

Market Segmentation Analysis

Comprehensive Summary
Steps 1, 2, and 3

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Coverage:

- Step 1:** Deciding (Not) to Segment
- Step 2:** Specifying the Ideal Target Segment
- Step 3:** Collecting Data (Parts 1-3)

Source: Market Segmentation Analysis
Authors: S. Dolnicar, B. Grün, F. Leisch
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A Strategic Framework for Effective Customer Segmentation

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Contents

1	Introduction	3
1.1	Purpose and Scope	3
1.2	Why Market Segmentation Matters	3
1.3	Structure of This Document	3
2	Step 1: Deciding (Not) to Segment	4
2.1	The Six Knock-Out Criteria	4
2.1.1	1. Senior Management Commitment	4
2.1.2	2. Market-Oriented Organization	4
2.1.3	3. Sufficient Resources	5
2.1.4	4. Ability to Restructure	5
2.1.5	5. Qualified Expertise	5
2.1.6	6. Positive Expected ROI	6
2.2	Decision Framework Visualization	7
2.3	Key Takeaway for Step 1	8
3	Step 2: Specifying the Ideal Target Segment	9
3.1	Two-Tiered Evaluation System	9
3.1.1	Overview of the System	9
3.2	Knock-Out Criteria (6 Essential Requirements)	10
3.2.1	The Six Universal Knock-Outs	10
3.3	Attractiveness Criteria (Organization-Specific)	10
3.3.1	Common Criteria Categories	11
3.4	Implementation Process	11
3.4.1	Team-Based Approach	11
3.5	Key Takeaway for Step 2	12
4	Step 3: Collecting Data	13
4.1	Part 1: Segmentation Variables vs Descriptors	13
4.1.1	Understanding the Distinction	13
4.1.2	Commonsense vs Data-Driven Segmentation	13
4.2	Part 2: Four Segmentation Criteria	14
4.2.1	Overview of Criteria Types	14
4.2.2	Selection Principle	14
4.3	Part 3: Survey Design and Data Quality	15
4.3.1	Variable Selection Challenges	15
4.3.2	Response Format Guidelines	15
4.3.3	Response Styles Problem	16
4.3.4	Sample Size Requirements	16
4.4	Data Quality Checklist	17
5	Integrated Summary: Steps 1-3	18
5.1	The Complete Framework	18
5.2	Critical Success Factors	19
5.3	Common Pitfalls to Avoid	19

6	Practical Implementation Guidelines	20
6.1	For Step 1: The Go/No-Go Decision	20
6.2	For Step 2: Defining Criteria	21
6.3	For Step 3: Data Collection Planning	22
7	Conclusion	23
7.1	The Foundation of Success	23
7.2	The Critical Insight	23
7.3	The Path Forward	23
7.4	Final Recommendations	24
7.5	Acknowledgment	24
8	References	25

1 Introduction

This comprehensive document, prepared by **Jai Kumar Gupta**, synthesizes key concepts from the foundational chapters of market segmentation analysis. Market segmentation represents one of the most powerful strategic tools available to modern organizations, enabling them to move beyond one-size-fits-all approaches toward targeted, efficient marketing strategies.

1.1 Purpose and Scope

This summary consolidates insights from three critical steps in the market segmentation process:

- **Step 1 (Chapter 3):** The strategic decision of whether to segment at all, including knock-out criteria
- **Step 2 (Chapter 4):** Defining what makes a segment attractive and worth pursuing
- **Step 3 (Chapter 5):** Collecting quality data through proper variable selection, response formats, and sample sizing

1.2 Why Market Segmentation Matters

Core Concept

Market segmentation acknowledges a fundamental truth: *not all customers are the same*. Organizations with heterogeneous markets face a critical choice:

- Serve everyone with a generic offering (one-size-fits-all)
- Serve distinct groups with customized offerings (segmentation strategy)

The latter approach, when executed properly, leads to increased customer satisfaction, improved marketing efficiency, and enhanced competitive positioning.

1.3 Structure of This Document

Each chapter summary includes:

- Executive overview of main concepts
- Key frameworks and decision tools
- Visual diagrams for clarity
- Practical takeaways and implementation guidelines

2 Step 1: Deciding (Not) to Segment

Chapter Summary

Core Question: Should the organization pursue market segmentation at all?

Key Insight: Not all organizations should segment. Six knock-out criteria must ALL be satisfied before proceeding with segmentation analysis.

Critical Principle: "Just because you CAN segment doesn't mean you SHOULD segment."

