Adapted extract of 'Crossing the Chasm'

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This document extracts key ideas from the 3rd edition of Geoffrey Moore's book "Crossing the Chasm' and includes comments to make it easier to see how to adapt the ideas climate campaigning.

LANGUAGE TRANSLATION

Defining high-tech terminology

High-tech terminology	Definition
Systems integrator	A systems integrator is a company that specializes in bringing together component subsystems into a whole and ensuring that those subsystems function together. The systems integrator works in a client-contractor relationship.
Value-added-reseller (VAR)	A value-added reseller (VAR) is a company that adds features or services to an existing product, then resells it (usually to end-users) as an integrated product or complete "turn-key" solution.
(What other high-tech terms should be defined to help the reader of this document?)	

Marketing terminology	Definition
Psychographics	Psychological demographics – the study and classification of people's personalities attitudes, aspirations, lifestyles etc., for use in marketing
Niche market	A niche market is a specialised, often small, market.
(What other marketing terms should be defined to help the reader of this document?)	

Translating terms from Crossing the Chasm into a climate campaigning framework

Terms from Crossing the Chasm	Potentially equivalent terms relevant to climate campaigning	Comments
	100	
Business-to-business	Organisation-to-organisation;	
~	institution-to-institution	
Company	Action organisation (NGO, business,	
	government, etc.)	
Customer	Individual or group adopter of a	
	campaign or a campaign demand; supporters	
Discontinuous/disruptive	Paradigm shift	
innovation		
High tech ventures	Campaign developers/deliverers	
Market	Social network	Could be made up of activists and activist groups, political constituencies, political parties, elite networks, businesses, business associations, etc.
Marketing	Strategic engagement (ie. strategy development and	
	implementation) with a social network	
Marketing and sales	Strategy, communications and engagement	
Money	Motivator, enabler, campaign resources (including volunteers), and sometimes just 'money'!	
Making money	Scaling impact; creating capacity; covering costs	
Product	Campaign demand, campaign plan, campaign concept	
Reason to buy	Reason to commit	
Technology	Campaign or change idea or method	
Visionaries	Individuals or groups willing to try a paradigm shifting idea	

Terms from Crossing the Chasm	Potentially equivalent terms relevant to climate campaigning	Comments
(What other marketing		
or high-tech terms used		
in the extracts from		
Crossing the Chasm		
should be translated into		
a climate action		
strategic context?)		

Defining climate campaigning terminology

Climate campaigning terminology	Definition
Emergency	In this document, emergency means a whole-of-society, extremely urgent response to the climate issue focused on impact prevention and the restoration of a safe climate.
Maximum protection	This is a strategic orientation aimed at deploying the maximum creativity and effort to preventing impacts from climate change both during the time of transition and when in the targeted climate end state.
Safe climate	The climate conditions that can provide maximum protection to people, other species and civilisation – likely to be like the climate conditions found before industrialisation and in the last few thousand years of the Holocene epoch

BOOK SUMMARY

The text here is principally extracts from Crossing the Chasm (3^{rd} edition). Commentary is in brackets and bold italics eg (*Comment: xxxx xxxx xxxx.*) Some changes are made to the text so that it reads properly as a stand alone extract. Modified text is place in square brackets eg. [modified text]. Extracted blocks of text are separated by a long dash — and when text is deleted from within a sentence or a paragraph the gap is marked with a string of dots

The book extracts use US spelling.

This version of the extract document has material from:

Part 1: Discovering the chasm

- Introduction
- Chapter 1 High-tech marketing illusion
- Chapter 2 High-tech marketing enlightenment

Part 1: Crossing the chasm

- Chapter 3 The D-Day analogy
- Chapter 4 Target the point of attack
- Chapter 5 Assemble the Invasion Force
- Chapter 6 Define the battle
- Appendix 2: The four gears model for digital consumer adoption

Part 1: Discovering the chasm

Introduction: If Mark Zuckerberg can be a millionaire

[The] default model for how to develop a high-tech market is almost—but not quite—right. As a result, our marketing ventures, despite normally promising starts, drift off course in puzzling ways, eventually causing unexpected and unnerving gaps in sales revenues, and sooner or later leading management to undertake some desperate remedy. Occasionally these remedies work out, and the result is a high-tech marketing success. (Of course, when these are written up in retrospect, what was learned in hindsight is not infrequently portrayed as foresight, with the result that no one sees how perilously close to the edge the enterprise veered.) More often, however, the remedies either flat-out fail, and a product or a company goes belly-up, or they progress after a fashion to some kind of limp but yet still-breathing half-life, in which the company has long since abandoned its dreams of success and contents itself with once again making payroll.

None of this is necessary. We have enough high-tech marketing history now to see where our model has gone wrong and how to fix it. To be specific, the point of greatest peril in the development of a high-tech market lies in making the transition from an *early market* dominated by a few *visionary* customers to a *mainstream market* dominated by a large block of customers who are predominantly *pragmatists* in orientation. The gap between these two markets, all too frequently ignored, is in fact so significant as to warrant being called a *chasm*, and crossing this chasm must be the primary focus of any long-term high-tech marketing plan. A successful crossing is how high-tech fortunes are made; failure in the attempt is how they are lost. (Comment: The *ideas in Crossing the Chasm need to be translated out of the business context, where appropriate, into the non-profit world of climate action. So 'making a fortune' can be read as 'being highly successful in climate activism'.*)

[The] urgency [of crossing the chasm] means that everyone in the company—not just the marketing and sales people—must focus all their efforts on this one end until it is accomplished. Chapters 3 through 7 set forth the principles necessary to guide high-tech ventures during this period of great risk. This material focuses primarily on marketing, because that is where the leadership must come from, but I ultimately argue in the Conclusion that leaving the chasm behind requires significant changes throughout the high-tech enterprise. The book closes, therefore, with a call for additional new strategies in the areas of finance, organizational development, and R&D.

This book is unabashedly about and written specifically for marketing within high-tech enterprises. But high tech can be viewed as a microcosm of larger industrial sectors. In this context, the relationship between an early market and a mainstream market is not unlike the relationship between a fad and a trend. Marketing has long known how to exploit fads and how to develop trends. The problem, since these techniques are antithetical to each other, is that you need to decide which one—fad or trend *(Comment: Translates best as 'good idea' vs 'proven method')*—you are dealing with before you start. It would be much better if you could start with a fad, exploit it for all it was worth, and then turn it into a trend.

That may seem like a miracle, but that is in essence what high-tech marketing is all about. Every truly innovative high-tech product starts out as a fad (Comment: ie. 'good idea')—

something with no known (*Comment: ie. 'proven'*) market value or purpose but with "great properties" that generate a lot of enthusiasm within an "in crowd" of early adopters. That's the early market.

Then comes a period during which the rest of the world watches to see if anything can be made of this; that is the chasm. If in fact something does come out of it—if a value proposition is discovered that can be predictably delivered to a targetable set of customers at a reasonable price—then a new mainstream market segment forms.....

The key in all this is crossing the chasm—performing the acts that allow the first shoots of that mainstream market to emerge. This is a do-or-die proposition for high-tech enterprises; hence it is logical that they be the crucible in which "chasm theory" is formed. But the principles can be generalized to other forms of marketing *(Comment: ie. 'strategic engagement')*, so useful [general] lessons may be learned.

One of the most important lessons about crossing the chasm is that the task ultimately requires achieving an unusual degree of company unity during the crossing period. This is a time when one should forgo the quest for eccentric marketing genius in favor of achieving an informed consensus among mere mortals. It is a time not for dashing and expensive gestures but rather for careful plans and cautiously rationed resources—a time not to gamble all on some brilliant coup but rather to focus everyone on pursuing a high-probability course of action and making as few mistakes as possible. *Comment: The is an apparent contradiction buried within the need for a high-probability crossing of the chasm and that is that choosing the beachhead to mount the crossing involves making a high-risk/low-data choice of the 'best' crossing point – see page Error! Bookmark not defined. – but the contradiction can be resolved by making a 'good-enough' choice of crossing point and then committing as many resources as a are needed to turn the actual crossing into a high probability of success event.)*

One of the functions of this book, therefore—and perhaps its most important one—is to open up the logic of marketing decision making during this period so that everyone on the management team can participate in the market development process. If prudence rather than brilliance is to be our guiding principle, then many heads are better than one. If market forces (Comment: ie. real-world dynamics) are going to be the guiding element in our strategy and most organizations insist this is their goal—then their principles must be accessible to all the players, and not, as is sometimes the case, reserved to an elect few who have managed to penetrate their mysteries.

Crossing the Chasm, therefore, is written for the entire high-tech community—for everyone who is a stakeholder in the venture, engineers as well as marketers, and financiers as well. All must come to a common accord if the chasm is to be safely negotiated. And with that thought in mind, let us turn to chapter 1.

1 High-tech marketing illusion

[Drawing] on the example of an electric car as a disruptive innovation that ha[s] yet to cross the chasm [and stepping] back a bit from the cool factor [and assuming] that these cars work like any other, except they are quieter and better for the environment ... the question is: When are you going to buy one?

The Technology Adoption Life Cycle

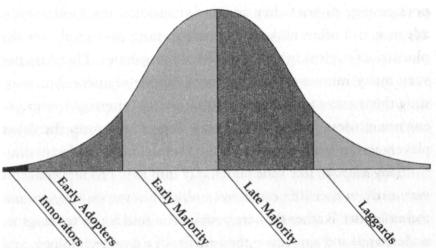
Your answer to the preceding question will tell a lot about how you relate [in this situation] to the *Technology Adoption Life Cycle*, a model for understanding the acceptance of new products. If your answer is "Not until hell freezes over," you are probably a very late adopter of [this] technology, what we call in the model a *laggard*. *If* your answer is "When I have seen electric cars prove themselves and when there are enough service stations on the road," you might be a middle-of-the-road adopter, or in the model, the *early majority*. If you say, "Not until most people have made the switch and it becomes really inconvenient to drive a gasoline car," you are probably more *of* a follower, a member *of* the *late majority*. *If*, on the other hand, you want to be the first one on your block with an electric car, you are apt to be an *innovator* or an *early adopter* [for this technology].

In a moment we are going to take a look at these labels in greater detail, but first we need to understand their significance. It turns out our attitude toward technology adoption becomes significant—at least in a marketing sense—any time we are introduced to products that require us to change our current mode of behavior or to modify other products and services we rely on. In academic terms, such change-sensitive products are called *discontinuous* or *disruptive innovations*. The contrasting term, *continuous* or *sustaining innovations*, refers to the normal upgrading of products that does not require us to change behaviour [or modify other products or services we rely upon].

[Discontinuous] innovation demands significant changes by not only the consumer but also the infrastructure of supporting businesses that provide complementary products and services to round out the complete offer. That is how and why such innovations come to be called discontinuous.

Between continuous and discontinuous lies a spectrum of demands for behavioral change.

The [*Technology Adoption Life Cycle*] model describes the market penetration of any new technology product in terms of a progression in the types of consumers it attracts throughout its useful life:



TECHNOLOGY ADOPTION LIFE CYCLE

As you can see, we have a bell curve. The divisions in the curve are roughly equivalent to where standard deviations would fall. (Comment: 'standard deviation' is a statistical term).

That is, the early majority and the late majority fall within one standard deviation of the mean, the early adopters and the laggards within two, and way out there, at the very onset of a new technology, about three standard deviations from the norm, are the innovators.

The groups are distinguished from each other by their characteristic response to a discontinuous innovation based on a new technology. Each group represents a unique psychographic [ie. psycho demographic] profile—a combination of psychology and demographics that makes its marketing responses different from those of the other groups. Understanding each profile and its relationship to its neighbors provides a critical foundation for high-tech marketing overall. (Comment: When applying these ideas to climate campaigning, it will be desirable to identify why each person or group ends up in a particular category of the innovation bell curve.)

Innovators pursue new technology products aggressively. They sometimes seek them out even before a formal marketing program has been launched. This is because technology is a central interest in their life, regardless of what function it is performing. At root they are intrigued [by] any fundamental advance and often make a technology purchase simply for the pleasure of exploring the new device's properties. There are not very many innovators in any given market segment, but winning them over at the outset of a marketing campaign is important nonetheless, because their endorsement reassures the other players in the marketplace that the product could in fact work.

Early adopters, like innovators, buy into new product concepts very early in their life cycle, but unlike innovators, they are not technologists. Rather they are people who find it easy to imagine, understand, and appreciate the benefits of a new technology, and to relate these potential benefits to their other concerns. Whenever they find a strong match, early adopters are willing to base their buying decisions upon it. Because early adopters do not rely on well-established references in making these buying decisions, preferring instead to rely on their own intuition and vision, they are core to opening up any high-tech market segment.

