

“Consumer-Like” Silicon Era

Value, Growth and Profit

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Keys to Business Success Is in Understanding

Value: What does the customer value?

Growth: How will you grow your business?

Profit: How do you capture the value?

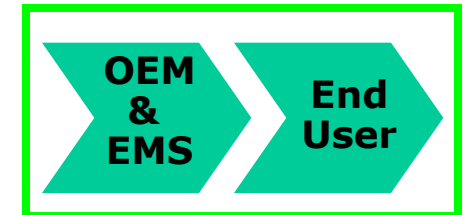
Value: Capturing More!

- ▲ **Historically:** Value Resided In Chip and Design
- ▲ **Today:** System Architecture Determines Value
- ▲ **Future:** Software Adds More Value to System
As the Silicon Is Virtually Free!

Design Value



Brand Value



Design value is based on engineering deliverables. Brand value is based on users experience. In consumer-like markets the technology is often given away. In most cases lowest value per unit goes to the back of the chain

Value: Four Categories in IC Value:

- ▲ Platform Leader
- ▲ Volume Leader
- ▲ Programmable Leader
- ▲ Specialist

Value: IC Category Examples:

▲ Platform Leaders

- Examples: PC—>MPUs—>Intel,
- Cellphone—>DSPs—>TI,

▲ Volume Leaders

- Examples: Electronics—>Standard Linear/Analog—>Fairchild
Electronics —> Memory —> DRAM Vendors

▲ Programmable Leaders

- Examples: FPGAs—>Altera, Xilinx
Microcontrollers—>Microchip, Freescale
Cores—>MIPS, ARM

▲ Specialists

- Lifecycle Specialists: Linear Technology
- Integration Specialists: BroadCom
- “Building Blocks” Specialists: PMC Sierra
- System on a Chip Specialist:

Value: IC Company Brings:

Category:	Company Value:
Platform:	Design & Process
Volume:	Process & Value Chain Cost Reduction
Programmable:	Design & Applications
Specialist:	Function or System Knowledge

Value: Customer Wants:

Category:	Customer Value:
Platform: Design & Process	Standards, System Solution, Certainty
Volume: Process & Value Chain Cost Reduction	Quality, Low Price
Programmable: Design & Applications	Flexibility, Time to Market
Specialist: Function or System Knowledge	Performance

Value Questions:

- ▲ What Category Do You See Yourself?
- ▲ Are You Straddling Multiple Categories?
- ▲ Do You Perceive Yourself in One Category When You Are Really in Another?
- ▲ Can I Compete Effectively In My Existing Category?
- ▲ What Am I Doing Differently To Create More Value for My Customer? Myself?

Growth:

- ▲ If YOU are Not Growing You Are Dying!
- ▲ You May Create Value, But That Doesn't Mean You Will or Can Grow.
- ▲ Growth Is Dependent on:
 - Market size and rate of growth
 - Number of competitors
 - Industry infrastructure or sophistication of value chain
 - Rate technology is absorbed in the market
 - Standards

Growth: Highly Diffused Markets Require Different Tactics...

Diffusion Rule = f (market size, competitors, infrastructure, standards)

Where:

- Market Size – equal to the projected total available market
- Competitors – equal to the number of existing and projected competitors
- Infrastructure – measure of the sophistication of the supply chain or the complexity of the supply chain in support of the end product and customer
- Standards – measure of the level of standard in the market

Growth: Environmental Assessment

▲ Market

- How are our markets changing?
- What's happening to ASPs?

▲ Competition

- How is the competition changing?

▲ Infrastructure

- How sophisticated is the supply chain?
- Does the infrastructure accelerate or impede absorption?
- What channels are used and how does the customer buy?