2.1 The Six Knock-Out Criteria

2.1.1 1. Senior Management Commitment

Key Takeaways

Requirement: Top management must fully support segmentation strategy.

Why Critical:

- Segmentation requires organizational restructuring
- Different departments may resist changes
- Implementation needs sustained leadership support
- Resource allocation decisions require executive approval

Assessment: If senior management views segmentation as "just another marketing project," STOP immediately.

2.1.2 2. Market-Oriented Organization

Key Takeaways

Requirement: Organization must truly focus on customer needs, not internal convenience.

Warning Signs of Product Orientation:

- "We make great products; customers should buy them"
- Internal processes take precedence over customer experience
- Limited customer feedback integration
- Engineering-driven rather than market-driven decisions

Market Orientation Requires: Culture of customer-centricity throughout organization.

2.1.3 3. Sufficient Resources

Key Takeaways

Requirement: Organization must have financial, human, and technical resources for:

- Data collection (surveys, analytics)
- Segmentation analysis (software, expertise)
- Multiple marketing mixes (one per segment)
- Ongoing segment management

Cost Reality: Segmentation is MORE expensive than mass marketing in the short term. Long-term ROI must justify this investment.

2.1.4 4. Ability to Restructure

Key Takeaways

Requirement: Organization must be flexible enough to reorganize around segments.

Potential Restructuring Needs:

- Dedicated segment managers
- Segment-specific product development teams
- Customized service delivery processes
- Modified distribution channels

Red Flag: Rigid organizational structures that cannot adapt.

2.1.5 5. Qualified Expertise

Key Takeaways

Requirement: Access to expertise in:

- Statistical analysis and data science
- Market research methodology
- Segment-specific marketing strategy
- Customer behavior analysis

Options: In-house team, external consultants, or university partnerships.

Critical: Lack of expertise leads to poor segmentation solutions that waste resources.

2.1.6 6. Positive Expected ROI

Key Takeaways

Requirement: Benefits must outweigh costs.

ROI Calculation:

$$\text{Expected Benefits} - \text{Segmentation Costs} > 0$$

Benefits Include:

- Increased revenue from better targeting
- Reduced marketing waste
- Higher customer retention
- Premium pricing opportunities

Costs Include:

- Analysis and implementation
- Multiple marketing campaigns
- Organizational restructuring
- Ongoing segment management