The early majority share some of the early adopter's ability to relate to technology, but ultimately they are driven by a strong sense of practicality. They know that many of these newfangled inventions end up as passing fads, so they are content to wait and see how other people are making out before they buy in themselves. They want to see well-established references before investing substantially. Because there are so many people in this segment—roughly one-third of the whole adoption life cycle—winning their business is fundamental to any substantial profits and growth.

The *late majority* shares all the concerns of the early majority, plus one major additional one: Whereas people in the early majority are comfortable with their ability to handle a technology product, should they finally decide to purchase it, members of the late majority are not. As a result, they wait until something has become an established standard, and even then they want to see lots of support and tend to buy, therefore, from large, well-established companies. Like the early majority, this group comprises about one-third of the total buying population in any given segment. Courting its favor is highly profitable indeed, for while profit margins decrease as the products mature, so do the selling costs, and virtually all the R&D costs have been amortized.

Finally there are the *laggards*. These people simply don't want anything to do with new technology, for any of a variety of reasons, some personal and some economic. The only time they ever buy a technological product is when it is buried deep inside another product—the way, say, that a microprocessor is designed into the braking system of a new car—such that they don't even know it is there. From a market development perspective laggards are generally regarded as not worth pursuing on any other basis.

(Comment: In the case of climate campaigning at the laggard end of the bell curve is an additional category of people and organisations that are not just slow to adopt a commitment to climate action but they are actively hostile and are trying to undo the work of the climate movement.)

To recap the logic of the Technology Adoption Life Cycle, its underlying thesis is that technology is absorbed into any given community in stages corresponding to the psychological and social profiles of various segments within that community. This 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.

The High Tech Marketing Model

This profile is in turn the very foundation of the [original] High-Tech Marketing Model. That model says that the way to develop a high-tech market is to work the curve left to right, focusing first on the innovators, growing that market segment, then moving on to the early adopters, growing that segment, and so on, to the early majority, late majority, and even to the laggards. In this effort, companies must use each "captured" group as a reference base for launching their marketing into the next group. Thus the endorsement of innovators becomes an important tool for developing a credible pitch to the early adopters, that of the early adopters to the early majority, and so on.

The idea is to keep this process moving smoothly, progressing something like the passing of a baton in a relay race or like Tarzan making his way across the jungle swinging from vine to well-placed vine. It is important to maintain momentum in order to create a bandwagon effect that makes it natural for the next group to want to buy in. Too much of a delay and the effect would be something like hanging from a motionless vine—nowhere to go but down. (Actually, going down is the graceful alternative. What happens more often is a desperate attempt to re-create momentum, typically through some highly visible form of promotion, which ends up making the company look like Tarzan frantically jerking back and forth, trying to get a vine moving with no leverage. This typically leads the other animals in the jungle just to sit and wait for him to fall.)

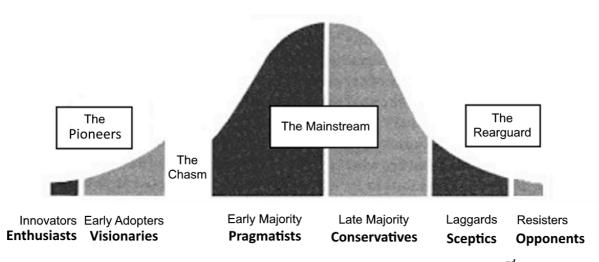
There is an additional motive for maintaining momentum: to keep ahead of the next emerging technology. In the past decade desktop personal computers have largely been displaced by laptops, a substantial number of which are likely to be displaced in this decade by tablets. You need to take advantage of your day in the sun before the next day renders you obsolete. From this notion comes the idea of a *window of opportunity*. If momentum is lost, then we can be overtaken by a competitor, thereby losing the advantages exclusive to a technology leadership position—specifically, the profitmargin advantage during the middle to late stages, which is the primary source from which high-tech fortunes are made.

This, in essence, is the [original] High-Tech Marketing Model—a vision of a smooth unfolding through all the stages of the Technology Adoption Life Cycle. What is dazzling about this concept, particularly to those who own equity in a high-tech venture, is its promise of a virtual monopoly over a major new market development. If you can get there first, "catch the curve," and ride it up through the early majority segment, thereby establishing the de facto standard, you can get rich very quickly and "own" a highly profitable market for a very long time to come.

Illusion and Disillusion: Cracks in the Bell Curve

It is now time to advise you that there are any number of us in Silicon Valley who are willing to testify that there is something wrong with the [original] High-Tech Marketing Model. We believe this to be true because we all own what once were meaningful equity stakes in corporations that either no longer exist or whose current valuation is so diluted that our stock—were there a market for it, which there is not—has lost all monetary significance.

Although we all experienced our fates uniquely, much of our shared experience can be summarized by recasting the Technology Adoption Life Cycle in the following way:



THE REVISED TECHNOLOGY ADOPTION LIFE CYCLE

Comment: the diagram above is based on the one found on page 21 of the 3rd edition of 'Crossing the Chasm' but has been modified to make it more relevant to climate campaigning.)

(Comment: It is important to apply these categories in <u>context</u> as they apply to a <u>specific issue</u>. While there are some people who have a dominant personality type that can be characterised as visionary, pragmatic, conservative or sceptical most people fit these categories in a particular context and perhaps for only a limited time. In a different context the same person might be located in a different category. Also these personality profiles do not map in any simple way onto political party affiliations. <u>When it comes to climate</u> there will be visionaries, pragmatists, conservatives, sceptics and perhaps even opponents amongst voters for or members of <u>all</u> parties – though the proportions might vary.)

As you can see, the components of the life cycle are unchanged, but between any two psychographic groups has been introduced a gap. This symbolizes the dissociation between the two groups—that is, the difficulty any group will have in accepting a new product if it is presented in the same way as it was to the group to its immediate left. Each of these gaps represents an opportunity for marketing to lose momentum, to miss the transition to the next segment, thereby never to gain the promised land of profit-margin leadership in the middle of the bell curve.

The First Crack

Two of the gaps in the High Tech Marketing Model are relatively minor—what one might call "cracks in the bell curve"—yet even here unwary ventures have slipped and fallen. The first

is between the innovators and the early adopters. It is a gap that occurs when a hot technology product cannot be readily translated into a major new benefit—something like Esperanto. The enthusiast loves it for its architecture, but nobody else can even figure out how to start using it.

This is a market development problem. As we shall see in the next chapter, the key to getting beyond the enthusiasts and winning over a visionary is to show that the new technology enables some strategic leap forward, something never before possible, which has an intrinsic value and appeal to the non-technologist. This benefit is typically symbolized by a single, compelling *flagship application*, something that showcases the power and value of the new product. If the marketing effort is unable to find [a] compelling application, then market development stalls [before engaging] the innovators, and the future of the product falls through this first crack in the bell curve.

The Other Crack

There is another crack in the bell curve, of approximately equal magnitude, that falls between the early majority and the late majority. By this point in the Technology Adoption Life Cycle, the market is already well developed, and the technology product has been absorbed into the mainstream. The key issue now—transitioning from the early to the late majority—has to do with lingering residual demands on the end user to be technologically competent.

Simply put, the early majority is willing and able to become technologically competent where necessary; the late majority is not. When a product reaches this point in the market development, it must be made increasingly easier to adopt in order to continue being successful. If this does not occur, the transition to the late majority will stall.

Discovering the Chasm

The real news, however, is not the two cracks in the bell curve, the one between the innovators and the early adopters, the other between the early and late majority. No, the real news is the deep and dividing *chasm* that separates the early adopters from the early majority. This is by far the most formidable and unforgiving transition in the Technology Adoption Life Cycle, and it is all the more dangerous because it typically goes unrecognized.

The reason the transition can go unnoticed is that with both groups the customer list and the size of the order can look the same. Typically, in either segment, you would see a list of Fortune 500 to Fortune 2000 customers making relatively large orders—five figures for sure, more often six figures or even higher. But in fact the basis for the sale—what has been promised, implicitly or explicitly, and what must be delivered—is radically different.

What the early adopter is buying, as we shall see in greater detail in Chapter 2, is some kind of *change agent*. By being the first to implement this change in their industry, the early adopters expect to get a jump on the competition, whether from lower product costs, faster time to market, more complete customer service, or some other comparable business advantage. They expect a radical discontinuity between the old ways and the new, and they are prepared to champion this cause against entrenched resistance. Being the first, they also are prepared to bear with the inevitable bugs and glitches that accompany any innovation just coming to market.

By contrast, the early majority want to buy a *productivity improvement* for existing operations. They are looking to minimize the discontinuity with the old ways. They want evolution, not revolution. They want technology to enhance, not overthrow, the established ways of doing business. And above all, they do not want to debug somebody else's product. By the time they adopt it, they want it to work properly and to integrate appropriately with their existing technology base.

This contrast just scratches the surface relative to the differences and incompatibilities among early adopters and the early majority. Let me just make two key points for now: Because of these incompatibilities, early adopters do not make good references for the early majority. And because of the early majority's concern not to disrupt their organizations, good references are critical to their buying decisions. So what we have here is a catch-22. The only suitable reference for an early majority customer, it turns out, is another member of the early majority, but no upstanding member of the early majority will buy without first having consulted with several suitable references.

[So], when promoters of high-tech products try to make the transition from a market base made up of visionary early adopters to penetrate the next adoption segment, the pragmatist early majority, they are effectively operating *without a reference base and without a support base within a market that is highly reference oriented and highly support oriented.*

What the company staff interpreted as a ramp in sales leading smoothly "up the curve" was in fact an initial blip—what we will be calling the *early market*—and not the first indications of an emerging *mainstream market*. The company failed because its managers were unable to recognize that there is something fundamentally different between a sale to an early adopter and a sale to the early majority, even when the company name on the check reads the same. Thus, at a time of greatest peril, when the company was just entering the chasm, its leaders held high expectations rather than modest ones, and spent heavily in expansion projects rather than husbanding resources.

All this is the result of high-tech marketing illusion—the belief induced by the High-Tech Marketing Model that new markets unfold in a continuous and smooth way. In order to avoid the perils of the chasm, we need to achieve a new state—high-tech marketing enlightenment—by going deeper into the dynamics of the *Technology Adoption Life Cycle* to correct the flaws in the model and provide a secure basis for marketing strategy development.

(Comment: A 'chasm'-level problem can arise when (a) marketers are trying to move a product into a new market segment where positive references from the engaged market segment carry no weight in the new target market segment, (b) there are few communications channels between the market segments and (c) adoption of the new product is disruptive in the new market segment. In the case of climate campaigning there is not only a chasm between visionaries and pragmatists but also between some political tribes (between left and right, or Greens vs Labor vs Coalition etc)

2 High-tech marketing enlightenment

First Principles

Before we get started, however, we need to establish some ground rules. The first step

is to get a firm grasp on the obvious. In our case, that means getting a useful working definition of the word *marketing*. Useful in this context means actionable—can we find in the concept of marketing a reasonable basis for taking actions that will predictably and positively affect company revenues? (Comment: In the case of the climate issue, 'company revenues' would translate into 'campaign success'.)

Actually, in this context, defining marketing is not particularly difficult: It simply means taking actions to create, grow, maintain, or defend markets. What a market is we will get to in a moment, but it is, first, a real thing, independent of any one individual's actions. Marketing's purpose, therefore, is to develop and shape something that is real, and not, as people sometimes want to believe, to create illusions. In other words, we are dealing with a discipline more akin to gardening or sculpting than, say, to spray painting or hypnotism.

Of course, talking this way about marketing merely throws the burden of definition onto market, which we will define, for the purposes of high tech, as:

- a set of actual or potential customers
- for a given set of products or services
- who have a common set of needs or wants, and
- who reference each other when making a buying decision.

People intuitively understand every part of this definition except the last. Unfortunately, getting the last part—the notion that part of what defines a high-tech market is the tendency of its members to reference each other when making buying decisions—is absolutely key to successful high-tech marketing. So let's make this as clear as possible.

If two people buy the same product for the same reason but have no way they could reference each other, they are not part of the same market. That is, if I sell an oscilloscope for monitoring heartbeats to a doctor in Boston and the identical product for the same purpose to a doctor in Zaire, and these two doctors have no reasonable basis for communicating with each other, then I am dealing in two different markets. Similarly, if I sell an oscilloscope to a doctor in Boston and then go next door and sell the same product to an engineer working on a sonar device, I am also dealing in two different markets. In both cases, the reason we have separate markets is that the customers could not have referenced each other.

(Comment: In the context social change campaigning, the 'market' can be translated as a 'social network'.)

