

CONFIDENTIAL

D - PLS. cc
consultants

Warren

Memorandum

Date: February 15, 1990
To: Regis
From: Doug
Re: Merchandising the PaineWebber Project

Attached is the PaineWebber project with the names changed to protect confidentiality. I have fronted the material with a memo from me to you, setting the stage for the material, in hopes that my brief overview will aid in your merchandising the work.

This was a fixed price project which I managed. The PCB expertise came from Jean Armstrong of our Portland office, the PLC expert is Becky Scrivinich in Boston, Geoff Moore conducted a product marketing workshop and Paul Hodges audited the Hughes beta site. Everyone delivered quality work. Bob Boden was senior consultant and project Godfather, bringing to the recommendations his expertise in organizational strategy.

As you can see by the above list, the PaineWebber project proves the new RMI account structure. Four RMI offices turned out this project in about two months. (This time included the Christmas holidays.) The revenue should be about \$70,000. Because of the need for six people to get up to speed quickly, the project will run about 10 % over budget.

(Immediate Result #1: The client adopted all the recommendations from our product marketing workshop.)

It is too early to get a read on PaineWebber. But it appears that they liked the result. We delivered a blueprint for hard work and a need for more investment. You once told me that VCs only call us when their investment is in trouble. This was the case with PaineWebber.

DM/cv

Attachment

Memorandum

Date: February 15, 1990
To: Regis
From: Douglas Molitor
Re: Due Diligence Report

Attached is the due diligence report we delivered to the client Monday. Basically, VentureCo took the technology development money, booked it as revenue, developed two technologies but failed to do any marketing. When the money ran out, VentureCo claimed that they had products. Our interviews with all alpha/beta sites showed otherwise. They do have market viable technologies, but no real product as yet.

RMI turned the work around on schedule. We completed the project in time for the VentureCo February board meeting. The fast completion was possible because of our bench strength. We had in-house expertise on the needed technologies, ranging from PCB test to PLC marketing.

Our blueprint for action for each of the two technologies appear in each Executive Summary, sections two and four. Our organizational recommendations can be found in section six. The back-up data is presented in differing formats, as the situation dictated.

This project consisted of many components, including:

- Audit presentation and audit analysis of a new and as yet uncatagorized technology from over 30 audits in ATE, test and instrumentation
- In person alpha/beta site interviews
- Eighteen factory floor manager audits (tough guys to get to)
- Product Marketing Workshop to ascertain how near to market readiness was one of the technologies
- Two sets of next step type recommendations

DM/cv

Attachment

1990 Target Customer Profile

- Early adopter, technical enthusiast or visionary (see Technology Adoption Process).
- Military or military aerospace manufacturing concern. Concentrate on the rework limitation issue with these prospects.
- Commercial hybrid with medium to low volume and high mix product line.
- User manual or decision tree troubleshooting.
 - Capture knowledge
 - Productivity tool
 - Speeds thruput
- Different people in the sales cycle will buy on sets of New Test benefits:

Operating manager, engineering manager:

- Quality
- Increased thruput
- Yield and efficiency

Test manager, technician:

- Healing an "ache" in test
- Speed, efficiency and accuracy of test diagnostics
- Doing job right

VP of manufacturing:

- Ship quality to schedule
- Positive manufacturing variance
- Time to market

Corporate management:

