

Marketing Your Technology

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What you WON'T be getting today

- A PhD in marketing theory and practice
- “One-size-fits-all” solutions to sell your technology
- Advice on how to get someone to buy something they don't want or need

What I WON'T be talking about

- Many of the usual “marketing and sales” topics are only appropriate for mature companies
- I won't be talking about:
 - Pricing strategy, Distribution, Market Research, Demographics, Market Segmentation, Advertising, Branding, Brand management, Direct marketing, Publicity.

What you WILL be getting today

- A strategic framework that will help you think about the kind of marketing you should be doing
- Some potential “good outcomes” that you should be pursuing
- Strategies for deciding who your customers are and what you should be saying to them
- Encouragement to take marketing seriously and learn more

A Valuable Strategic “Framework”

To what extent does your innovation make other technologies obsolete?

Example: The automobile made the horse and buggy obsolete

To what extent will your innovation make current marketing & sales channels obsolete?

Example: The companies that make and sell automobiles are not the same companies who sold horses and buggies

Other Examples

Evolutionary Innovations:

- **1 TB hard drives did make 100GB hard drives obsolete**
- **Companies that sell 100GB drives also sell 1TB drives**

Niche Innovations:

- **Solid state Flash Drives did not make Hard Drives obsolete**
- **Companies that sell Flash Drives do not sell Hard Drives**

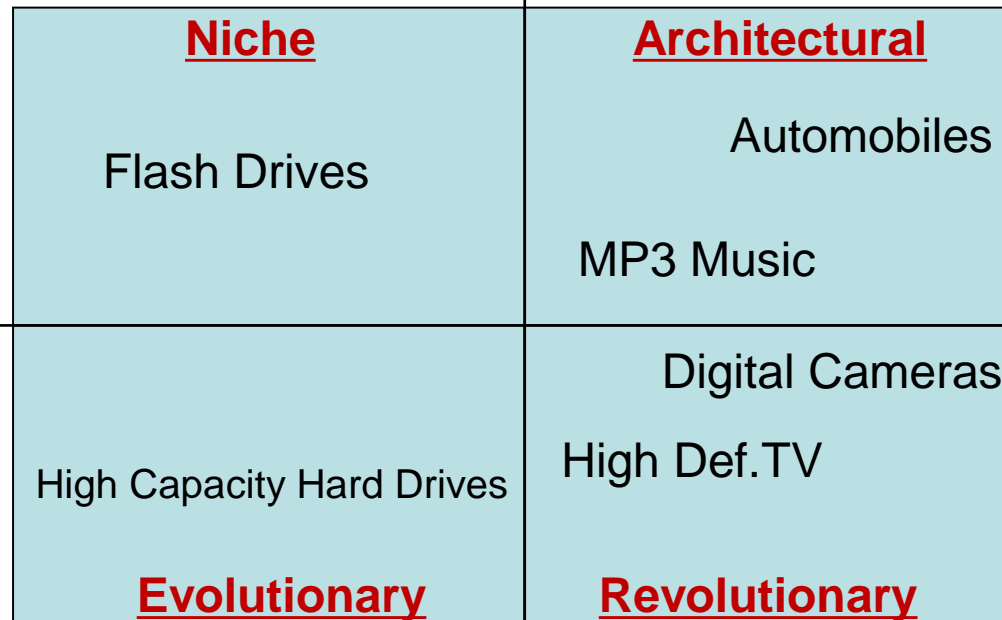
Revolutionary Innovations:

- **Digital (High Definition) TV made analog TVs obsolete**
- **Companies that sold analog TVs now sell digital TVs**

The Transilience Map

Makes sales & marketing channels obsolete

Leaves older technologies viable



Makes older technologies obsolete

Retains existing sales & marketing channels

More things to consider ...

1. How mature is your technology?
2. What are your goals for your company?
3. What kind of problem does your technology solve?

How do we define “Maturity?”

- An objective assessment of the maturity of your technology and product is the first step to an effective marketing plan!
- “Technology Readiness Levels” (TRLs) are a simple way to define how mature a technology is.
- US government agencies, large companies, universities, and investors use TRLs to help guide investment, product development, purchasing, and resource allocation decisions.