Depending on what day of the week it is, this idea seems to be either blindingly obvious or doubtful at best. Staying with the example at hand, can't one argue that there is, after all, such a thing as the oscilloscope market? Well, yes and no. If you want to use the word *market* in this sense (I would prefer you use the word *category* to convey this idea), it stands for the aggregate sales, both past and projected, for oscilloscopes. If that is how you want to use the word—say, if you are a financial analyst—that's fine, but you had better realize you are adding apples and oranges (that is, doctor sales + engineer sales) to get your final totals, and in so doing, you are leaving yourself open to misinterpreting the data badly. Most important, *market*, when it is defined in this sense, ceases to be a single, isolable object of action—it no longer refers to any single entity that can be acted on—and cannot, therefore, be the focus of marketing.

The way around this problem for many marketing professionals is to break up the category into isolable "market segments." *Market segments,* in this vocabulary, meet our definition of markets,

including the self-referencing aspect. When marketing consultants sell market segmentation studies, all they are actually doing is breaking out the natural market boundaries within an aggregate of current and potential sales.

Marketing professionals insist on market segmentation because they know that no meaningful marketing program can be implemented across a set of customers who do not reference each other. The reason for this is simply leverage. No company can afford to pay for every marketing contact made. Every program must rely on some ongoing chain-reaction effects—what is usually called *word of mouth*. The more self-referencing the market and the more tightly bounded its communications channels, the greater the opportunity for such effects.

Early Markets

The initial customer set for a new technology product is made up primarily of innovators and early adopters. In the high-tech industry, the innovators are better known as technology enthusiasts or just techies, whereas the early adopters are the visionaries. It is the latter group, the visionaries, who dominate the buying decisions in this market, but it is the technology enthusiasts who are first to realize the potential in the new product. High-tech marketing, therefore, begins with the techies.

Innovators: The Technology Enthusiasts

Classically, the first people to adopt any new technology are those who appreciate the technology for its own sake...."inventors", "propeller heads", "nerds", "techies"—we have many labels for a group of people who are, as a rule and despite a tendency toward introversion, delightful companions—provided you like to talk about technical topics.

They are the ones who first appreciate the architecture of your product and why it therefore has a competitive advantage over the current crop of products established in the marketplace. They are the ones who will spend hours trying to get products to work that, in all conscience, never should have been shipped in the first place. They will forgive ghastly documentation, horrendously slow performance, ludicrous omissions 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.

In business, technology enthusiasts are the gatekeepers for any new technology. They are the ones who have the interest to learn about it and the ones everyone else deems competent to do the early evaluation. As such, they are the first key to any high-tech marketing effort.

As a buying population, or as key influencers in corporate buying decisions, technology enthusiasts pose fewer requirements than any other group in the adoption profile—but you must not ignore the issues that are important to them. First, and most crucially, 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. Often this may not be sound from a management point of view, and you will have to deny or restrict such access, but you should never forget that it is wanted.

Third, they want to be first to get the new stuff. By working with them under nondisclosure—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. This is sometimes a matter of budgets, but it is more fundamentally a problem of perception—they think all technology should be free or available at cost, and they have no use for "added-value" arguments. The key consequence here is, if it is their money, you have to make it available cheap, and if it is not, you have to make sure price is not their concern.

In large companies, technology enthusiasts can most often be found in the advanced technology group, or some such congregation, chartered with keeping the company abreast of the latest developments in high tech. There they are empowered to buy one of almost anything, simply to explore its properties and examine its usefulness to the corporation. In smaller companies, which do not have such budgetary luxuries, the technology enthusiast may well be the "designated techie" in the IT (information technology) group or a member of a product design team who either will specify your product for inclusion into the overall system or supply it to the rest of the team as a technology aid or tool.

To reach technology enthusiasts, you need to place your message in one of their various haunts—on the Web, of course. Direct response advertising works well with this group, as they are the segment most likely to send for literature, or a free demo, a webinar, or whatever else of substance you offer. Just don't waste your money on a lot of fancy image advertising—they read all that as marketing hype. Direct email will reach them—and provided it is factual and new information, they read cover to cover.

In sum, technology enthusiasts are easy to do business with, provided you 1) have the latest and greatest technology, and 2) don't need to make much money. For any innovation, there will always be a small class of these enthusiasts who will want to try it out just to see if it works. That said, for the most part, these people are not powerful enough to dictate the buying decisions of others, nor do they represent a significant market in themselves. What they represent instead is a sounding board for initial product or service features and a test bed for introducing modifications to the product or service until it is thoroughly "debugged."

Enthusiasts are like kindling: They help start the fire. They need to be cherished for that. The way to cherish them is to let them in on the secret, to let them play with the product and give you their feedback, and wherever appropriate, to implement the improvements they suggest and to let them know that you implemented them.

The other key to working with enthusiasts toward a successful marketing campaign is to find the ones who have access to the big boss. Big bosses are people who can dictate purchases and who do represent a significant marketing opportunity in and of themselves. To get more specific about the kind of big boss we are looking for, let us now turn to the next group in the Technology Adoption Life Cycle, the early adopters, or as they are often called in the high-tech industry, the visionaries.

Early Adopters: The Visionaries

Visionaries are that rare breed of people who have the insight to match up an emerging technology to a strategic opportunity, the temperament to translate that insight into a high-visibility, high-risk project, and the charisma to get the rest of their organization to buy into that project. They are the early adopters of high-tech products. Often working with budgets in the multiple millions of dollars, they represent a hidden source of venture capital that funds high-technology business.

As a class, visionaries tend to be recent entrants to the executive ranks, highly motivated, and driven by a "dream." 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 or by their customers. It also involves a high degree of personal recognition and reward. Understand their dream, and you will understand how to market to them.

[The] key point [is that] visionaries are not looking for [a mere] improvement; they are looking for a fundamental breakthrough. Technology is important only insomuch as it promises to deliver on this dream.

Visionaries drive the high-tech industry because they see the potential for an "order-of-magnitude" return on investment and willingly take high risks to pursue that goal. They will work with vendors who have little or no funding, with products that start life as little more than a diagram on a whiteboard, and with technology gurus who bear a disconcerting resemblance to Rasputin. They know they are going outside the mainstream, and they accept that as part of the price you pay when trying to leapfrog the competition.

Because they see such vast potential for the technology they have in mind, they are the least pricesensitive of any segment of the technology adoption profile. They typically have budgets that let them allocate generous amounts toward the implementation of a strategic initiative. This means they can usually provide up-front money to seed additional development that supports their project—hence their importance as a source of high-tech development capital.

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 and additional customers to small fledgling enterprises.

As a buying group, visionaries are easy to sell [to] but very hard to please. This is because they are buying a dream that, to some degree, will always be a dream. The "incarnation" of this dream will require the melding of numerous technologies, many of which will be immature or even nonexistent at the beginning of the project. The odds against everything falling into place without a hitch are astronomical. Nonetheless, both the buyer and the seller can build successfully on two key principles.

First, visionaries like a *project orientation*. They want to start out with a pilot project, which makes sense because they are "going where no man has gone before," and you are going there with them. This is followed by more project work, conducted in phases, with milestones, and the like. The visionaries' idea is to be able to stay very close to the development train to make sure it is going in the right direction and to be able to get off if they discover it is not going where they thought.

While reasonable from the customer's point of view, this project orientation is usually at odds with the intentions of entrepreneurial vendors who are trying to create a more universally applicable product around which they can build a multi-customer business. This is potentially a lose-lose situation threatening both the quality of the vendor's work and the fabric of the relationship, and it requires careful account management including frequent contact at the executive level.

The winning strategy is built around the entrepreneur being able to "productize" the deliverables from each phase of the visionary project. That is, whereas for the visionary the deliverables of phase one are only of marginal interest—proof of concept with some productivity improvement gained, but not "the vision"—these same deliverables, repackaged, can be a whole product to someone with less ambitious goals.

The first deliverable of [a visionary project] might be[just] a milestone [to the visionary]. ...But the [supplier to a visionary project] might look at [an early deliverable] as a very desirable product extension and want to license it with only modest alterations. It is important, therefore, in creating the phases of the visionary's project to build in milestones that lend themselves to this sort of product spin-off.

The other key quality of visionaries is that they are 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 payment or the stick of a penalty clause—to drive the project faster. This plays into the classic weaknesses of entrepreneurs—lust after the big score and overconfidence in their ability to execute within any given time frame.

Here again, account management and executive restraint are crucial. The goal should be to package each of the phases such that each phase:

- 1. is accomplishable by mere mortals working in earth time
- 2. provides the vendor with a marketable product
- 3. provides the customer with a concrete return on investment that can be celebrated as a major step forward.

(Comment: This is a strategy for evolutionary success – ie. incrementalise the process and make each step self-supporting.)

[P]oint [3] is crucial. Getting closure with visionaries is next to impossible. Expectations derived from dreams simply cannot be met. This is not to devalue the dream, for without it there would be no directing force to drive progress of any sort. What is important is to celebrate continually the tangible and partial both as useful things in their own right and as heralds of the new order to come.

(Comment: In the case of climate campaigning, if a radical idea simply has to actualized in the real world then the social entrepreneur and the supporting visionaries need to develop a hybrid approach of 'practical idealism'.)

The most important principle stemming from all this is the emphasis on management of expectations. Because controlling expectations is so crucial, the only practical way to do business with visionaries is through a small, top-level direct sales force. At the front end of the sales cycle, you need such a group to understand the visionaries' goals and give them confidence that your company can step up to them. In the middle of the sales cycle, you need to be extremely flexible about commitments as you begin to adapt to the visionaries' agenda. At the end, you need to be very careful in negotiations, keeping the spark of the vision alive without committing to tasks that are unachievable within the time frame allotted. All this implies a mature and sophisticated representative working on your behalf.

In terms of prospecting for visionaries, they are not likely to have a particular job title, except that, to be truly useful, they must have achieved at least a senior vice presidential level in order to have the clout to fund their visions. In fact, in terms of communications, typically you don't find them, they find you. The way they find you, interestingly enough, is by maintaining relationships with technology enthusiasts. That is one of the reasons why it is so important to capture the technology enthusiast segment.

In sum, visionaries represent an opportunity early in a product's life cycle to generate a burst of revenue and gain exceptional visibility. The opportunity comes with a price tag—a highly demanding customer who will seek to influence your company's priorities directly and a high-risk project that could end in disappointment for all. But without this boost many high-tech products cannot make it to market, unable to gain the visibility they need within their window of opportunity, or unable to sustain their financial obligations while waiting for their marketplace to develop more slowly. Visionaries are the ones who give high-tech companies their first big break. *It is hard to plan for them in marketing*

programs, but it is even harder to plan without them.

(Comment: The maximum protection/emergency wing of the climate movement has not yet 'sold' its 'product' to most of the potential visionaries- so beware of trying to sell the new paradigm to the mainstream of the climate movement straightaway.)

The Dynamics of Early Markets

To get an early market started requires an entrepreneurial company with a breakthrough technology product that enables a new and compelling application, a technology enthusiast who can evaluate and appreciate the superiority of the product over current alternatives, and a well-heeled visionary who can foresee an order-of-magnitude improvement from implementing the new application. When the market is unfolding as it should, the entrepreneurial company seeds the technology enthusiast community with early copies of its product while at the same time sharing its vision with the visionary executives. It then invites the visionary executives to check with the technology enthusiast of their choice to verify that the vision is indeed achievable. Out of these conversations comes a series of negotiations in which, for what seems like a very large amount of money at the time, but which will later be recognized as just the tip of the iceberg, the technology enthusiasts get to buy more toys than they have ever dreamed of, the entrepreneurial company commits itself to product modifications and system integration services it never intended to, and the visionary has what on paper looks to be an achievable project, but which is in fact a highly improbable dream.

That's when the market unfolds as it should. That is the good scenario—good because, although it is rife with problems, they are ones that will get solved one way or another, and some level of value will be achieved all around. There are numerous other scenarios where the early market does not even get a proper start. Here are some of them:

• First problem: The company simply has no expertise in bringing a product to market. It raises insufficient capital for the effort, hires inexperienced sales and marketing people, tries to sell the product through an inappropriate channel of distribution, promotes in the wrong places and in the wrong ways, and in general fouls things up.

Remedying this kind of situation is not as hard as it may seem, provided the participants in the company are still communicating and cooperating with each other, and everyone is willing to scale back their expectations several notches.

The basis for reform is the principle that winning at marketing more often than not means being the biggest fish in the pond. If we are very small, then we must search out a very small pond, a target market segment that fits our size. To qualify as a "real pond," as we also noted before, its members must be aware of themselves as a group, that is, it must constitute a self-referencing market segment, so that when we establish a leadership position with some of its members, they will get the word out—quickly and economically—to the rest.

Of course, no single pond of a size we can dominate in the short term is large enough to provide a sustaining market for the long term. Sooner or later, we have to expand into adjacent ponds. Or, to shift the metaphor, we need to reframe our tactics in the context of a *"bowling pin" strategy*, where one targets a given segment not just because one can "knock it over" but because, in so doing, it will help knock over the next target segment, and thus lead to market expansion. With the right kind of angle of attack, it is amazing how large and fast the chain reaction can be. So one is never necessarily out of the game, even when things are pretty bleak.

