they doing it?
- Purchase & shopping behaviors
- Key influencers

Channel Segmentation

WHO are they?
- Lifestyle & lifestage
- Geography
- Industry type (B2B)

Demographics Segmentation

WHEN & **WHERE** are they doing it?
- Purchase & usage occasions

Occasion Segmentation

WHY are they doing it?
- Category needs, desires & beliefs

Needs-Based Segmentation

tactic

strategic

There are different ways you can segment a market, which result in different ways in which the segmentation can be used

What Makes a "Good" Segmentation?

Many different evaluation systems exist.
Most deem a segmentation good if it meets these criteria
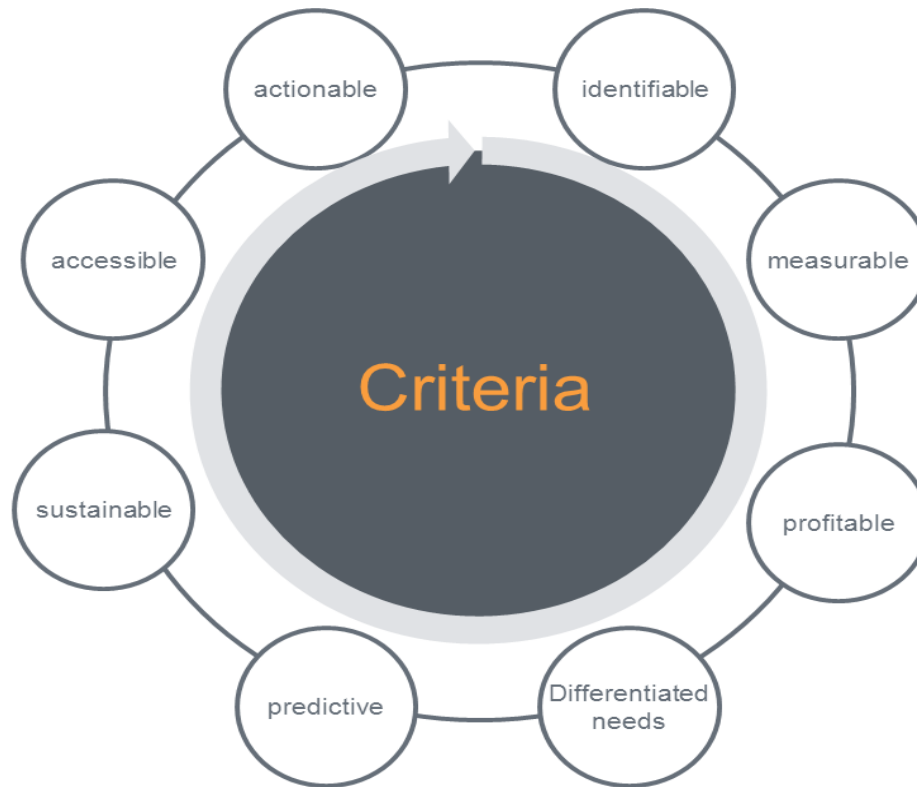
Key Tenants on Segmentation

- No one segmentation approach will work in all situations.

- The value in segmentation does not come from the segmentation solution but from the **programs leveraging this solution.**

- Segmentation should be "**customer-in**" versus business- or product-out.

- There is both a **science and an "art"** to designing and evaluating a successful segmentation.

- Segmentation is the foundation for distinctive and **sustainable competitive advantage**.