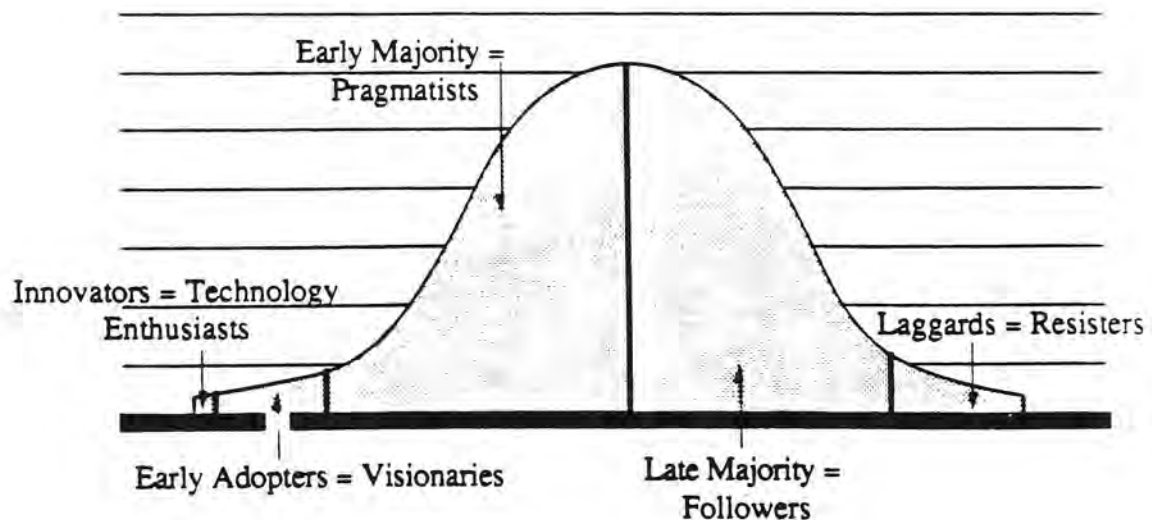
- Improved bottom line
- Payback
- Vendor visibility and credibility

Key Sales Recommendations

Are Target Customers and Available Adopter Market in Line?

- There is an indication that the prospective customers VentureCo is targeting for New Test, are in the late adopter category--the pragmatists. The need for service and support for example is a real need expressed by this group who want their jobs and want to avoid risks. As yet, service and support is entwined in the resource/corporate support issues at New Test's core.
- It is essential however that there has been some groundwork done with early adopters before VentureCo can hope to attract the late adopters in profitable numbers. Early adopters of new products are the technical enthusiasts and the visionaries, each of whom have a different set of needs, wants and motivations. If you accept the premise that the technical enthusiasts are very important to attract at this point in time (as a Beta or production sale), there needs to be a realignment in the marketing and sales strategy. At present the strategy appears to be focused almost entirely on the late adopters or pragmatists. As the Technology Adoption Life Cycle (see that section of this report) becomes evident, it could have quite an impact on the total New Test development and distribution strategy.

Technology Adoption Profile



Technology Adoption Life Cycle

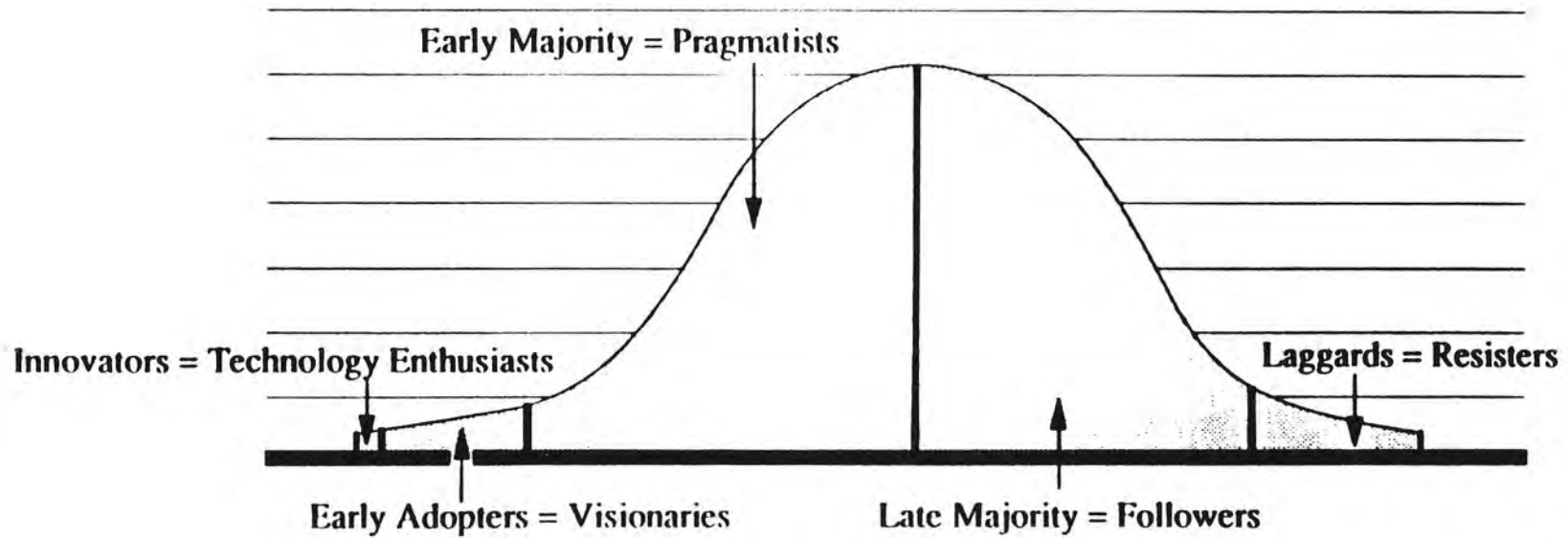
The technology adoption life cycle is a model which describes the market penetration of any new technology in terms of the types of consumers it attracts throughout its useful life. It is probably the most well established model in technology marketing, because it continues to provide useful insights (see Figure 1).