• A second problem: The company sells the visionary before it has the product. This is a version of the famous vaporware problem, based on pre-announcing and pre-marketing a product that still has significant development hurdles to overcome. At best, the entrepreneurial company secures a few pilot projects, but as schedules continue to slip, the visionary's position in the organization weakens, and support for the project is eventually withdrawn, despite a lot of customized work, with no usable customer reference gained.

Caught in this situation, the entrepreneurial company has only one adequate response, a truly unhappy one: shut down its marketing efforts, admit its mistakes to its investors, and focus all its energies into turning its pilot projects into something useful, first in terms of a deliverable to the customer, and ultimately in terms of a marketable product.

• Problem number three: Marketing falls prey to the crack between the technology enthusiast and the visionary by failing to discover, or at least failing to articulate, the compelling application that provides the order-of-magnitude leap in benefits: A number of companies buy the product to test it out, but it never gets incorporated into a major system rollout, because the rewards never quite measure up to the risks. The resulting lack of revenue leads to folding the effort, either by shutting it down entirely or selling it for the technology assets to another enterprise.

The corrective response here begins with reevaluating what we have. If it is not, in fact, a breakthrough product, then it is never going to create an early market. But perhaps it could serve as a supplementary product in an existing mainstream market. If that is indeed the case, then the right response is to swallow our pride, reduce our financial expectations, and subordinate ourselves to an existing mainstream-market company, which can put our product in play through its existing channels.

Alternatively, if we truly have a breakthrough product but we are stalled in getting the early market moving, then we have to step down from the lofty theoretical plateau on which we have established that this product can be part of any number of exciting applications and get very practical about focusing on one application, making sure that it is indeed a compelling one for at least one visionary who is already familiar with us, and then committing to that visionary, in return for his or her support, to removing every obstacle to getting that application adopted.

These are some of the most common ways in which an early market development effort can go off—and be put back on—track. For the most part, the problems are solvable because there are always multiple options at the outset of anything. The biggest problem is typically overly ambitious expectations combined with undercapitalization—or, as my grandmother used to put it, when your eyes are bigger than your stomach. Things get a lot more complex when we are dealing with the dynamics of mainstream markets, to which we shall now turn.

Mainstream Markets

Mainstream markets in high tech look a lot like mainstream markets in any other industry, particularly where enterprises are selling to other enterprises. (Comment: For the 'business to web-empowered consumer' case, see Appendix 2 below.) They are dominated by the early majority, who in high tech are best understood as pragmatists, who, in turn, tend to be accepted as

leaders by the late majority, best thought of as conservatives, and rejected as leaders by the laggards, or skeptics. As in the previous chapter, we are going to look closely at how the psychographics of each of these groups influences the development and dynamics of a high-tech market.

Early Majority: The Pragmatists

Throughout the history of high tech, the early majority, or pragmatists, have represented 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. *(Comment: Or in the case of the climate issue where the greatest influence/power resides.)* Instead, those funds are in the hands of more prudent souls, who do not want to be pioneers ("Pioneers are people with arrows in their backs"), who never volunteer to be an early test site ("Let somebody else debug your product"), and who have learned the hard way that the "leading edge" of technology is all too often the "bleeding edge."

Who are the pragmatists? Actually, important as they are, they are hard to characterize because they do not have the visionary's penchant for drawing attention to themselves.

In the realm of high tech [development], pragmatist CEOs are not common, and those there are, true to their type, tend to keep a relatively low profile.

They tend to be best known by their closest colleagues, from whom they typically have earned the highest respect, and by their peers within their industry, where they show up near the top of the leaderboard year after year.

Of course, to market successfully to pragmatists, one does not have to be one just understand their values and work to serve them. To look more closely into these values, 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 one in their vocabulary—it does not connote opportunity or excitement but rather the chance to waste money and time. They will undertake risks when required, but they first will put in place safety nets and manage the risks very closely.

(Comments: The role of the 'early market' players – enthusiasts and visionaries– is to invent breakthrough products and then de-risk them for the pragmatists.)

The Fortune 2000 IT community, as a group, is led by people who are largely pragmatist in orientation. (Comments: The same is largely true for the larger climate action groups when judged in the context of climate emergency campaigning.) Business demands for increased productivity push them toward the front of the adoption life cycle, but natural prudence and budget restrictions keep them cautious.

If pragmatists are hard to win over, they are loyal once won, often enforcing a company standard that requires the purchase of your product, and only your product, for a given requirement. This focus on standardization is, well, pragmatic, in that it simplifies internal service demands. But the secondary effects of this standardization on your growth and profitability—increasing sales volumes and lowering the cost of sales—is dramatic. Hence the importance of pragmatists as a market segment.

When pragmatists buy, they care about the company they are buying from, the quality of the product they are buying, the infrastructure of supporting products and system interfaces, 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 visionaries are more likely to be planning on implementing the great new order and then using that as a springboard to their next great career 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.

Pragmatists tend to be "vertically" oriented, meaning that they communicate more with others like themselves within their own industry than do technology enthusiasts and early adopters, who are more likely to communicate "horizontally" across industry boundaries in search of kindred spirits. This means it is very tough to break into a new industry selling to pragmatists. References and relationships are very important to these people, and there is a kind of *catch-22* operating: Pragmatists won't buy from you until you are established, yet you can't get established until they buy from you. Obviously, this works to the disadvantage of start-ups and, conversely, to the great advantage of companies with established track records. On the other hand, once a start-up has earned its spurs with the pragmatist buyers within a given vertical market, they tend to be very loyal to it, and even go out of their way to help it succeed.

When this happens, the cost of sales goes way down, and the leverage on incremental R&D to support any given customer goes way up. That's one of the reasons pragmatists make such a great market.

There is no one distribution channel preferred by pragmatists, but they do want to keep the sum total of their distribution relationships to a minimum. This allows them to maximize their buying leverage and maintain a few clear points of control should anything go wrong. In some cases this prejudice can be overcome if the pragmatist buyer knows a particular salesperson from a previous relationship. As a rule, however, the path into the pragmatist community is smoother if a smaller entrepreneurial vendor can develop an alliance with one of the already accepted vendors or if it can establish a value-added-reseller (VAR) sales base. VARs, if they truly specialize in the pragmatist's particular industry, and if they have a reputation for delivering quality work on time and within budget, represent an extremely attractive type of solution to a pragmatist. They can provide a "turnkey" answer to a problem, without impacting internal resources already overloaded with the burdens of ongoing system maintenance. What the pragmatist likes best about VARs is that they represent a single point of control, a single company to call if anything goes wrong.

One final characteristic of pragmatist buyers is that they like to see competition—in part to get costs down, in part to have the security of more than one alternative to fall back on should anything go wrong, and in part to assure themselves they are buying from a proven market leader. This last point is crucial: Pragmatists want to buy from proven market leaders because they know that third parties will design supporting products around a market-leading product. That is, market-leading products create an aftermarket that other vendors service. This radically reduces pragmatist customers' burden of support. By contrast, if they mistakenly choose a product that does not become the market leader, but rather one of the also-rans, then this highly valued aftermarket support does not develop, and they will be stuck making all the enhancements by themselves. Market leadership is crucial, therefore, to winning pragmatist customers.

Pragmatists are reasonably price-sensitive. They are willing to pay a modest premium for top quality or special services, but in the absence of any special differentiation, they want the best deal. That's because, having typically made a career commitment to their job and/or their company, they get measured year in and year out on what their operation has spent versus what it has returned to the corporation.

Overall, to market to pragmatists, you must be patient. You need to be conversant with the issues that dominate their particular business. You need to show up at the industry-specific conferences and trade shows they attend. You need to be mentioned in articles that run in the newsletters and blogs they read. You need to be installed in other companies in their industry. You need to have developed applications for your product that are specific to their industry. You need to have partnerships and alliances with the other vendors who serve their industry. You need to have earned a reputation for quality and service. In short, you need to make yourself over into the obvious supplier of choice.

This is a long-term agenda, requiring careful pacing, recurrent investment, and a mature management team. One of its biggest payoffs, on the other hand, is that it not only delivers the pragmatist element of the Technology Adoption Life Cycle but tees up the conservative element as well. Sadly, however, high-tech industry has, for the most part, not seen fit to reap the rewards it has so carefully sown. To see how this has come about, let us now take a closer look at the conservatives.

Late Majority: The Conservatives

The mathematics of the Technology Adoption Life Cycle model says that for every pragmatist there is a conservative. Put another way, conservatives represent approximately one-third of the total available customers within any given Technology Adoption Life Cycle. As a marketable segment, however, they are rarely developed as profitably as they could be, largely because high-tech companies are not, as a rule, in sympathy with them.

Conservatives, in essence, are against discontinuous innovations. They believe far more in tradition than in progress. And when they find something that works for them, they like to stick with it.

In this sense, conservatives have more in common with early adopters than one might think. Both can be stubborn in their resistance to the call to conform that unites the pragmatist herd. To be sure, eventually conservatives do succumb to the new paradigm just to stay on par with the rest of the world. But just because they use such products doesn't mean they have to like them.

The truth is, conservatives often fear high tech a little bit. 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. Often their real goal in buying high-tech products is simply not to get stung. Unfortunately, because they are engaging with 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 reinforces their disillusion with high tech and resets the buying cycle at an even more cynical level.

If high-tech businesses are going to be successful over the long term, they must learn to break this vicious circle and establish a reasonable basis for conservatives to want to do business with them. They must understand that conservatives do not have high aspirations about their high-tech investments and hence will not support high price margins. Nonetheless, through sheer volume, they can offer great rewards to the companies that serve them appropriately.

Conservatives like to buy preassembled packages, with everything bundled, at a heavily

discounted price. The last thing they want to hear is that the software they just bought doesn't support the home network they have installed. They want high-tech products to be like refrigerators—you open the door, the light comes on automatically, your food stays cold, and you don't have to think about it. The products they understand best are those dedicated to a single function—music, video, email, games. The notion that a single device could do all four of these functions does not excite them—instead, it is something they find vaguely nauseating.

The conservative marketplace provides a great opportunity, in this regard, to take low-cost, trailing-edge technology components and repackage them into single-function systems for specific business needs. The quality of the package should be quite high because there is nothing in it that has not already been thoroughly debugged. The price should be quite low because all the R&D has long since been amortized, and every bit of the manufacturing learning curve has been taken advantage of. It is, in short, not just a pure marketing ploy but a true solution for a new class of customer.

There are two keys to success here. The first is to have thoroughly thought through the "whole solution" to a particular target end-user market's needs, and to have provided for every element of that solution within the package. This is critical because there is no profit margin to support an afterpurchase support system. The other key is to have lined up a low-overhead distribution channel that can get this package to the target market effectively. In this context, the rise of "as-a-service" offerings delivered over the Web creates a magnificent opportunity to make progress with this segment.

So, the conservative market is still something that high tech has more in its future than in its past. The key is to focus on convenience rather than performance, user experience rather than feature sets.

Overall, one has the feeling that the conservative market is still perceived more as a burden than an opportunity. High-tech business success within it will require a new kind of marketing imagination linked to a less venturesome financial model. The dollars are there for the making if we can meet new challenges that are as yet only partially familiar. However, as the cost of R&D radically escalates, companies are going to have to amortize that cost across bigger and bigger markets, and this must inevitably lead to the long-ignored "back half" of the technology adoption curve.

The Dynamics of Mainstream Markets

Just as the visionaries drive the development of the early market, so do the pragmatists drive the development of the mainstream market. Winning their support is not only the point of entry but the key to long-term dominance. But having done so, you cannot take the market for granted.

To maintain leadership in a mainstream market, you must at least keep pace with the competition. At this point it is no longer necessary to be the technology leader, nor is it necessary to have the very best product. But the product must be good enough, and should a competitor make a major breakthrough, you have to make at least a catch-up response.

This is the game that Oracle (Comment: Oracle is a software company servicing big businesses.) has played masterfully in the first decade of the twenty-first century. After several decades of relying primarily on [internally driven] R&D to build out its portfolio of enterprise IT

software, it changed [to an] acquisition [or] consolidation [strategy] very much along the lines seen in earlier times for railroads, airlines, accounting firms, and more recently, banks. But in Oracle's case, it was not just bulking up in its traditional categories, but rather it was buying up the assets needed to create a top-to-bottom enterprise "stack," the full complement of what a Fortune 500 [Chief Information Officer] would expect to own.

Such consolidations are designed to conserve rather than to innovate. It is not that innovation has ceased but rather that it has relocated. Technologies from a prior era, once the focal point of innovation, now become the scaffolding upon which next-generation innovation will build. In that context, stability and predictability become much more highly valued, and ecosystems are willing to pay a premium to a core set of vendors to maintain them.