Segmentation Methodology – A(nother) Process

1	2	3	4	5	6
Identify Business Issues	Clarify Scope and Dimensions	Generate and Refine Hypotheses	Decide on Data to use / Collect Needed Data	Build the Segmentation Framework	Link to Marketing & Business Strategy
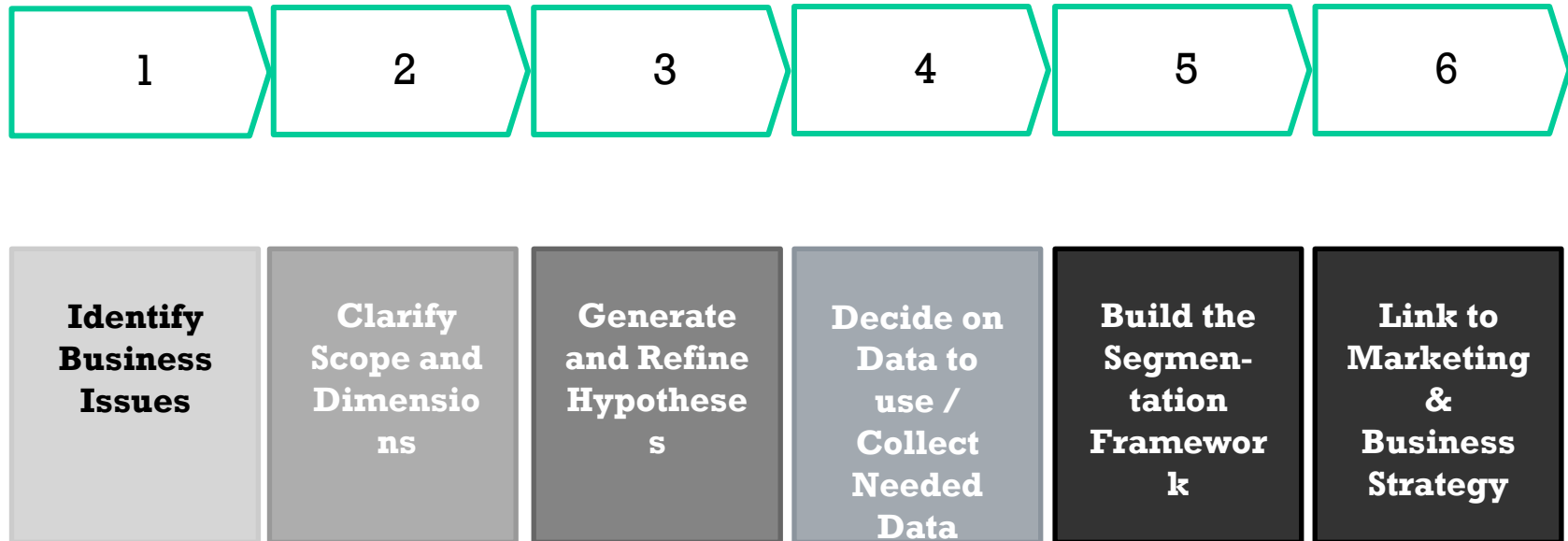
Overview of segment attitudes

1 Novices

% Total Population: 17%
% US Population: 18%
% Brazil Population: 6%
% Canada Population: 18%

Who they are
- Rely more on expert opinion than their own
- Boating helps them escape from everyday life and relax
- Boating gives me a feeling of adventure

Who they are not
- Not considered knowledgeable about boating
- Boating is not their true life passion
- Boating is not the #1 activity they do in

2 No Frills

% Total Population: 23%
% US Population: 29%
% Brazil Population: 5%
% Canada Population: 19%

Who they are
- Functionality is more important than style
- Perform repairs and maintenance on their boats
- Tend to prefer a boat with little to no frills

Who they are not
- Do not go for the latest and greatest boat
- Having a powerful boat is not as important to them
- Do not see the boat brand as saying a lot about who they are

3 Status Seekers

% Total Population: 20%
% US Population: 19%
% Brazil Population: 29%
% Canada Population: 18%

Who they are
- Willing to pay a premium for a brand with a reputation for high quality
- Buy the latest and greatest boats
- View their boat as a status symbol

Who they are not
- Do not choose functionality over style
- Do not prefer a basic boat with little to no thrills
- Do not perform repairs and maintenance on their boats

4 Active Family Boaters

% Total Population: 9%
% US Population: 10%
% Brazil Population: 7%
% Canada Population: 10%

Who they are
- Boating helps them stay active
- Boating allows them to excel in sports they're passionate about
- Boating gives me an outlet to socialize with family and/or friends

Who they are not
- The lowest price is not more important than boat brand
- Do not prefer a basic boat with little to no frills
- Do not rely on expert opinion other than their own

5 Price driven Lifestylers

% Total Population: 31%
% US Population: 25%
% Brazil Population: 53%
% Canada Population: 33%

Who they are
- Boating is their true passion in life
- Consider themselves more knowledgeable than their boating peers
- Boating is the #1 activity they do in their spare time

Who they are not
- Boating is not a means to escape from everyday life and relax
- Boating does not provide them with a sense of adventure
- They do not consider owning a boat as a way of rewarding themselves for hard work

Perceptual Maps

Preliminary

Motivated by image / **Motivated by functionality** (vertical axis)

Boating as an activity ← → **Boating as lifestyle** (horizontal axis)

Image Conscious — Sea Ray, Harris PontBote
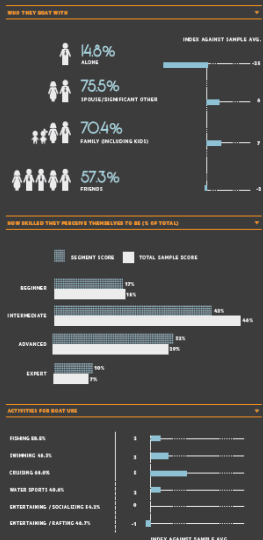
Active Social Boaters — Crestliner, Lowe Boats, Boston Whaler, Bayliner

Casual Boaters — Cypress Cay ?