The underlying thesis of the model is that technology is absorbed into any given user base in stages corresponding to the psychological and social profiles of various segments within that user community. **The process can be thought of as a continuum**, with definable stages, each associated with a definable group, and each group making up a predictable portion of the whole community, as follows:

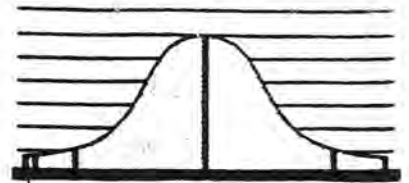
<u>Group</u>	<u>Percent of Total</u>
Innovators	2.5
Early Adopters	13.5
Early Majority	34
Late Majority	34
Laggards	16

The profile is a great model -- it is descriptive, it is prescriptive, and it is predictive. That is, each of these groups has a characteristic description which in turn helps set the priorities of any high tech marketing strategy. The prescription for success in introducing technology into any community is to work the curve left to right, focusing first on the innovators, growing that market, then moving on to the early adopters, growing that market, and so on. The key tactic is to use each "captured" group as a reference base for going on to market to the next group.

Technology Adoption Profile



Innovators: Technology Enthusiasts

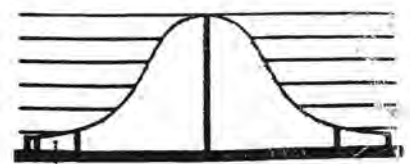


Innovators = Technology Enthusiasts

Classically, the first people to adopt any new technology are those who appreciate the technology for its own sake. Propeller heads, nerds, techies: lots of labels for a group of people who are as a rule, like to talk about technical topics. They are the ones who will spend hours alpha and beta testing products which, in all conscience, never should have been shipped in the first place. They will forgive ghastly documentation, horrendously slow performance, ludicrous lacunae in functionality, and bizarrely obtuse methods of invoking some needed function -- all in the name of moving technology forward. They make great critics because they truly care.

As a buying population, or as key recommenders to a buying decision, technology enthusiasts pose fewer requirements than any other group in the adoption profile -- but you must not ignore the issues that are key to them. First, and most important, they want the truth, and without any tricks. Second, wherever possible, whenever they have a technical problem, they want access to the most technically knowledgeable person to answer it.

Third, they want to be first to get the new stuff. By working with them under non-disclosure -- a commitment to which they typically adhere scrupulously -- you can get great feedback early in the design cycle and begin building a supporter who will influence buyers not only in his own company but elsewhere in the marketplace as well. Finally, they want everything cheap.



Early Adopters = Visionaries

Early Adopters: The Visionaries

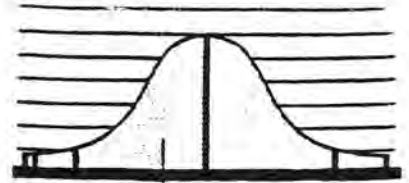
These are the people who truly fund high technology business. As a class, they tend to be recent entrants to the executive ranks, highly motivated, and driven by a "dream." Understand their dream, and you will understand how to market to them.