The key to making a smooth transition from the pragmatist to the conservative market segments is to maintain a strong relationship with the former, always giving them an open door to go to the new paradigm, while still keeping the latter happy by adding value to the old infrastructure. It is a balancing act to say the least, but properly managed, the earnings potential in loyal mature market segments is very high indeed.

In this regard, if we now look back over the first four profiles in the Technology Adoption Life Cycle, we see an interesting trend. The importance of the product itself, its unique functionality, when compared to the importance of the ancillary services to the customer, is at its highest with the technology enthusiast, and at its lowest with the conservative. This is no surprise, since one's level of involvement and competence with a high-tech product is a prime indicator of when one will enter the Technology Adoption Life Cycle. The key lesson is that the longer your product is in the market, the more mature it becomes, and the more important the service element is to the customer. Conservatives, in particular, are extremely service oriented.

In the last decade, high tech has truly come to grips with this phenomenon by actively reconfiguring its product offers as services.

To get to this place, two things have to happen in coordination with one another. The first is that vendors must design out as much as possible the service demands that derive from installing and implementing their products successfully. This is service-as-a-tax, adding no value, being simply the price you have to pay to get the stuff to work. This is still extraordinarily high for enterprise IT software, and while it has created a lot of income for systems integrators, it has left a bad taste in everyone's mouth, so the less of it, the better.

By contrast, when vendors address the second goal of making the service yield an improved user experience, then there are smiles all around. The Apple iPad is a wonderful example here, for it appeals not only to technology enthusiasts and visionaries ("It is just so cool!"), but equally so to pragmatists ("No training costs!") and to conservatives ("No training, period!")

That said, there will always be [some] people who still feel disenfranchised by high tech, and it is to their issues that we will now turn.

Laggards: The Skeptics

Skeptics—the group that makes up the last one-sixth of the Technology Adoption Life Cycle—do not participate in the high-tech marketplace, except to block purchases. Thus, the primary function of high-tech marketing in relation to skeptics is to neutralize their influence. In a sense, this is a pity because skeptics can teach us a lot about what we are doing wrong—hence this postscript.

One of the favorite arguments of skeptics is that disruptive innovations of any kind rarely fulfill their promises and almost always come with unintended consequences. This combination of elusive reward with omnipresent risk just looks to them like a bad bet. Of course, visionaries and pragmatists are quite adept at overcoming these objections; otherwise there would be no high-tech industry for us to discuss. But what if, instead of rushing to rebuttal, we were to explore the merits of the skeptic's argument?

The point is, as any experienced seller of high-tech products can tell you, cost justification of high-tech purchases is a shaky venture at best. There is always the potential to return significant dollars, but it always depends on factors beyond the system itself. Put another way, this simply means that the claims that salespeople make for high-tech products are really claims made for "whole product solutions" that incorporate elements well beyond whatever high-tech manufacturers ship inside their boxes. If high-tech marketers do not take responsibility for seeing that the whole product solution is being delivered, then they are giving the skeptic an opening to block the sale. (For all the reasons just cited, the significance of whole product solutions is discussed at length later as the key component of successfully crossing the chasm and entering into the mainstream.)

What skeptics are struggling to point out is that new systems, for the most part, don't deliver on the promises that were made at the time of their purchase. This is not to say they do not end up delivering value, but rather that the value they actually deliver is not often anticipated at the time of purchase. If this is true—and to some degree I believe it is—it means that committing to a new system is a much greater act of faith than normally imagined. It means that the primary value in the act derives more from such notions as supporting a bias toward action than from any quantifiable packet of cost-justified benefits. The idea that the value of the system will be discovered rather than known at the time of installation implies, in turn, that product flexibility and adaptability, as well as ongoing account service, should be critical components of any buyer's evaluation checklist.

Ultimately the service that skeptics provide to high-tech marketers is to point continually to the discrepancies between the sales claims and the delivered product. These discrepancies, in turn; create opportunities for the customer to fail, and such failures, through word of mouth, will ultimately come back to haunt us as lost market share. Steamrolling over the skeptics, in other words, may be a great sales tactic, but it is a poor marketing one. From a marketing point of view, we are all subject to the "Emperor's New Clothes" syndrome, but particularly so in high tech, where every player in the market has a vested interest in boosting the overall perception of the industry. Skeptics don't buy our act. We ought to take advantage of that fact.

(Comment: In the case of climate change the innovation bell curve ends with a category of 'opponent-people or organizations that are motivated to block action on climate change. Opponents often try to recruit support from conservatives and pragmatists. Strategies often used by opponents include creating an ideological justification for conservatives to not take on climate action and to increase the risks that pragmatists will face if they take on climate action.)

Back to the Chasm

As the preceding pages indicate, there is clearly a lot of value in the Technology Adoption Life Cycle as a marketing model. By isolating the psychographics of customers based on when they tend to enter the market, it gives clear guidance on how to develop a marketing program for an innovative product.

The basic flaw in the model, as we have said, is that it implies a smooth and continuous progression across segments over the life of a product, whereas experience teaches just the opposite. Indeed, making the marketing and communications transition between any two adoption segments is normally excruciatingly awkward because you must adopt new strategies just at the time you have become most comfortable with the old ones.

The biggest problem during this transition period is the lack of a customer base that can be referenced at the time of making the transition into a new segment. As we saw when we redrew the Technology Adoption Life Cycle, the spaces between segments indicate the credibility gap that arises from seeking to use the group on the left as a reference base to penetrate the segment on the right.

In some cases, the basic affinities of the market keep groups relatively close together. Earlyadopting visionaries, for example, tend to keep in touch with and respect the views of technology enthusiasts; this is because they need the latter to serve as a reality check on the technical feasibility of their vision and to help evaluate specific products. As a result, enthusiasts can speak to at least some of the visionaries' concerns.

In a comparable way, conservatives look to pragmatists to help lead them in their technology purchases. Both groups like to see themselves as members of a particular industry first, businesspeople second, and purchasers of technology third. Pragmatists, however, have more confidence in technology as a potential benefit and in their ability to make sound technology purchases.

Conservatives are considerably more nervous about both. They are willing to go along, up to a point, with pragmatists they respect, but they are still slightly unnerved by pragmatists' overall self-confidence. So, once again, the reference base has partial value in transitioning between adoption segments.

The significance of this weakening in the reference base traces back to the fundamental point made about markets in the introduction: Namely, that markets—particularly high-tech markets—are made up of people who reference each other during the buying decision. As we move from segment to segment in the technology adoption life cycle, we may have any number of references built up, but they may not be of the right sort.

Nowhere is this better seen than in the transition between visionaries and pragmatists. If there are to some extent minor gaps between the other adoption groups, between visionaries and pragmatists there is a great—and to a large extent, greatly ignored—chasm.

If we look deep into that chasm, we see four fundamental characteristics of visionaries that alienate pragmatists.

[1.] Visionaries lack respect for the value of colleagues' experiences. Visionaries are the first people in their industry segment to see the potential of the new technology. Fundamentally, they see themselves as smarter than their opposite numbers in competitive companies—and quite often they are. Indeed, it is their ability to see things first that they want to leverage into a competitive advantage. That advantage can only come about if no one else has discovered it. They do not expect, therefore, to be buying a well-tested product with an extensive list of industry references. Indeed, if such a reference base exists, it will almost certainly turn them off, indicating that for this technology, at any rate, they are already too late.

Pragmatists, on the other hand, deeply value the experience of their colleagues in other companies. When they buy, they expect extensive references, and they want a good number to come from companies in their own industry segment. This, as we have already noted, creates a catch-22 situation; since there are usually only one or two visionaries per industry segment, how can you accumulate the number of references a pragmatist requires, when virtually everyone left to call on is also a pragmatist?

[2.] Visionaries take a greater interest in technology than in their industry. Visionaries are defining the future. You meet them at technology conferences and other futurist forums where people gather to forecast trends and seek out new market opportunities. They are easy to strike up a conversation with, and they understand and appreciate what high-tech companies and high-tech products are trying to do. They want to talk ideas with bright people. They are bored with the mundane details of their own industries. They like to talk and think high tech.

Pragmatists, on the other hand, don't put a lot of stake in futuristic things. They see themselves more in present-day terms, as the people devoted to making the wheels of their industry turn. Therefore, they tend to invest their convention time in industry-specific forums discussing industry-specific issues. Where pragmatists are concerned, sweeping changes and global advantages may make for fine speeches, but not much else.

[3.] Visionaries fail to acknowledge the importance of existing product infrastructure. Visionaries are building systems from the ground up. They are incarnating their vision. They do not expect to find components for these systems lying around. They do not expect standards to have been established—indeed, they are planning to set new standards. They do not expect support groups to be in place, procedures to have been established, or third parties to be available to share in the workload and the responsibility.

Pragmatists expect all these things. When they see visionaries forging their own paths with little or no thought of connecting with the mainstream practices in their industry, they shudder. Pragmatists have based their careers on such connections. Once again, it is painfully obvious that visionaries, as a group, make a very poor reference base for pragmatists.

[4.] Visionaries have little self-awareness about the impact of their disruptiveness. From a pragmatist's point of view, visionaries are the people who come in and soak up all the budget for their pet projects. If the project is a success, they take all the credit, while the pragmatists get stuck trying to maintain a system that is so "state-of-the-art" no one is quite sure how to keep it working. If the project fails, visionaries always seem to be a step ahead of the disaster, getting out of town while they can, and leaving the pragmatists to clean up the mess. Visionaries, successful or not, don't plan to stick around long. They see themselves on a fast track that has them leapfrogging up the corporate ladder and across corporations. Pragmatists, on the other hand, tend to be committed long-term to their profession and the company at which they work. They are very cautious about grandiose schemes because they know they will have to live with the results.

All in all, it is easy to see why pragmatists are not anxious to reference visionaries in their buying decisions. Hence the chasm. This situation can be further complicated if the high-tech company, fresh from its marketing successes with visionaries, neglects to change its sales pitch. Thus, the company may be trumpeting its recent success at early test sites when what the pragmatist really wants to hear about are up-and-running production installations. Or the company may be saying "state-of-the-art" when the pragmatist wants to hear "industry standard."

The problem goes beyond pitches and positioning, though. It is fundamentally a problem of time. The high-tech vendor wants—indeed, needs—the pragmatist to buy now, and the pragmatist needs—or at least wants—to wait. Both have absolutely legitimate positions. The fact remains, however, that somewhere a clock has been started, and the question is, who is going to blink first?

For everyone's sake, it had better be the pragmatist. How to make sure of this outcome is the subject of the next section.

Part 2: Crossing the chasm

3 The D-Day analogy

The chasm is, by any measure, a very bad place to be. It promises few, if any, new customers only those who have somehow got off the safe thoroughfares. But it does house all sorts of unpleasant folk, from disenchanted current customers to nasty competitors to unsavory investors. Their efforts conspire to tax the reserves of the fledgling enterprise seeking to pass through to the mainstream. We need to look briefly at these challenges so we can be alert in our defenses against them.

The Perils of the Chasm

Let's begin with the lack of new customers. As opportunities from the early market of visionaries become, increasingly saturated (with big-ticket products this can be after as few as three to five contracts), and with the mainstream market of pragmatists nowhere near the comfort level they need in order to buy, there is simply an insufficient marketplace of available dollars to sustain the firm. Having flirted with going cash-flow positive (especially during the months following one of the early market big orders), the trend is now reversed, and the enterprise is accelerating into increasingly negative cash flow. Worse still, mainstream competitors, who up to this time had paid no attention to the fledgling entry into their market, now have caught sight of a new target, experienced one or two major losses, and set their sales forces in motion to counterattack.

There are few opportunities for refuge. Managers would like to retreat into their existing majoraccount relationships, service them in an exceptional way, and leverage that investment of an additional year in fleshing out the greater part of the visionary's plan. This would not only ensure a secured reference base but also begin to create the infrastructure of ancillary products and interfaces needed to turn a discontinuous innovation into the pragmatist's idea of a real-world solution. Unfortunately, there are no extra dollars in these accounts to pay for this year. Indeed, this year of work is far more likely to be necessary just to catch up to the promises made to secure the deal in the first place. So, while there is plenty of good work to do, there is no additional money to pay for it.

Nor can managers find safety through continuing to service just the early market. To be sure, there are still sales opportunities here—other visionaries who can be sold to. But each one is going to have a unique dream, leading to unique demands for customization, which in turn will overtax an already burdened product development group. Moreover, sooner or later in this early market, yet another entrepreneur with a yet more innovative technology, and with a yet better story to tell, will come along. By then you have to be across the chasm and established in the mainstream, or you are out of luck.

There is still more peril. The marketing efforts to date have been funded by investors—either formally, as in the case of venture-funded enterprises, or informally, as is the case with new

products developed within larger corporations. These investors have seen some early successes and now expect to see real progress against the business plan's long-term revenue growth objectives. As we now know, seeking this kind of growth during the chasm period is futile. Nonetheless, it is the commitment in the plan (if the commitment had not been made, the funding would not have been available) and the clock, is ticking.