▲ Standards

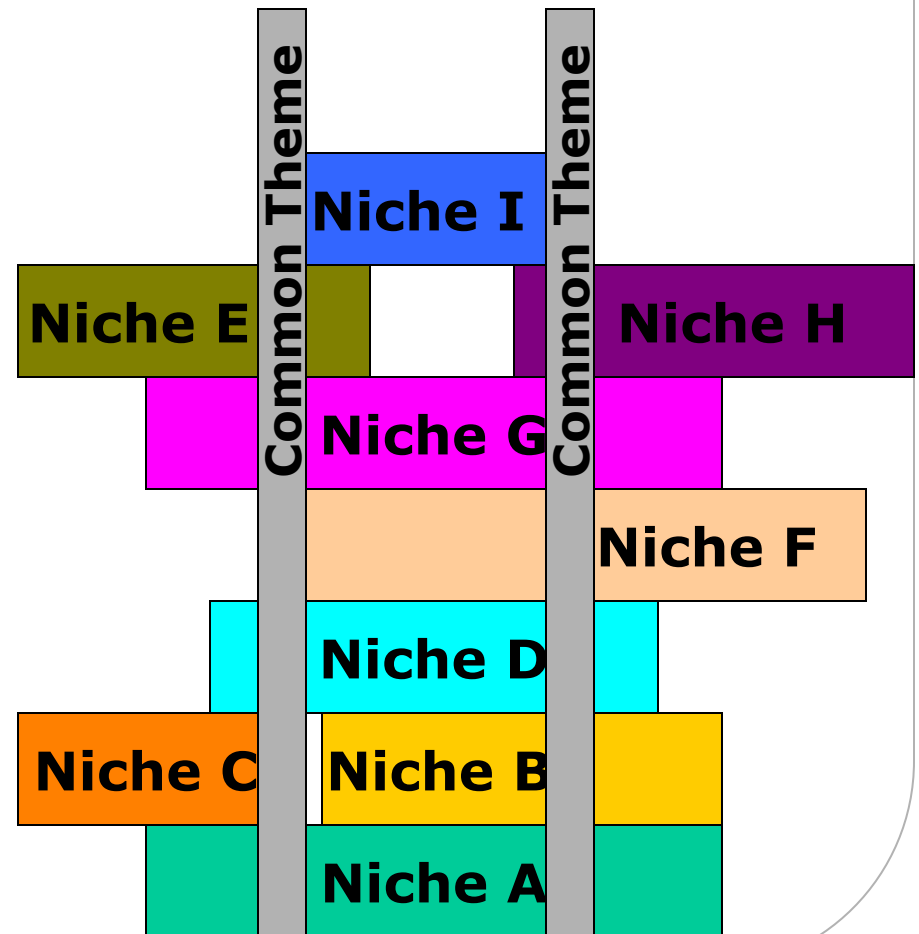
- What level of standards are in the industry?

Growth Questions:

- ▲ Is the TAM greater or less than \$1 billion?
- ▲ How do you describe competition (large, established, or emerging companies)?
- ▲ How fast is the market growing and how fast is the technology absorbed in the market?
- ▲ How sophisticated is the industry infrastructure? How can you influence its development?
- ▲ What market share do you possess? Are you gaining, maintaining or losing share?
- ▲ What is the level of diffusion in the market?

Growth: Build A Billion Dollar Market One Niche at a Time ...

- ▲ Bottom Up Approach To \$1B
- ▲ Common Theme Required
- ▲ Don't Go Into Next Niche Before You Have Dominate Share!
- ▲ Takes Time
- ▲ Less Dependence on Major Customer or Account
- ▲ Customer Diversification in Good and Bad Times



Profit:

- ▲ Value and Growth Must Be In Place to Create Profit!
- ▲ Sustainable Profit Results From Correct Reinvestment.
- ▲ Profit Is Dependent on:
 - Competition
 - Gross Margin or VALUE you provide
 - R&D Investment
 - R&D Effectiveness

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Profitability Strategy: Profit DNA