Function-First Boaters — Princecraft, Lund
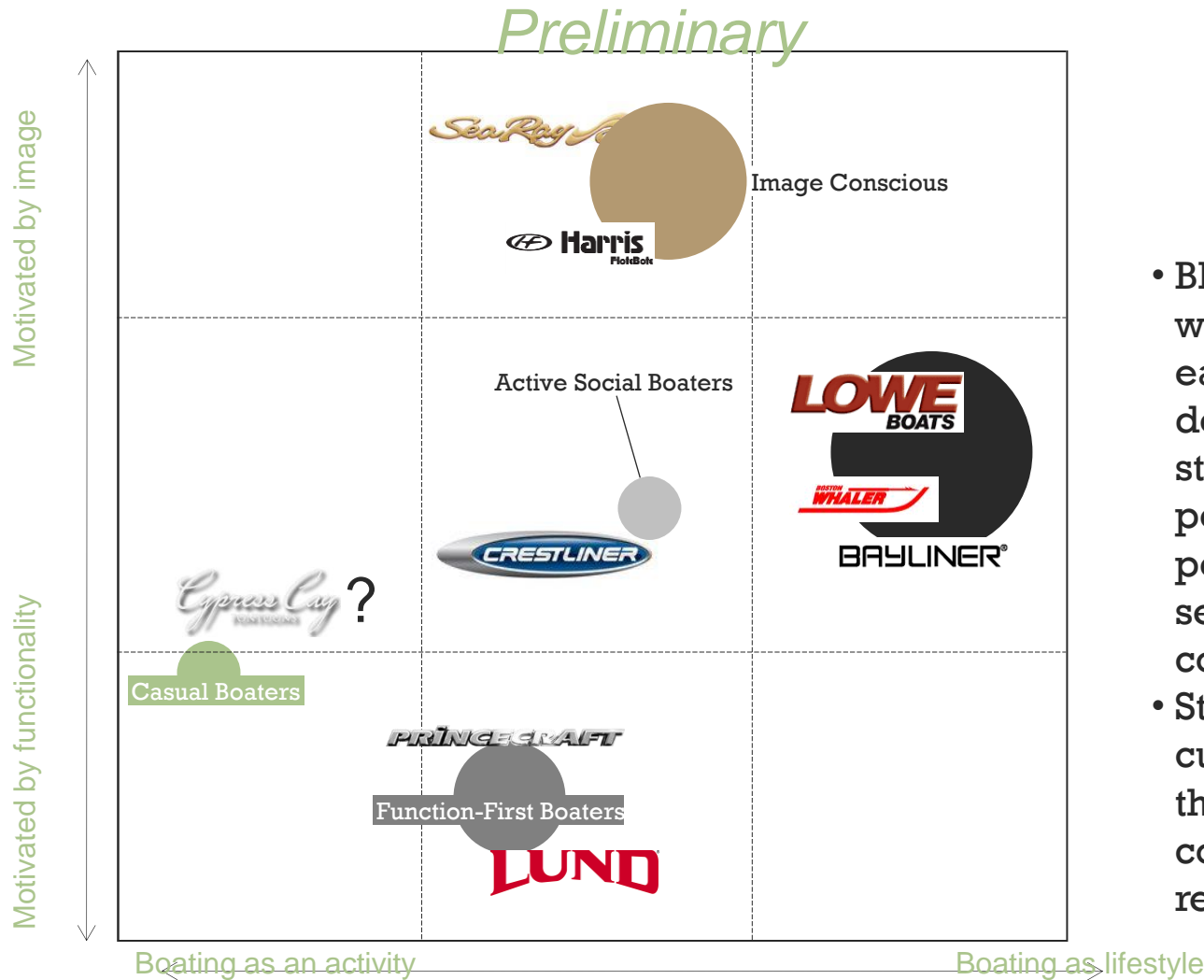
Rationale:

- BBG brand portfolio was assessed within each segment to determine brand strength, current penetration/share, perception on key segment drivers vs. key competitors
- Strategic intent and current positioning of the brand was also considered in the recommendation

Note: segment size based on revenue contribution

Overview of segments

Link to Business Strategy

➢ Developing the appropriate strategy to go after identified target segments is key for every business

CUSTOMER SEGMENTATION

1. BRAND PORTFOLIO & ARCHITECTURE STRATEGY
- Helps map out brands in the portfolio relative to meaningful/profitably attractive customer segments
- Provides customer view of the business and brands and clarifies brand's perceptual license to extend

2. BRAND IDENTITY & POSITIONING STRATEGY
- Makes the link between brand associations and customer activity/behavior
- Critical input to developing positioning platforms

3. MARKETING EFFECTIVENESS
- Input to assessing customer purchase funnel in order to optimize investments relative to priority segments
- Helps target profitable customer segments