Indeed, a truly predatory type of investor—sometimes referred to as a *vulture capitalist*—looks to use the chasm period of struggle and failure as a means to discredit the current management, thereby driving down the equity value in the company, so that in the next round of funding, he or she has an opportunity to secure dominant control of the company, install a new management team, and, worst case, become the owner of a major technology asset, dirt cheap. This is an incredibly destructive exercise during which not only the baby and the bathwater but all human values and winning opportunities are thrown out the window. Nonetheless, it happens.

Even investors with reasonable demands and a supportive attitude, however, can be troubled by the chasm. Under the best-case scenario, you are asking them to rein back their expectations just when it seems most natural to let them fly. There is an underlying feeling that somehow, somewhere, someone has failed. They may be willing to give you the benefit of the doubt for a time, but you don't have any time to waste. You must get into a mainstream market segment soon, establishing long-term relationships with pragmatist buyers, for only through these can you control your own destiny.

Fighting Your Way into the Mainstream

To enter the mainstream market is an act of aggression. (Comment: The aim, in the case of climate campaigning, is certainly to change the status quo and this can be disconcerting for those being challenged but the aim is not to be aggressive for the sake of it. Nevertheless the change agent must be emotionally prepared not to be loved by everyone 100% of the time.) The companies who have already established relationships with your target customer will resent your intrusion and do everything they can to shut you out. The customers themselves will be suspicious of you as a new and untried player in their marketplace. No one wants your presence. You are an invader.

This is not a time to focus on being nice. *(Comment: But in climate campaigning there is also no value in being nasty.)* As we have already said, the perils of the chasm make this a life-or-death situation for you. You must win entry to the mainstream, despite whatever resistance is posed. For guidance, we are going to look back to an event in the first half of the twentieth century, the Allied invasion of Normandy on D-Day, June 6, 1944. While there may be more current examples of military success (although they do not spring to mind), this particular analogy relates to our specific concerns very well.

The comparison is straightforward enough. Our long-term goal is to enter and take control of a mainstream market (Western Europe) that is currently dominated by an entrenched competitor (the Axis). For our product to wrest the mainstream market from this competitor, we must assemble an invasion force comprising other products and companies (the Allies). By way of entry into this market, our immediate goal is to transition from an early market base (England) to a strategic target market segment in the mainstream (the beaches at Normandy). Separating us from our goal is the chasm (the English Channel). We are going to cross that chasm as fast as we can with an invasion force focused directly and exclusively on the point of attack (D-Day). Once we force the competitor out of our targeted niche markets (secure the beachhead), then we will move out to take over adjacent market segments (districts of France) on the way toward overall market domination (the liberation of Western Europe).

That's it. That's the strategy. Replicate D-Day, and win entry to the mainstream. Cross the chasm by targeting a very specific niche market where you can dominate from the outset, drive your competitors out of that market niche, and then use it as a base for broader operations. Concentrate an overwhelmingly superior force on a highly focused target. It worked in 1944 for the Allies, and it has worked since for any number of high-tech companies.

The key to the Normandy advantage, what allows the fledgling enterprise to win over pragmatist customers in advance of broader market acceptance, is focusing an overabundance of support into a confined market niche. By simplifying the initial challenge, the enterprise can efficiently develop a solid base of references, collateral, and internal procedures and documentation by virtue of a restricted set of market variables. The efficiency of the marketing process, at this point, is a function of the "boundedness" of the market segment being addressed. The more tightly bound it is, the easier it is to create and introduce messages into it, and the faster these messages travel by word of mouth.

Companies just starting out, as well as any marketing program operating with scarce resources, must operate in a tightly bound market to be competitive. Otherwise their "hot" marketing messages get diffused too quickly, the chain reaction of word-of-mouth communication dies out, and the sales force is back to selling "cold." This is a classic chasm symptom, as the entrepreneurial enterprise leaves behind the latent enthusiasm of the early market. It is usually interpreted as a letdown in the sales force or a cooling off in demand when, in fact, it is simply the consequence of trying to expand too rapidly and too broadly into too loosely bounded a market.

The D-Day strategy prevents this mistake. It has the ability to galvanize an entire enterprise by focusing it on a highly specific goal that is 1) readily achievable and 2) capable of being directly leveraged into long-term success. Most companies fail to cross the chasm because, confronted with the immensity of opportunity represented by a mainstream market, they lose their focus, chasing every opportunity that presents itself, but finding themselves unable to deliver a salable proposition to any true pragmatist buyer. The D-Day strategy keeps everyone on point—if we don't take Normandy, we don't have to worry about how we're going to take Paris. And by focusing our entire might on such a small territory, we greatly increase our odds of immediate success.

Unfortunately, sound as this strategy is, it is counterintuitive to the management of start-up enterprises, and thus, although widely acknowledged in theory, it is rarely put into practice. Here's the more common scenario:

How to Start a Fire

Starting a fire is a problem that any Boy Scout or Girl Scout can solve. You lay down some bunched-up newspaper, put on some kindling and some logs, and then light the paper. Nothing could be easier. *Trying to cross the chasm without taking a niche market approach is like trying to light a fire without kindling*.

The bunched-up paper represents your promotional budget, and the log, a major market opportunity. No matter how much paper you put under that log, if you don't have any target market segments to act as kindling, sooner or later, the paper will be all used up, and the log still won't be burning.

Starting a fire isn't rocket science, but it does represent a kind of discipline. And it is here that high-tech management shows itself most lacking. Most high-tech leaders, when it comes down to making marketing choices, will continue to shy away from making niche market commitments, regardless. Like marriage-averse bachelors, they may nod in all the right places and say all the right things, but they will not show up when the wedding bells chime. Why not?

First, let us understand that this is a failure of will, not of understanding. That is, it is not that these leaders need to learn about niche marketing. MBA marketing curricula of the past twenty-five years have been adamant about the need to segment markets and the advantages gained thereby. No one, therefore, can or does plead ignorance. Instead, the claim is made that, although niche strategy is generally best, we do not have time—or we cannot afford—to implement it now. This is a ruse, of course, the true answer being much simpler: *We do not have, nor are we willing to adopt, any discipline that would ever require us to stop pursuing any sale at any time for any reason.* We are, in other words, not a market-driven company; we are a sales-driven company.

Now, how bad can this really be? I mean, sales are good, right? Surely things can just work themselves out, and we will discover our market, albeit retroactively, led to it by our customers, yes? The true answers to the previous three questions are: 1) disastrous, 2) not always, and 3) never in a million years.

To put it simply, the consequences of being sales-driven during the chasm period are fatal. Here's why: The sole goal of the company during this stage of market development must be to secure a beachhead in a mainstream market—that is, to create a pragmatist customer base that is referenceable, people who can, in turn, gain us access to other mainstream prospects. To capture this reference base, we must ensure that our first set of customers completely satisfy their buying objectives. To do that, we must ensure that the customer gets not just the product but what we will describe in a later chapter as the whole product—the complete set of products and services needed to achieve their desired result, the thing we promised them to get the purchase order. Whenever anything is left out from this set, the solution is incomplete, the selling promise unfulfilled, and the customer unavailable for referencing. Therefore, to secure these much-needed references, which is our prime goal in crossing the chasm, we must commit ourselves to providing, or at least guaranteeing the provision of, the whole product.

Whole product commitments, however, are expensive. Even when we recruit partners and allies to help fulfill them, they require resource-intensive management. And when the support role falls back on us, it often requires the attention of our most key people, the same people who are critical to every other project we have going. Therefore, whole product commitments must be made not only sparingly but also strategically—that is, made with a view toward leveraging them over multiple sales. This can only happen if the sales effort is focused on a single niche market. More than one, and you take on additional use cases, causing you to burn out your key resources, falter on the quality of your whole product commitment, and prolong your stay in the chasm. To be truly sales-driven is to invite a permanent stay.

For reasons of whole product leverage alone, the sales-driven strategy should be avoided. But its siren lure is so strong that additional ammunition against it is warranted. Consider the following: One of the keys in breaking into a new market is to establish a strong word-of-mouth reputation among buyers. Numerous studies have shown that in the high-tech buying process, word of mouth is the number-one source of information that buyers reference, both at the beginning of the sales cycle, to establish their "long lists," and at the end, when they are paring down their short ones. Now, for word of mouth to develop in any particular marketplace, there must be a critical mass of informed individuals who meet from time to time and, in exchanging views, reinforce the product's or the company's positioning. That's how word of mouth spreads.

Seeding this communications process is expensive, particularly once you leave the early market, which in general can be reached through the technical press and related media. By contrast, pragmatist buyers, as we have already noted, communicate along industry lines or through professional associations. Chemists talk to other chemists, lawyers to other lawyers, insurance executives to other insurance executives, and so on. Winning over one or two customers in each of five or ten different

segments—the consequence of taking a sales-driven approach—will create no word-of-mouth effect. Your customers may try to start a conversation about you, but there will be no one there to reinforce it. By contrast, winning four or five customers in one segment will create the desired effect. Thus, the segment-targeting company can expect word-of-mouth leverage early in its crossing-the-chasm marketing effort, whereas the sales-driven company will get it much later, if at all. This lack of word of mouth, in turn, makes selling the product that much harder, thereby adding to the cost and the unpredictability of sales.

Finally, there is a third compelling reason to be niche focused when crossing the chasm, which has to do with the need to achieve market leadership. Pragmatist customers want to buy from market leaders. Their motive is simple: Whole products grow up around the market-leading products and not around the others. That is, there are many more mobile apps for Apple and Android mobile devices than there are for Windows 8 or BlackBerry.The existence of this added-value infrastructure not only enriches the value of the product but also simplifies the task of getting support, at no additional cost to either the vendor or the customer.

Pragmatists are very much aware of this effect. As a result, perhaps unconsciously but nonetheless consistently, they conspire to install some company or product as the market leader and then do everything in their power to keep them there. One of the main reasons they delay their buying decisions at the beginning of a marketplace—thereby creating the chasm effect—is to help them get a fix on who the leader will be. They don't want to back the wrong one.

Now, by definition, when you are crossing the chasm, you are not a market leader. The question is, How can you accelerate achieving that state? This is a matter of simple mathematics. To be the leader in any given market, you need the largest market share—typically over 50 percent of the new sales at the beginning of a market, although it may end up to be as little as 30-35 percent later on. So, take the sales you expect to generate over any given time period—say the next two years—double that number, and that's the size of market you can expect to dominate. Actually, to be precise, that is the *maximum* size of market, because the calculation assumes that all your sales came from a single market segment. So, if we want market leadership early on—and we do, since we know pragmatists tend to buy from market leaders, and our number-one marketing goal is to achieve a pragmatist installed base that can be referenced—the *only right strategy is to take a "big fish, small pond" approach.*

Segment. Segment. Segment. One of the other benefits of this approach is that it leads directly to you "owning" a market. That is, you get installed by the pragmatists as the leader, and from then on, they conspire to help keep you there. This means that there are significant barriers to entry for any competitors, regardless of their size or the added features they have in their product. Mainstream customers will, to be sure, complain about your lack of features and insist you upgrade to meet the competition. But, in truth, mainstream customers like to be "owned"—it simplifies their buying decisions, improves the quality and lowers the cost of whole product ownership, and provides security that the vendor is here to stay. They demand attention, but they are on your side. As a result, an owned market can take on some of the characteristics of an annuity—a building block in good times, and a place of refuge in bad—with far more predictable revenues and far lower cost of sales than can otherwise be achieved.

For all these reasons—for whole product leverage, for word-of-mouth effectiveness, and for perceived market leadership—it is critical that, when crossing the chasm, you focus exclusively on achieving a dominant position in one or two narrowly hounded market segments. If you do not commit fully to this goal, the odds are overwhelmingly against your ever arriving in the mainstream market.

Beyond Niches

...[W]e need also to acknowledge that there is life after niche. Major market dominance ultimately transcends niche, although it continues to renew and extend itself by developing new segments. And this is indeed when the truly large profits are made. It is clearly a post-chasm phenomenon, but there is a planning exercise to be done from the outset. Just as the *objective* of D-Day was to take Normandy beaches but the *goal* was to liberate Western Europe, so in our marketing strategy we want to establish a longer-term vision to guide our immediate tactical choices.

The key to moving beyond one's initial target niche is to select *strategic* target market segments to begin with. That is, target a segment that, by virtue of its other connections, creates an entry point into one or more adjacent segments. For example, when the Macintosh first crossed the chasm back in the 1980s, the target niche was the graphics arts departments in Fortune 500 companies. This was not a particularly large target market, but it was one that was responsible for a broken, mission-critical process—providing presentations for executives and marketing professionals. The fact that the segment was relatively small turned out to be good news because Apple was able to dominate it quickly and establish its proprietary system as a legitimate standard within the corporation (against the wishes of the IT department, which wanted everyone on an IBM PC).