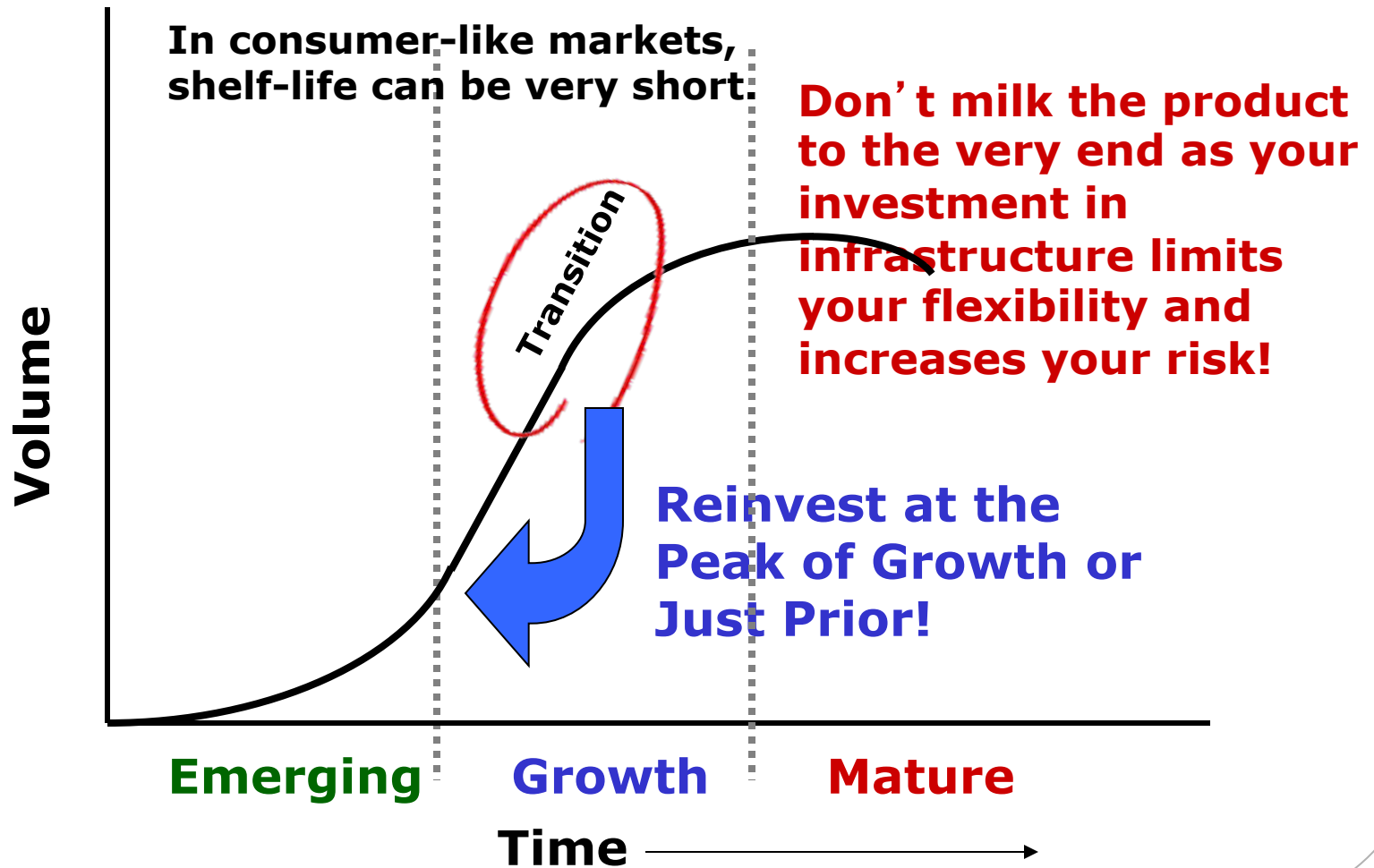
Profit Potential → Profit Models → Profit Metrics

- ▲ Can This Market Be Profitable?
- ▲ What **Business Model** Can We Apply, Right Now, to Be Profitable Over Time?
- ▲ What Are the Measures or Milestones to in Place to Support the Profit Model?

Profit Questions:

- ▲ How Do I Create Profit?
- ▲ Does My Model Create Sustainable Profit?
- ▲ Is Value Migrating to Other Elements of the Chain? If So Can I Capture Value and Profit?
- ▲ Am I Investing In Areas That Will Create Profits Given My Investment and Competition?
- ▲ What Metrics and Milestones Do I Have In Place to Measure Profits?

Profit: Earlier Reinvestment Is Key



Profit: Reinvest Earlier – Why?

- ▲ Less Chance Your Infrastructure Will Harden
- ▲ More Opportunity to Build The Diversified, Niche at a Time Strategy
- ▲ Less Dependence on One or a Few Customers
- ▲ Building Greater Value in Multiple Areas Not Just Supply Chain Management Which Is Easily Copied Over Time

The Cure For Corporate Malaise

Think Value, Growth and Profit

- ▲ **Value:** Silicon Value Must Be Beyond Shrinks!
 - What does the customer truly value?
 - What markets can silicon be truly disruptive?

- ▲ **Growth:** Build a Billion Dollar Market With Multiple Niches
 - Which markets can be leveraged quickly for greatest return?
 - Can you build upon a market theme a niche at a time?

- ▲ **Profit:** Avoid Product Arthritis Through Early Reinvestment
 - At what lifecycle phase is your high-revenue product?
 - Given the lifecycle when should you reinvest?