2.2 Decision Framework Visualization

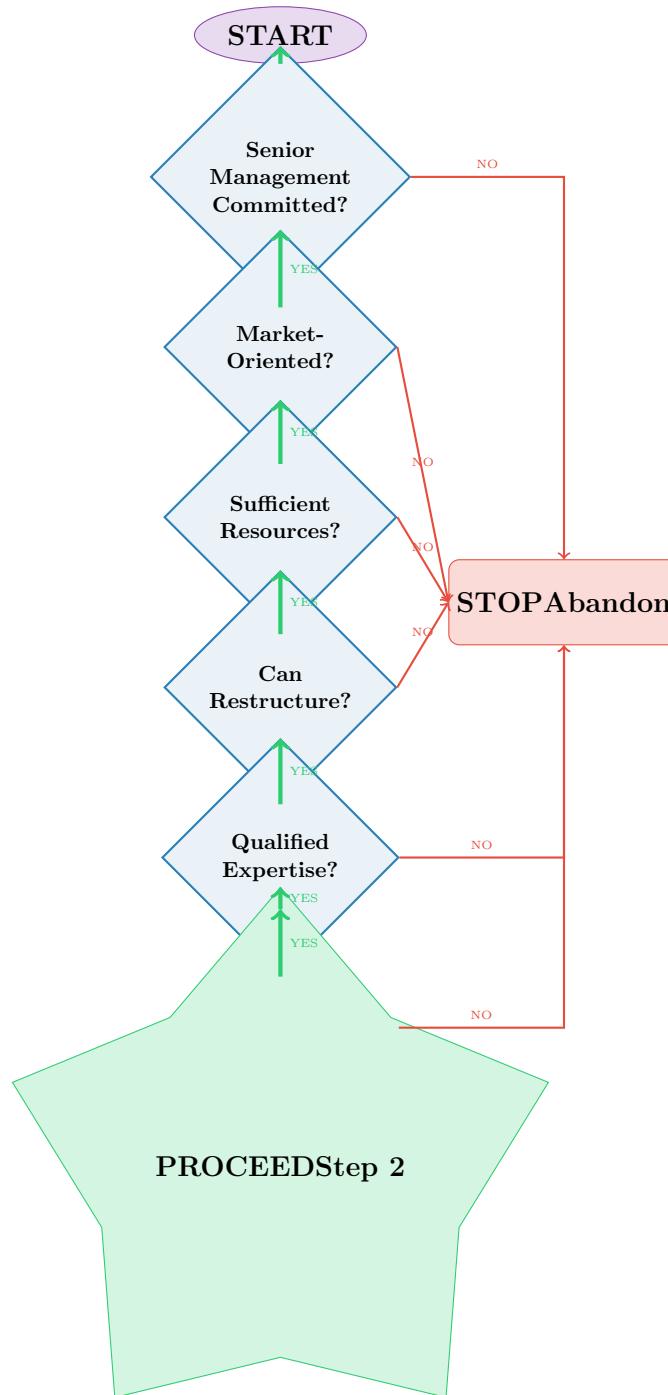


Figure 1: Step 1: Knock-Out Decision Framework - ALL Must Be YES

2.3 Key Takeaway for Step 1

Key Takeaways

The ONE-NO Rule: A single "No" answer to any knock-out criterion means segmentation should NOT be pursued.

Why So Strict? Missing even one criterion leads to:

- Failed implementation
- Wasted resources
- Organizational frustration
- Damage to customer relationships

Better Strategy: Wait until ALL criteria can be satisfied, then proceed with confidence.

3 Step 2: Specifying the Ideal Target Segment

Chapter Summary

Core Question: What characteristics make a segment attractive and worth targeting?

Key Insight: Before collecting data or analyzing anything, define your evaluation criteria. This guides Steps 3-8.

Critical Principle: "What gets measured gets managed" - Define success criteria upfront.

3.1 Two-Tiered Evaluation System

3.1.1 Overview of the System

Core Concept

Step 2 establishes a **two-stage filter** for evaluating segments:

Stage 1: Knock-Out Criteria (Binary)

- Non-negotiable requirements
- Pass/Fail decision
- Segment must satisfy ALL

Stage 2: Attractiveness Criteria (Weighted)

- Relative importance scores
- Compare qualified segments
- Select highest-scoring segment(s)

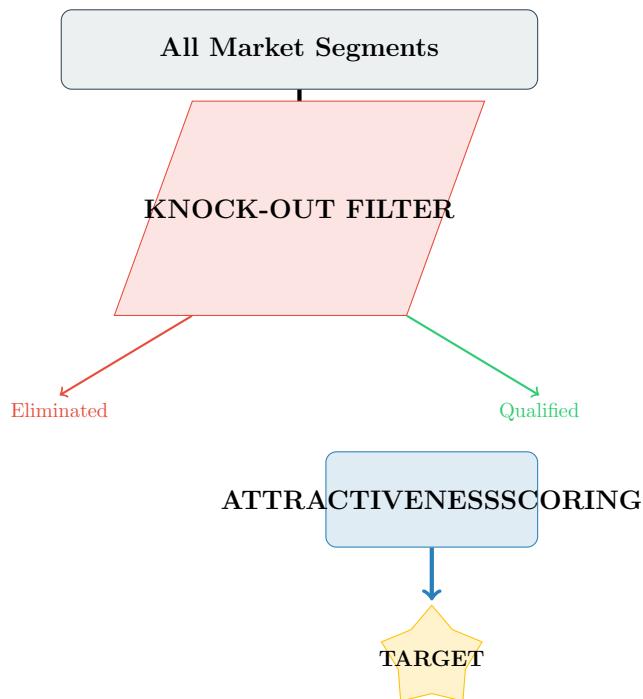


Figure 2: Two-Tiered Segment Evaluation System

3.2 Knock-Out Criteria (6 Essential Requirements)

3.2.1 The Six Universal Knock-Outs

Criterion	Requirement
1. Homogeneous Within	Segment members must be SIMILAR to each other
2. Heterogeneous Between	Segments must be DIFFERENT from each other
3. Substantial	Large enough to justify customized marketing
4. Matching	Organization can satisfy segment's needs
5. Identifiable	Can recognize members in marketplace
6. Reachable	Can communicate with and distribute to segment

Table 1: Six Knock-Out Criteria for Segment Viability

3.3 Attractiveness Criteria (Organization-Specific)

3.3.1 Common Criteria Categories

Key Takeaways

Key Difference: Unlike knock-out criteria (universal), attractiveness criteria are **customized** to each organization's priorities.

