Next Generation Shopping Experience

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“We shop, therefore we are”
1960s & 70s - “Big Discount Boxes”

Strategy
Price, Assortments, Access, Experience

Execution
Operations, Supply Chains, EDI, Inventory Management, Store replication

Financials
Net margins ~4%, Gross margins ~25%, YoY ~5% - 9%
1980s - “Category Killers”

Strategy

Specialized, End-to-End solutions, Market Presence

Execution

Services, Integrations, Operations

Financials

Net margins ~6%, Gross margins ~30%, YoY ~5% to 9%
...and then there were

Club stores

Loyalty and rewards programs

Rudimentary marketing CRM systems are born

High end stores, Super specialized goods stores ...
1990s - e-tail “Movie Screen”
1990s - e-tail Characteristics

Strategy
Technology as competitive advantage, Customer obsession, Scientific pricing, ~Infinite selection, Low entry barrier for suppliers

Execution
Andon cords, Kaizen, Data driven decision making in most areas, Digital Ads, Recommendations, Reviews

Financials
Negative net working capital, Long term view for financial returns
2000s & beyond - traditional retail struggles

Store closures & Job losses

Less # of stores translates to lower customer & seller interest

Online strategies haven’t taken off - absence of technology firepower, very different operational strategies needed for online sales fulfilment
## Summary: Current state

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Traditional retail</th>
<th>e-tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
<td>Limited</td>
<td>Virtually unlimited</td>
</tr>
<tr>
<td>Personalization</td>
<td>Very low</td>
<td>Highly personalized</td>
</tr>
<tr>
<td>Look ‘n feel</td>
<td>Mostly great</td>
<td>Non existent</td>
</tr>
<tr>
<td>Convenience</td>
<td>Works well for limited use cases</td>
<td>Choosing, Buying &amp; Returning are easy</td>
</tr>
<tr>
<td>Pricing &amp; Promotions</td>
<td>Suboptimal</td>
<td>Global optimality</td>
</tr>
<tr>
<td>Returns</td>
<td>~10%</td>
<td>~30%</td>
</tr>
<tr>
<td>Cart abandonment</td>
<td>Mild concern</td>
<td>Strong concern</td>
</tr>
</tbody>
</table>
Selling Experience
Technology evolutions and trends

- E-Commerce
- Mobile
- Omni Channel
- Chatbots
- Smart mirrors
- Powerful processors
- Motion tracking
- VR (AR)
Why VR for Retail/Shopping

Recreate In-Store Experience
Why VR for Retail/Shopping

Recreate In-Store Experience

Physical look, feel & connect

Personalized Experience
Why VR for Retail/Shopping

- Recreate In-Store Experience
- Physical look, feel & connect
- Personalized Experience
- Anywhere & Anytime
- Trials & Selection
Why VR for Retail/Shopping

Recreate In-Store Experience
Physical look, feel & connect
Personalized Experience
Anywhere & Anytime
Trials & Selection
Assistance
Share & Interact
Cross-sells and Upsell
Seeing is believing
The market is ready for VR
Technology players

Augmented Reality
- Microsoft HoloLens
- RideOn Ski Goggles
- Google Glass

Virtual Reality
- Google Cardboard
- Samsung Gear VR
- HTC Vive
- PlayStation VR
- Oculus Rift

#GartnerDMC
Technology details

Content
- 360 / High end Photo realistic Camera
- Photogrammetry

Headsets
- Smartphones
- Tethered to a PC
- Built In PC in headset

Software
- Basic VR, simple videos
- Custom VR App for Oculus, Vive, HoloLens

Retail
- Virtual fitting rooms
- Virtual mirrors, Body scanners

Challenges

Cost
- Headsets
- Content Production

Adoption
- No dominant player or platform
- No standard format for content

Side effects
- Nausea
- Cybersickness
Regulatory and societal impact

VR Experiences **not rated** like games and movies

**Copyrightability**

Sell the experience, **forget the product**

**No privacy** in virtual worlds

Virtual-reality experiences can have **real** physical and emotional consequences

**Isolation** from the real world
VR/AR EcoSystem

Technology Players behind that “Experience”

Hardware

Software/Platform

Content Providers

Retail
VR/AR EcoSystem: Hardware

Winning Factors:
- Cost
- Ease of Use
- Compute
- Integration
Winning Factors:
- Inter-Operability
- Content Quality
- User Interface (UI)
VR/AR EcoSystem : Retail

- **Advantage**
  - Amazon
  - Alibaba

- **Opportunity**
  - Sony
  - Facebook

- **Challenges**
  - Cost
  - Ease of Use
  - Inter-Operability
## VR/AR in Retail: Potential Winners

<table>
<thead>
<tr>
<th>Winners</th>
<th>Advantage</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amazon &amp; Alibaba</td>
<td>Platform Play; e-commerce leadership; Early Adoption; Consumer Base</td>
<td>Execution; Cost;</td>
</tr>
<tr>
<td>Sony</td>
<td>Leadership in VR Gaming; Established Playstation audience.</td>
<td>Entry into Retail; Cost;</td>
</tr>
<tr>
<td>ebay</td>
<td>Early Adoption; Successful Field Trials; Hands Free Operation</td>
<td>Inter-operability;</td>
</tr>
<tr>
<td>Thomas Cook</td>
<td>Early Adoption; High Margin</td>
<td></td>
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<td>Automotive</td>
<td>High Margin</td>
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eBay & MYER: World’s First VR Departmental Store
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