More important, however, having dominated this niche, the company was then able to leverage its win into adjacent departments within the corporation—first marketing, then sales. The marketing people found that if they made their own presentations, they could update them on the way to the trade shows, and the salespeople found that with a Mac they didn't have to rely on the marketing people. At the same time, this beachhead in graphics arts also extended out into external markets that interfaced with the graphics arts people—creative agencies, advertising agencies, and eventually, publishers. All used the Macintosh to exchange a variety of graphic materials, and the result was a complete ecosystem standardized on the "nonstandard" platform.

How one goes about ensuring a strategic niche for the D-Day landing site is the subject of the next chapter.

Successful Chasm Crossings

[S]oftware programs at the application layer [can present valuable chasm crossing case studies] because they are "naturally vertical" [since] they directly interface with end users, and end users organize themselves by geography, industry, and profession. This makes them readily adaptable to the beachhead focus needed to cross the chasm. Later on in the life cycle, however, as solutions generalize, a horizontal approach is typically more productive, but this is a much harder challenge for an application offer to meet.

By contrast, infrastructure offerings have just the opposite dynamic. They are "naturally horizontal," because they interface with machines and other programs where the value, in part, is providing a stable, standard interface. They do not lend themselves to vertical marketing because, as products, they do not change very much from niche to niche.

Unfortunately, however, pragmatist customers rarely adopt any new technology en masse. Usually these innovations are taken up first by a single niche, one that has such pressing problems it goes ahead of the herd. The rest of the herd is delighted by this eventuality because it gets a free look at how well the technology plays out without having to take any immediate risk. The niche wins—presuming the beachhead strategy is conducted correctly—by getting a state-of-the-art fix for its heretofore unsolvable problem. And the vendor wins because it gets certified by at least one segment of pragmatists that its offering is legitimately mainstream.

So, because of the dynamics of technology adoption, and not because of any niche properties in the product itself, vendors of disruptive infrastructure must also take a vertical market approach to crossing the chasm even though it seems unnatural. The good news for them is that, later on, when a mass market emerges and horizontal marketing prevails, it is much easier to take advantage of the opportunity.

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From Idea to Implementation

..... In the next four chapters we will break up th[e] challenge [of crossing the chasm] into four pieces. First we will look at how to select the point of attack, the place to cross, the beachhead, the head bowling pin. Then we will look at what kind of offer it will take to secure that initial target market, and how we as a fledgling enterprise with limited resources can go about fielding such an offer. Then we will look at the landscape, identifying the forces that seek to throw us off the beach and back into the chasm, and how we can position ourselves for success. And finally we will look at the selling systems themselves, pricing and distribution, to help us pick the right approach to the market during this particularly vulnerable time.

The critical attitude to maintain in all four of these challenges is that chasm crossing represents a unique time in your enterprise's history. It is a far cry both from your past, where selling to visionaries was the key to success, and your future, which will be focused on either niche or massmarket expansion programs. Between these two stages is a singular moment of transition, the penetration of the mainstream market, an act of burglary, of breaking and entering, that requires special techniques used at no other time in the Technology Adoption Life Cycle.

4 Target the point of attack

When it comes to crossing the chasm, Yogi Berra got it right:

"If you don't know where you are going, you will wind up somewhere else."

The fundamental principle for crossing the chasm is to target a specific niche market as your point of attack and focus all your resources on achieving the dominant leadership position in that segment as quickly as possible. In one sense, this is a straightforward market-entry problem, to which the correct approach is well-known. First you divide up the universe of possible customers into market segments. Then you evaluate each segment for its attractiveness. After the targets get narrowed down to a very small number, the "finalists", then you develop estimates of such factors as the market niches' size, their accessibility to distribution, and the degree to which they are well defended by competitors. Then you pick one and go after it. What's so hard?

The empirical answer here is, I don't know, but nobody seems to do it very well. That is, it is extremely rare that people come to the Chasm Group with a market segmentation strategy already in hand, and when they do have one, it is usually not one they are very confident about. Now, these are smart people, and a lot of them have been to business school, and they know all about market segmentation—so it is not for lack of intellect or knowledge that their market segmentation strategies suffer. Rather, they suffer from a built-in hesitancy and lack of confidence related to the paralyzing effects of having to make a *high-risk, low-data decision*.

A High-Risk, Low-Data Decision

Think about it. We already know that crossing the chasm is a high-risk endeavor, the effort of an unknown and unproven invasion force marching into the camp of some fierce and established competitor. We are either going to get it right, or we are going to lose a substantial portion, perhaps even all, of the equity value in our venture. In sum, there's a lot riding on this kind of decision, and severe punishment for making it badly.

Now, with that in mind, think about having to make what may be the most important marketing decision in the history of your enterprise *with little or no useful hard information*. For since we are trying to pick a target market segment that we have not yet penetrated to any great extent, by definition we also lack experience in that arena. Moreover, since we are introducing a discontinuous innovation into that market, no one has any direct experience with which to predict what will happen. The market we will enter, by definition, will not have experienced our type of product before. And the people who have experienced our product before, the visionaries, are so different in psychographic profile from our new target customers—the pragmatists—that we must be very careful about extrapolating our results to date. We are, in other words, in a high-risk, low-data state.

If you now turn to the established case studies in market segmentation, like as not you will discover they will be based on work done on market share problems in *existing markets—in* other words, work done in situations where there is already a considerable amount of data to work with. There are precious few paradigms for how to proceed when you cannot examine market share data, indeed cannot even conduct an informed interview with an existing customer of the type you are now seeking to win over. In short, you are on your own.

Now, the biggest mistake one can make in this state is to turn to numeric information as a source of refuge or reassurance. We all know about lies, damned lies, and statistics, but for numeric marketing data we need to open up a whole new class of prevarication. This stuff is like sausage—your appetite for it lessens considerably once you know how it is made. In particular, the kind of market-size forecasts that come out of even the most highly respected firms—the ones that get quoted in the press as showing the bright and promising future for some new technology or product—are, by necessity, rooted in multiple assumptions. Each of these assumptions has enormous impact on the resulting projection, each represents an experienced but nonetheless arbitrary judgment of a particular market analyst, and all are typically well documented in the report, but also typically ignored by anyone who quotes from it. And once a number gets quoted in the press, then God help us—because it has become *real*. You know it is real because pretty soon you see new numbers cropping up, with claims for their legitimacy based on their being derivations of these other "established" numbers.

As you can see, this whole thing is a house of cards. In some contexts, it even has some uses, particularly where financial managers must deal on a macro level with high-tech markets. But it is absolute folly to use such numbers for developing crossing-the-chasm marketing strategies. That would be like using a map of the world to find your way from the San Francisco airport to the Ferry Plaza.

And yet, that is what some people try to do. As soon as the numbers get up in a chart-or better

yet, a graph—as soon as they thus become blessed with some specious authenticity, they become the drivers in high-risk, low-data situations because these people are so anxious to have data. That's when you hear them saying things like "It will be a billion-dollar market in 2016. If we only get five percent of that market . . ." When you hear that sort of stuff, exit gracefully, holding on to your wallet.

Now, most of the people who come to the Chasm Group are more sophisticated than this. They know the numbers do not provide the answers they need. But that doesn't mean they feel any better about having to make a high-risk, low-data decision—which means, in effect, they are stymied. It is our job to get them out of this semi-paralyzed state and back into action.

The only proper response to this situation is to acknowledge the lack of data as a condition of the process. To be sure, you can fight back against this ignorance by gathering highly focused data yourself. But you cannot expect to transform a low-data situation into a high-data situation quickly. And given that you must act quickly, you need to approach the decision from a different vantage point. You need to understand that *informed intuition*, rather than *analytical reason*, is the most trustworthy decision-making tool to use.

Informed Intuition

Despite our culture's anxiety about relying on nonverbal processes, there are situations in which it is simply more effective to substitute right-brain tactics for left-brain ones. Ask any great athlete, or artist, or charismatic leader—ask any great decision maker. All of them describe a similar process, in which analytical and rational means are used extensively both in preparation for and in review of a central moment of performance. But in the moment itself, the actual decisions are made intuitively. The question is: How can we use this testimony to our advantage in crossing the chasm in a reasonable and predictable way?

The key is to understand how intuition—specifically, *informed intuition*—actually works. Unlike numerical analysis, it does not rely on processing a statistically significant sample of data in order to achieve a given level of confidence. Rather, it involves conclusions based on isolating a few high-quality images—really, data fragments—that it takes to be archetypes of a broader and more complex reality. These images simply stand out from the swarm of mental material that rattles around in our heads. They are the ones that are memorable. So the first rule of working with an image is: If you can't remember it, don't try, because it's not worth it. Or, to put this in the positive form: Only work with memorable images. *(Comment: Because of the paucity of formal data, the answer cannot be found wholly within the data. Instead the data has to be used to activate the most <u>relevant</u> information already in the strategy team's brains.)*

Now, just as in literature, where memorable characters like Hamlet or [Joan of Arc] or Dumbledore or Voldemort stand out and become symbols for a larger segment of humanity, so in marketing can whole target populations become imagined as Gen X, Gen Y, Goths, geeks, Beibers, Dinks (Double Income, No Kids), or Henrys (High Earners, Not Rich Yet). These are all just images—stand-ins for a greater reality—picked out from a much larger set of candidate images on the grounds that they really "click" with the sum total of an informed person's experience. Each is in effect a "poster child."

Let us call these poster children *characterizations* because they represent characteristic market behaviors. "Beibers," for example, can be expected to shop at a mall, emulate a rock star, seek peer approval, and resist parental restrictions—all of which imply that certain marketing tactics will be more successful than others in winning their dollars. Now, *visionaries, pragmatists,* and *conservatives*

represent a set of images analogous to Goth or geek—albeit at a higher level of abstraction. For each of these labels also represents characteristic market behaviors—specifically, in relation to adopting a discontinuous innovation—from which we can predict the success or failure of marketing tactics. The problem is, they are too abstract. They need to become more concrete, more target-market specific. That is the function of *target customer characterization*.

Target Customer Characterization: The Use of Scenarios

First, please note that we are not focusing here on target *market* characterization. The place where most crossing-the-chasm marketing segmentation efforts get into trouble is at the beginning, when they focus on a target market or target segment instead of on a *target customer*.

Markets *as categories* are impersonal, abstract things: the smartphone market, the gigabit router market, the office automation market, and so on. Neither the names nor the descriptions of markets evoke any memorable images—they do not elicit the cooperation of one's intuitive faculties. In fact, these are not "markets" at all in our sense of the term—they do not refer to populations of customers, but rather sets of competitors.

We need to work with something that gives more clues about how to proceed in the presence of real people with complex motives. However, since we do not have real live customers as yet—or at least, not very many of them—we are just going to have to make them up. Then, once we have their images in mind, we can let them guide us to developing a truly responsive approach to their needs.

Target customer characterization is a formal process for making up these images, getting them out of individual heads and in front of a market development decision-making group. The idea is to create as many characterizations as possible, one for each different type of customer and application for the product. (It turns out that, as these start to accumulate, they begin to resemble one another so that, somewhere between twenty and fifty, you realize you are just repeating the same formulas with minor tweaks, and that in fact you have outlined eight to ten distinct alternatives.) Once we have built a basic library of possible target customer profiles, we can then apply a set of techniques to reduce these "data" into a prioritized list of desirable target market segment opportunities. The quotation marks around *data* are key, of course, because we are still operating in a low-data situation. We just have a better set of *material* to work with.

Now it is time to go after the mainstream market, taking market share away from [traditional] ... products. Where would you begin?

This is a classic case of "So many segments, so little time"—exactly the sort of thing that target customer scenarios are best for. A representative format for any given scenario is illustrated in the following section. A finished scenario should be limited to a single page. As you will see from the example, this is a highly tactical exercise in microcosm, but it has major implications for how marketing strategy is set overall. So as we work through the example, we will also keep an eye out for the broader implications.

... Scenario [format]

1. HEADER INFORMATION. At the top of the page you need thumbnail information about the end user, the technical buyer, and the economic buyer of the offer. For business markets, the key data are: industry, geography, department, and job title. For consumer markets, they are demographic: age, sex, economic status, social group.

....[O]ur key header information is:

- *Economic buyer*: who ultimately pays for the [product]
- *End user*:[who uses the product]
- Technical buyer:[who makes the technical choice of the product.]