Typical Categories:

1. **Market Factors:** Size, growth rate, market potential
2. **Profitability:** Margins, ROI, customer lifetime value
3. **Competition:** Rivalry intensity, barriers to entry
4. **Strategic Fit:** Alignment with company strengths
5. **Risk:** Market volatility, regulatory concerns
6. **Operational:** Ease of implementation, resource requirements

Process: Select 6 criteria most relevant to your organization, assign weights totaling 100 points.

3.4 Implementation Process

3.4.1 Team-Based Approach

Core Concept

Recommended Structure:

- **Core Team (2-3 people):** Drive the analysis
- **Advisory Committee:** Representatives from all organizational units (marketing, sales, operations, finance, IT)

Why Teams?

1. Diverse perspectives improve criteria selection
2. Stakeholder buy-in ensures implementation success
3. Different units have different priorities

Workflow:

1. Core team proposes criteria and weights
2. Advisory committee reviews and modifies
3. Iterate until consensus achieved
4. Document final criteria for use in Step 8

3.5 Key Takeaway for Step 2

Key Takeaways

Define Before You Analyze: Criteria selected in Step 2 determine:

- What data to collect in Step 3
- How to evaluate segments in Step 8
- Which segment(s) to target

Critical Timing: Must be completed BEFORE data collection begins. Otherwise, you may lack the data needed to evaluate segments later.

Living Document: Criteria can be refined as understanding deepens, but core framework should be stable.

4 Step 3: Collecting Data

Chapter Summary

Core Question: How do we collect quality data that enables accurate segmentation?

Key Insight: "Good market segmentation analysis requires good empirical data."

Data quality directly determines segmentation quality.

Critical Principle: The data quality chain - Quality Data → Correct Segments → Effective Targeting → Business Success. Break any link, chain fails.

4.1 Part 1: Segmentation Variables vs Descriptors

4.1.1 Understanding the Distinction

Core Concept

Two Types of Variables:

1. Segmentation Variables

- Used to CREATE/IDENTIFY segments
- Basis for grouping consumers
- Example: Benefits sought when booking vacation

2. Descriptor Variables

- Used to DESCRIBE segments after creation
- Help understand who members are
- Example: Age, gender, income, media habits
- Enable targeted marketing mix development

Analogy: Segmentation variables = "sorting criteria"; Descriptor variables = "profile information"

4.1.2 Commonsense vs Data-Driven Segmentation

Aspect	Commonsense	Data-Driven
Segmentation Variables	ONE single variable	MULTIPLE variables
Example	Gender (male/female)	5 benefits sought
Approach	Pre-defined split	Algorithm discovers
When Used	Known logical split	Unknown patterns
Example Industries	Insurance (age), Baby products	Tourism, Retail

Table 2: Commonsense vs Data-Driven Segmentation

4.2 Part 2: Four Segmentation Criteria

4.2.1 Overview of Criteria Types

Key Takeaways

The Four Major Approaches:

1. Geographic - Where they live

- Country, region, city, climate
- Easy to identify and reach
- Limited insight into preferences

2. Socio-Demographic - Who they are

- Age, gender, income, education
- Very easy to measure
- Problem: Explains only 5% of behavior variance (Haley 1985)

3. Psychographic - Why they buy

- Benefits, lifestyle, values, motives
- High predictive power
- Difficult to identify in marketplace

4. Behavioral - What they do

- Purchase history, usage, loyalty
- Most predictive (actual behavior)
- Requires existing customer data

4.2.2 Selection Principle

Core Concept

Cahill's Principle (2006): "Do the least you can."

Selection Logic:

1. Can geographic or demographic work? → Use simplest
2. If not, consider psychographic
3. Use behavioral if actual behavior data available
4. Don't use complexity for complexity's sake

Guiding Question: "What's the SIMPLEST criterion that will work at least cost?"

4.3 Part 3: Survey Design and Data Quality

4.3.1 Variable Selection Challenges

Key Takeaways

The Goldilocks Principle:

Too Few Variables:

- Miss critical information
- Segments not meaningful

Too Many Variables:

- Respondent fatigue
- Noisy/redundant variables mask true patterns
- Longer surveys = higher dropout

Just Right: All necessary, no unnecessary, no redundant

4.3.2 Response Format Guidelines

Scale Type	Distance?	Rating	Recommendation
Binary (Yes/No)	Clear	Excellent	Preferred for segmentation
Metric (Numbers)	Clear	Excellent	Use when feasible
Ordinal (Likert)	Unclear	Problematic	Avoid if possible
Nominal (Categories)	None	Poor	Convert to binary

Table 3: Response Format Suitability

Core Concept

Why Binary Often Best:

- Distance clearly defined (0 to 1)
- No interpretation ambiguity
- Research shows often OUTPERFORMS ordinal (Dolnicar 2003)
- Avoids response style bias

4.3.3 Response Styles Problem

Key Takeaways

Definition: Systematic tendency to respond based on something OTHER than question content.