The core of the dream is a business goal, not a technology goal, and it involves taking a quantum leap forward in how business is conducted in their industry. This is the key point -- we are not looking for an improvement; we are looking for a fundamental breakthrough. Technology is important only inasmuch as it promises to deliver on this dream.

Finally, beyond fueling the industry with dollars, visionaries are also effective at alerting the business community to pertinent technology advances. Outgoing and ambitious as a group, they are usually more than willing to serve as highly visible references, thereby drawing the attention of the business press to an enterprise otherwise too small to catch their attention.

As a buying group, visionaries are easy to sell but very hard to please. This is because they are buying a dream which, to some degree, will always be a dream.

Another quality of visionaries is that they are typically in a hurry. They see the future in terms of windows of opportunity, and they see those windows closing. As a result, they tend to exert deadline pressures -- the carrot of a big order or the stick of a penalty clause -- to drive the project faster. This plays into the classic weaknesses of the entrepreneur -- lust after the big score and over-confidence in his ability to execute within a given timeframe.



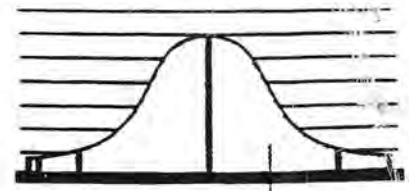
Pragmatists

Early Majority = Pragmatists

Pragmatists represent the bulk of the market volume for any technology product. You can succeed with the visionaries, and you can thereby get a reputation for being a high flyer with a hot product, but that is not ultimately where the dollars are. Instead, those funds are in the hands of more prudent souls, who do not want to be pioneers ("those are the guys with arrows in their backs"), who never volunteer to be the beta site ("let somebody else debug it"), and who have learned the hard way that the "leading edge" of technology is all too often the "bleeding edge."

If the goal of visionaries is to take a quantum leap forward, the goal of pragmatists is to make a percentage improvement -- incremental, measurable, predictable progress. If they are installing a new product, they want to know how other people have fared with it. The word *risk* is a negative word in their vocabulary -- it does not connote adventure or excitement but rather the chance to waste money and time. They will undertake risks when required, but will first put in place safety nets, and will manage the risk elements very closely.

When pragmatists buy, they care about the company they are buying from, the quality of the product they are buying, and the reliability of the service they are going to get. In other words, they are planning on living with this decision personally for a long time to come. (By contrast, the visionary is planning on implementing the great new order and then using that as a springboard to his next great step upward.) Because pragmatists are in it for the long haul, and because they control the bulk of the dollars in the marketplace, the rewards for building relationships of trust with them are very much worth the effort.

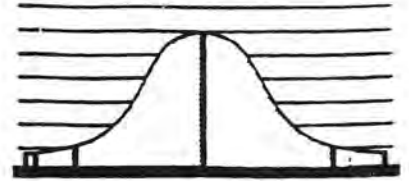


Followers

Late Majority = Followers

Following the mathematics of the technology adoption profile model, for every pragmatist there is a follower. Put another way, followers represent approximately one third of the total available market. As a market, however, they are rarely developed as profitably as they could be, largely because high tech companies are not, as rule, in sympathy with them.

The problem is, followers don't like high tech products. They are buying them because they feel they must just in order to stay at parity with the rest of the world. The fact is, they are slightly afraid of high tech. Therefore, they tend to invest only at the end of a technology life cycle, when products are extremely mature, market share competition is driving low prices, and the products themselves can be treated as commodities. Their minimum goal in buying high tech products is not to get stung. Unfortunately, because they are working the low margin end of the market, where there is little motive for the seller to build a high integrity relationship with the buyer, they often do get stung. This only goes to reinforce their disillusion with high tech, and resets the buying cycle at an even more cynical level.



Laggards = Resisters

Resisters

Resisters -- the last one sixth of the Technology Adoption Profile -- do not participate in the high tech marketplace, except to block purchases. As such, the primary function of high tech marketing in relation to resisters is to neutralize their influence. This is a pity because resisters can teach us a lot about what we are doing wrong.

Adapted from: High Tech Marketing, Changes in the Game,
by Geoffrey Moore