Technology Readiness Levels

- | | |
|--|-----------------------|
| 1. Basic principles observed and reported. | <u>Basic Research</u> |
| 2. Technology concept and/or application formulated. | |
| 3. Analytical and experimental critical function and/or characteristic proof of concept. | |
| 4. Component and/or breadboard validation in laboratory environment. | <u>Demonstration</u> |
| 5. Component and/or breadboard validation in relevant environment. | |
| 6. System/subsystem model or prototype demonstration in a relevant environment. | |
| 7. System prototype demonstration in an operational environment. | |
| 8. Actual system completed and qualified through test and demonstration. | <u>Application</u> |
| 9. Actual system proven through successful long-term operations. | |

Maturity defines who your target customer is!

- TRL 1-3 is basic research and is generally “marketed” to government agencies, major companies, and philanthropic organizations that seek to advance the state of the art.

Ex: Sponsored research, “Science for hire”

- TRL 4-7 is technology demonstration and is “marketed” to early-adopters and strategic partners seeking early market advantages.

Ex: Licensing agreements, sales of patent portfolio, joint venturing, pilot projects

- TRL 8-9 is technology application and product development and is marketed directly to end users.

Ex: Product sales and marketing, full-scale manufacturing & support

A challenging question ...

What do you want your company to look like in three years?

In five years?

Did you say ...

- A small, well respected R&D team with consistent project funding and licensable patents?
- A stable, medium-sized company that offers several related products or services?
- A major manufacturing company that has products known throughout the world?
- Something else?

What is a “Good Outcome” for you?

Success in Basic Research means:

- You’ve found agencies, universities, or R&D-intensive companies who will pay you to generate new concepts and validate their potential; and
- You have become a recognized “thought leader” in your field.

What is a “Good Outcome” for you?

Success in Technology Demonstration means:

- You have formed partnerships or joint ventures with companies who will help test your technology and ultimately manufacture products or provide valuable services;
- You have licensed your technology to a company that will pay you a royalty when they sell products or services; and/or
- You have sold the rights to your patent(s)

What is a “Good Outcome” for you?

Success in Technology Application and product development means:

- Sales, sales, and more sales.

Don't be a "Stealth Start-up"

Many companies try NOT to draw attention to themselves because:

- 1.** They are afraid people will steal their idea
- 2.** They want their product to be perfect when they release it
- 3.** They think they know everything they need to know about the market

Don't be a "Stealth Start-up"

Being a "stealth start-up" is almost always a mistake:

1. Your idea isn't really unique ... execution will determine your success or failure.
2. Version 1 your product won't be good enough, but the only way to know how to fix it is to get feedback from customers.
3. Being secretive will keep you from "knowing what you don't know"

The 7 Ps of Technology Marketing

- 1. Potential** – Once it's mature, what sort of new and valuable applications or improvements will be possible?
- 2. Products** – What will you be delivering to your customers?
- 3. Price** – How much money do you need to mature your technology versus what you might be able to charge for it?
- 4. Partners** – Can you do this by yourself or do you need partners?
- 5. Promotion** – How will you become known to your potential customers and partners?
- 6. Process** - How can people obtain your product or service?
- 7. People** – Who is the “face” of your business?

The 7 Ps vs. "Maturity"

	Basic Research	Technology Demonstration	Product Development
Potential	Many possible applications in many industries	Initial product forms and features are being defined	Specific products and services are defined, applications are known
Products	Papers, presentations, ideas	Prototypes, one-time services, patents, methodologies	Finished products, mature services
Price	Basic research funds	Test and evaluation funds	Operational and capital budgets
Partners	Other researchers	Future manufacturers, joint sales & marketing	Sales partners
Promotion	Conferences, technical societies, journals	Trade shows, professional societies, venture fairs	Advertising, Public Relations, direct sales
Process	Journals, invitations to speak, collaborative projects	Test installations, Pilot Projects	Purchase
People	The Researcher	A team of developers, designers, testers	The CEO and professional sales

One last thing to worry about ...

Premature scaling of sales and marketing is the leading cause of failure in start-ups.

Early sales are great for morale and cash flow, but may not be indicative of a sustainable business model.

A start-up should scale sales and marketing only after the team has found a repeatable sales model.

Questions?