Common Styles:

1. **Acquiescence:** Agree with everything
2. **Extreme Response:** Always pick endpoints
3. **Midpoint:** Always pick neutral
4. **Social Desirability:** Answer "good" way
5. **Naysaying:** Disagree with everything

Danger: Algorithms can't distinguish between real preferences and response style artifacts. Can create fake segments.

Solutions:

- Use binary/metric scales
- Avoid long Likert batteries
- Screen suspicious segments

4.3.4 Sample Size Requirements

Key Takeaways

Research-Based Formulas:

Dolnicar et al. (2016) - Recommended:

$$n \geq 100 \times p$$

Where p = number of segmentation variables

Example: 15 benefit-seeking questions → Need 1,500 respondents

Factors Increasing Requirements:

- Unequal segment sizes
- Overlapping segments
- Correlated variables
- Noisy data
- Response biases

Critical Finding: Some problems CAN'T be solved by just adding more data. Improve data quality FIRST, then determine sample size.

4.4 Data Quality Checklist

Key Takeaways

Optimal Data Should:

Variable Selection:

- Contain ALL necessary items
- Contain NO unnecessary items
- Contain NO redundant items

Response Format:

- Be binary OR metric (avoid ordinal)
- Convert nominal to binary dummies

Data Quality:

- Free of response styles
- Minimize social desirability bias
- No careless responding

Sample:

- Sufficient size: $n \geq 100 \times p$
- Representative of target population

5 Integrated Summary: Steps 1-3

5.1 The Complete Framework

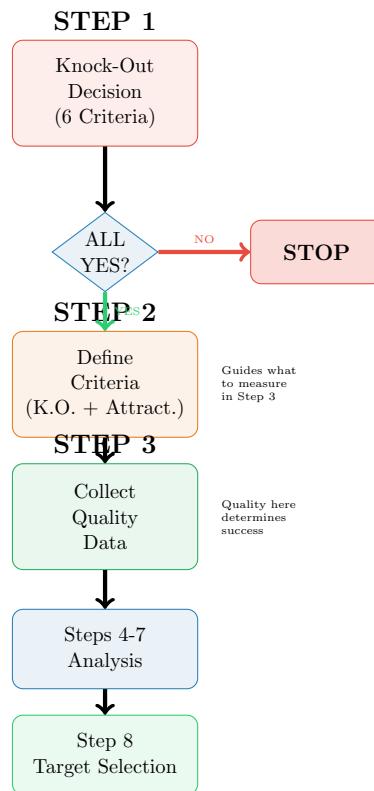


Figure 3: Steps 1-3 in Complete Segmentation Framework

5.2 Critical Success Factors

Key Takeaways

10 Non-Negotiable Requirements for Success:

1. **Strategic Commitment:** ALL six knock-out criteria satisfied (Step 1)
2. **Early Criteria Definition:** Know what "attractive" means before collecting data (Step 2)
3. **Team Involvement:** Include all organizational units in criteria selection
4. **Simplest Criterion:** Use geographic/demographic if possible; complexity only when needed
5. **Variable Discipline:** All necessary, no unnecessary, no redundant variables
6. **Response Format:** Binary or metric preferred over ordinal
7. **Response Style Awareness:** Design to minimize, check for patterns in results
8. **Adequate Sample:** Minimum $100 \times$ number of segmentation variables
9. **Data Quality:** Quality beats quantity - fix problems before increasing n
10. **Actual Behavior:** Use observed behavior data when available (beats surveys)

5.3 Common Pitfalls to Avoid

Step	Pitfall	Consequence
Step 1	Proceeding despite knock-out failure	Implementation fails, resources wasted
Step 1	Underestimating organizational resistance	Segmentation solution never implemented
Step 2	Not defining criteria before data collection	Lack data needed for segment evaluation
Step 2	Top-down criteria without team input	No organizational buy-in for results
Step 3	Using surveys by default	Miss higher-quality behavioral data
Step 3	Including noisy variables	Algorithms can't find true segments
Step 3	Defaulting to 5-point Likert scales	Ordinal problems, response style capture
Step 3	Insufficient sample size	Unstable, unreliable segmentation
Step 3	Not screening for response styles	False segments based on artifacts