4. CUSTOMER EXPERIENCE
- Ensures that the experience is tailored to relevant customer segment needs

Link to Business Strategy

➢Just building the segmentation is only half the battle

1 Product/Offer	**2** Pricing/ASS	**3** Marketing/Brand	**4** Dealer/Channel
Breadth & Depth of Offer	Pricing & Financing	Marketing Communication	Channel Store/Environment
Product Requirements	Customer Service & Support	Events	Inventory Management
Product Naming & Architecture	Maintenance & Repair	Licencing	Dealer Network
			Dealer Relationship Building
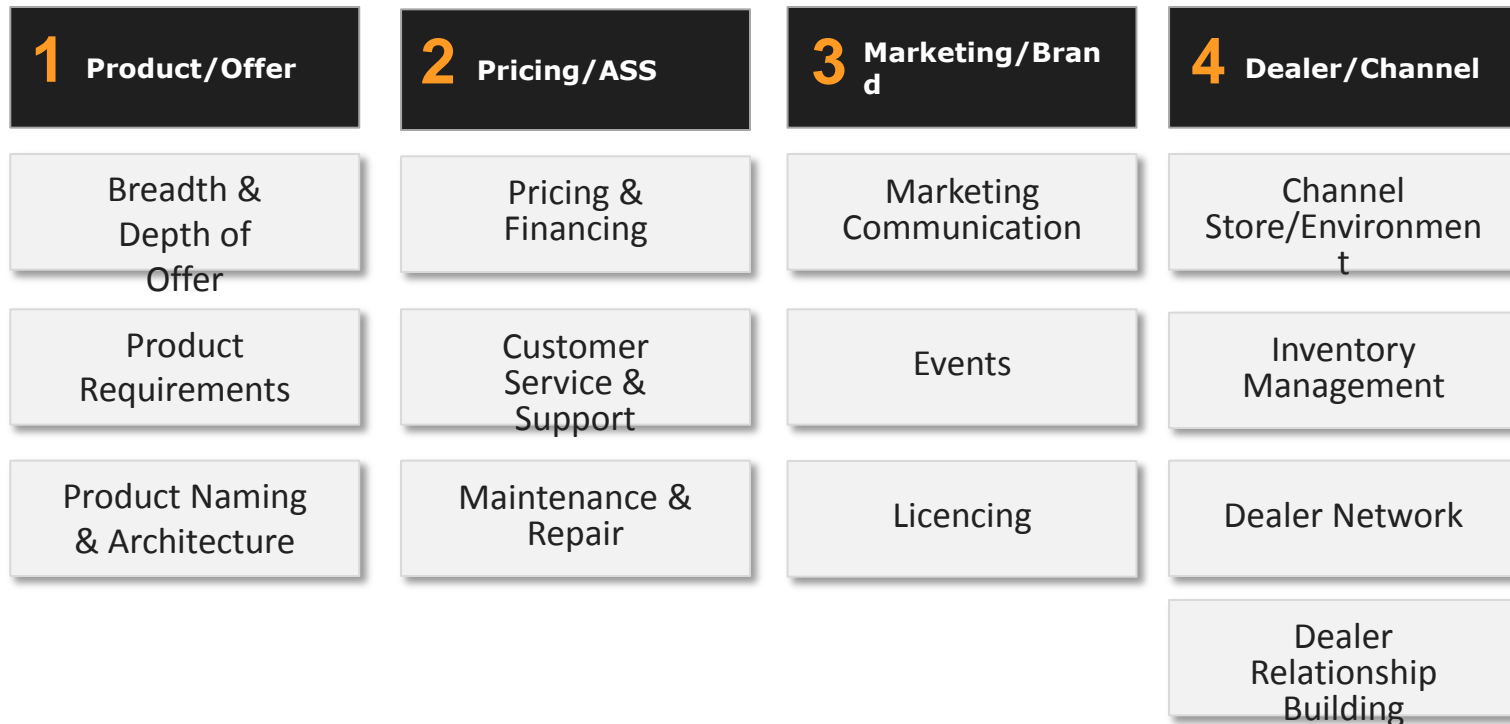
There is A LOT of JUDGMENT in ANALYTICS:

Your involvmenent is CRUCIAL

Next class: Purchase Drivers and Discrimination

➤ Who are most likely to click on an ad?

➤ Who are likely to respond to a direct mail campaign? What distinguishes those who responded to previous direct mail compared to those who do not?

➤ How are satisfied customers different from dissatisfied customers in terms of their demographics and attitudes towards your products' characteristics?

➤ Who are likely to default on a loan?

➤ To whom should we offer a particular promotion?

➤ Which transaction is most likely a fraud?

➤ Which applicants are most likely to fit in our organization and succeed?

➤ Which drug development project should we mainly invest in?

INSEAD

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