Table 4: Common Pitfalls and Their Consequences

6 Practical Implementation Guidelines

6.1 For Step 1: The Go/No-Go Decision

Core Concept

Action Items:

Week 1-2: Assessment

1. Schedule meeting with senior management
2. Present knock-out criteria framework
3. Conduct honest assessment of each criterion
4. Document responses with evidence

Decision Point:

- If ALL six = YES → Proceed to Step 2
- If ANY = NO → Document why, revisit in 6-12 months
- If UNCERTAIN → Conduct deeper assessment before proceeding

Red Flag: Management says "let's just try and see" without commitment. This guarantees failure.

6.2 For Step 2: Defining Criteria

Core Concept

Action Items:

Week 1: Preparation

1. Form core team (2-3 people)
2. Identify advisory committee members
3. Review Table 4.1 criteria from literature
4. Prepare initial proposal

Week 2-3: Iteration

1. Present proposal to advisory committee
2. Each member allocates 100 points across 6 attractiveness criteria
3. Discussion and negotiation
4. Converge to consensus

Week 4: Documentation

1. Document final knock-out criteria (6 universal)
2. Document final attractiveness criteria + weights (organization-specific)
3. Get executive approval
4. These guide Step 3 data collection

6.3 For Step 3: Data Collection Planning

Core Concept

Action Items:

Phase 1: Source Decision

1. Check: Do we have behavioral data? (scanner, loyalty, web analytics)
2. If YES → Use it (highest quality)
3. If NO → Plan survey (ensure criteria from Step 2 can be measured)

Phase 2: Variable Selection

1. Conduct exploratory research (focus groups, interviews) if needed
2. List ALL potentially relevant variables
3. Eliminate redundant variables
4. Eliminate noisy variables
5. Keep only necessary, unique variables

Phase 3: Questionnaire Design

1. Use binary or metric scales (avoid ordinal)
2. Convert nominal to binary dummies
3. Minimize Likert scale batteries
4. Use concrete, specific language
5. Pre-test with small sample

Phase 4: Sample Size

1. Count segmentation variables: p
2. Calculate: $n = 100 \times p$ (minimum recommended)
3. Add 20% buffer for response styles/screening
4. Budget accordingly

7 Conclusion

7.1 The Foundation of Success

This document, prepared by **Jai Kumar Gupta**, has synthesized the foundational steps of market segmentation analysis. These three steps—deciding whether to segment, defining what makes segments attractive, and collecting quality data—form the bedrock upon which all subsequent analysis depends.

7.2 The Critical Insight

Key Takeaways

Market segmentation is NOT a technical exercise. It is a **strategic transformation** requiring:

- Organizational commitment (Step 1)
- Clear strategic vision (Step 2)
- Quality empirical foundation (Step 3)

Weakness in any step cascades through the entire process, leading to:

- Poor segment identification
- Ineffective targeting
- Wasted resources
- Organizational frustration

Conversely, strength in all three steps creates conditions for:

- Accurate segment extraction
- Effective marketing strategies
- Improved customer satisfaction
- Sustainable competitive advantage

7.3 The Path Forward

Organizations that successfully navigate Steps 1-3 position themselves for:

- **Step 4:** Extracting segments through clustering algorithms
- **Step 5:** Profiling segments to understand their characteristics
- **Step 6:** Describing segments in detail
- **Step 7:** Selecting target segments based on Step 2 criteria

- **Step 8:** Developing customized marketing mixes
- **Step 9:** Implementing segment-based strategies

7.4 Final Recommendations

Core Concept

For Practitioners:

1. **Be Honest:** If Step 1 criteria aren't met, wait until they are
2. **Involve Stakeholders:** Step 2 requires organizational input, not just analysts
3. **Prioritize Quality:** Step 3 data quality matters more than quantity
4. **Document Everything:** Decisions in Steps 1-3 guide all subsequent work
5. **Iterate if Needed:** Can refine criteria as understanding deepens

Success Metric: If you complete Steps 1-3 properly, Steps 4-9 become significantly easier and more likely to succeed.

7.5 Acknowledgment

This comprehensive summary draws from the seminal work of Dolnicar, Grün, and Leisch (2018), whose rigorous research and practical frameworks have advanced the field of market segmentation analysis significantly. Their emphasis on methodological rigor, organizational realism, and data quality provides practitioners with a roadmap for successful implementation.

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Market Segmentation Analysis - Steps 1, 2, and 3

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