Note: In 'off-the-shelf consumer' scenarios, the three roles of user, technical buyer, and economic buyer tend to merge into one or two. If the user is a child, the economic buyer is the parent, and the technical buyer is a toss-up (in our house, the child for sure). If the user is an adult, the economic buyer often is the other spouse (as in, is it okay for me to spend our money on this doodad?), and the technical buyer tends to be the user. One caveat, though: *It is extremely difficult to cross the chasm in a consumer market. Almost all successful crossings happen in business markets, where the economic and technical resources can absorb the challenges of an immature product and service offering.* Alternatively, consumer markets can spin up with no chasms at all if the technology[/technology infrastructure] is already adopted and the disruption is coming from a new [use or] business model. (For an alternative market development model that describes these dynamics, see "The Four Gears" discussion in Appendix 2.)

....[T]he idea behind the header information is to focus the marketing and R&D teams on a specific instance of how the product would be bought and used. This is called a *use case*. Do not worry about being overly focused at this point—indeed, the more specific, the better. The devil is always in the details, and these scenarios are all about getting the devil in view.

2. A DAY IN THE LIFE (BEFORE) The idea here is to describe a situation in which the user is stuck, with significant consequences for the economic buyer. The elements you need to capture are five:

- *Scene or situation:* Focus on the moment of frustration. What is going on? What is the user about to attempt?
- Desired outcome: What is the user trying to accomplish? Why is this important?
- Attempted approach: Without the new product, how does the user go about the task?
- Interfering factors: What goes wrong? How and why does it go wrong?
- *[Negative impacts]:* So what? What is the impact of the user failing to accomplish the task productively?

(Comment: In the climate campaigning case, "A day in the life (before)" might instead be "The future to avoid")

3. A DAY IN THE LIFE (AFTER) Now the idea is to take on the exact same situation, along with the exact same desired outcome, but to replay the scenario with the new technology in place. Here you need to capture just three elements:

- New approach: With the new product how does the enduser go about the task?
- *Enabling factors:* What is it about the new approach that allows the user to get unstuck and be productive?
- [R]ewards: What are the costs avoided or benefits gained?

(Comment: In the climate campaigning case, "A day in the life (after)" might instead be "The future to be achieved")

Processing the Scenario: The Market Development Strategy Checklist

Target customer characterization is at the core of applying market segmentation strategy to the problem of crossing the chasm. It supplies the "data." Assume that we have spent a day with a group of ten or so field-savvy members of ...[product development] company compiling a library of, say, twenty to forty of these scenarios. In this library we have captured actual use cases from every current customer, every interesting prospect whether won, lost, or in waiting, as well as other interesting prospects that we might know about from past lives.

This is not a formal segmentation survey—they take too long, and their output is too dry. Instead, it is a tapping into the fund of anecdotes that actually carries business knowledge in our culture. Like much that is anecdotal, these scenarios will incorporate fictions, falsehoods, prejudices, and the like. Nonetheless, they are by far the most useful and most accurate form of data to work with at this stage in the segmentation process. Compared to SIC codes, for example, they are paragons of accuracy and integrity. Nonetheless, they are still crude at best, and now it is time to submit them to a refinery—the Market Development Strategy Checklist.

This list consists of a set of issues around which go-to-market plans are built, each of which incorporates a chasm-crossing factor, as follows:

- Target customer
- Compelling reason to buy
- Whole product
- Competition
- Partners and allies
- Distribution
- Pricing
- Positioning
- Next target customer

Processing the scenarios consists of rating each scenario against each of these factors. The process actually takes place in two stages. In Stage 1, all scenarios are rated against four "showstopper" issues (*Comment: The bolded topics in the list above*). Low scores in any one of these typically eliminates the scenario from future consideration *as the beachhead segment*. That is, the niche may be a good one to pursue after the chasm has been crossed, but it is not a good target for the crossing itself.

Scenarios that pass the first cut are rated against the remaining five factors. At both stages scores are awarded for each factor, and the scenarios are rank ordered by score. At the end of the process, top-ranked scenarios are taken to be the top chasm-crossing targets. They are further discussed until the team commits to one—and *only* one—beachhead target.

The italics immediately above are meant to answer the single most asked question of the Chasm Group: *Can't we go after more than one target?* The simple answer is no. (The more complex answer is also no, but it takes longer to explain.) Just as you cannot hit two balls with one bat swing, hit two birds with one stone, or brush your teeth and your hair at the same time, so you cannot cross the chasm in two places. We've already discussed this, of course, but trust me, one cannot make this point too

often.

(Comment: See at the end of Chapter 3 'How to start a fire': There it says it is important to focus "one or two" market segments. So, arguably, the book is saying that there would need to be a hugely compelling argument to go for more than one segment.)

Turning back to the checklist, the four factors that raise showstopper issues for crossing the chasm are as follows:

TARGET CUSTOMER: Is there a single, identifiable economic buyer for this offer, readily accessible to the sales channel we intend to use, and sufficiently well funded to pay the price for the whole product? In the absence of such a buyer, sales forces waste valuable time evangelizing groups of people trying to generate a sponsor. Sales cycles drag on forever, and the project can be shut down at any time.

COMPELLING REASON TO BUY: Are the economic consequences sufficient to make any reasonable economic buyer anxious to fix the problem called out in the scenario? If pragmatists can live with the problem for another year, they will. But they will continue to be interested in learning more. So your salespeople will be invited back again and again—they just won't return with any purchase orders. Instead, they will report that the customer said, "Great presentation!" What the customer was really saying was "I learned some more and I didn't have to buy anything."

WHOLE PRODUCT: Can our company with the help of partners and allies field a complete solution to the target customer's compelling reason to buy in the next three months such that we can be in the market by the end of next quarter and be dominating the market within twelve months thereafter? The clock is ticking. We need to cross now, which means we need a problem we can solve now. Any thread left hanging could be the one that trips us up.

COMPETITION: Has this problem already been addressed by another company such that they have crossed the chasm ahead of us and occupied the space we would be targeting? Dick Hackborn, the HP executive who led the move into laser printers, had a favorite saying: "Never attack a fortified hill". Same with beachheads. If some other company got there before you, all the market dynamics that you are seeking to make work in your favor are already working in its favor. Don't go there.

When scenarios are scored against these four factors, 1 to 5, the worst aggregate score they can get is 4, the best 20, with higher-rated scenarios preferred. But there is an additional caveat. A very low score, relative to the others, in any of these factors almost always is a showstopper. So it is not just total score alone that matters. When in doubt, favor scenarios that have a high-rated compelling reason to buy. If they have already attracted a competitor, see if you can't end-run them. Expect that the best scenarios will be "whole product challenged"—if it were easy, someone else would have done it. Indeed, the fact that it is hard will create a barrier to entry in your favor once you have stepped up to the solution.

The remaining factors fall into the "nice to have" category. That is, low scores can usually be overcome, given investment and time. Since, however, investment and time are two of your scarcest resources, cheaper and sooner are very desirable attributes in a target market scenario. Here's how they play out:

PARTNERS AND ALLIES: Do we already have relationships begun with the other companies needed to fulfill the whole product? If you do, it is typically from a single early-market project, or

else you are just lucky. Pulling together this partnership is a major challenge for the whole product manager.

DISTRIBUTION: Do we have a sales channel in place that can call on the target customer and fulfill the whole product requirements put on distribution?

Calling on the line-of-business side of the house requires some fluency in the language of the target niche, and established relationships with targeted buyers and users accelerates this process dramatically. Lacking this, companies typically hire a well-connected individual out of the target industry and charter her to lead the sales force back in.

PRICING: Is the price of the whole product consistent with the target customer's budget and with the value gained by fixing the broken process? .. [Can and will] all the partners, including the distribution channel, get compensated sufficiently to keep their attention and loyalty?

Note here that it is the whole product price, not the price of the product per se, that matters. Services will often make up as much or more of this total as product.

POSITIONING: Is the company credible as a provider of products and services to the target niche?

At the outset, the answer is typically, Not very. One of the delights of niche marketing, however, is the speed at which this resistance can be overcome if only one truly commits to a whole product that fixes the broken process.

NEXT TARGET CUSTOMER: If we are successful in dominating this niche, does it have good "bowling pin" potential? That is, will these customers and partners facilitate our entry into adjacent niches?

This is an important issue of strategy. Chasm crossing is not the end, but rather the beginning, of mainstream market development. It is important that we have additional follow-on niches that can be lucratively addressed. Otherwise the economics of niche marketing simply do not hold up.

After the scenarios that passed the first round of showstopper screening have been scored on this second set of factors and then rank ordered by score, the team has extracted all of the "data" this process can provide. It is now time to make the high-risk, low-data decision and get on with it.

Committing to the Point of Attack

Making the commitment to a niche market can be challenging, especially for entrepreneurs who are technology enthusiasts or visionaries, because they personally don't have the pragmatist response and thus have trouble trusting in the market dynamics outlined in this book. This is a defining moment for them. The start-up company must either cross or die, but what value is life if to gain it one has to go against one's best self? Not an easy question to answer.

When faced with such nasty decisions, it is usually best to make them quickly, get into the new flow, and plan to course-correct going forward. This is a white-water rafting strategy, where hesitating on a split decision is the one behavior guaranteed to capsize the boat. When you do pick, go hard in the direction chosen, regardless of doubts. Just so with crossing the chasm.

The good news in this is that you do not have to pick the optimal beachhead to be successful. What you must do is win the beachhead you have picked. If there is a genuine problem in the segment, you will have the target customer pulling for you. If it is a hard problem, and the segment is reasonably small, you probably will not have competition to distract you. This means you can focus all your attention on the whole product, which is where it needs to be. Nail that and you win.

What could cause you to change course? Most often, it is that the scenario that is driving the effort is based on a false assumption. To guard against this, you should commission some market research early in the process specifically to validate the winning scenario. But you should not wait for this research to be complete before you start forward. The enemy in the chasm is always time. You must force the pace at all times, even when in doubt, because standing still plays into the hands of the established vendors and the status quo.

And Yes, Size Matters

Finally, when you are on the verge of making the commitment to the target segment, sooner or later the issue of how much revenue the segment might generate comes up. At this point, people normally think that bigger is better. But in fact, this is almost never the case. Here's why.

To become a going concern, a persistent entity in the market, you need a market segment that will commit to you as its de facto standard for enabling a critical business process. To become that de facto standard, you need to win at least half, and preferably a lot more, of the new orders in the segment over the next year. That is the sort of vendor performance that causes pragmatist customers to sit up and take notice. At the same time, you will still be taking orders from other segments. So do the math.

Suppose you can get half of next year's orders from the target segment—no mean feat considering that, prior to a couple of days ago, you hadn't focused on it at all. Say your revenue target is \$10 million over all. That means \$5 million from the target segment. It also means that same \$5 million has to represent at least half of the total orders from the segment if you are to have the desired market-leader impact. In other words, if you are going to be a \$10 million company next year you do not want to attack a segment larger than \$10 million. At the same time, it should be large enough to generate your \$5 million. So the rules of thumb in crossing the chasm are simple: *Big enough to matter, small enough to lead, good fit with your crown jewels.*

If you find the target segment is too big, sub-segment it. But be careful here. You must respect word-of-mouth boundaries. The goal is to become a big fish in a small pond, not one flopping about trying to straddle a couple of mud puddles. The best sub-segmentation is based on special interest groups within the general community. These typically are very tightly networked and normally form because they have very special problems to solve. In the absence of such, geography can often be a safe sub-segmentation variable, provided that it affects the way communities congregate.

If the target segment is too small to generate half of next year's sales for the new product, then you have to augment it. Again, be careful to respect genuine segmentation boundaries. If there is no appropriate super-segment, then you probably should go back and pick another target.

Recap: The Target Market Selection Process

We have been saying all along that the material in this chapter and the following three chapters is tactical by nature—that is, made up of relatively specific tasks and exercises that can, and should, be performed recurrently throughout a major enterprise. As a way of recapping this material, at the end of each chapter there will be a checklist of activities, suitable as a means either for

managing a group through this process or testing the final output of a group's marketing decision making.

For selecting the target market segment that will serve as the point of entry for crossing the chasm into the mainstream market, the checklist is as follows:

- 1. Develop a library of target customer scenarios. Draw from anyone in the company who would like to submit scenarios, but go out of your way to elicit input from people in customer-facing jobs. Keep adding to it until new additions are no more than minor variations on existing scenarios.
- 2. Appoint a subcommittee to make the target market selection. Keep it as small as possible but include on it anyone who could veto the outcome.
- 3. Number and publish the scenarios in typed form, one page per scenario. Accompanying the bundle, provide a spreadsheet with the rating factors assigned to columns and the scenarios assigned to rows. Break the rating factors into two subtotals, showstoppers first, then nice-to-haves.
- 4. Have each member of the subcommittee privately rate each scenario on the showstopper factors. Roll up individual ratings into a group rating. During this process discuss any major disagreements about scores. This typically surfaces different points of view on the same scenario and is critical not just to getting the opportunity correctly in focus but also in laying the groundwork for a future consensus that will stick.
- 5. Rank order the results and set aside scenarios that do not pass the first cut. This is typically about two-thirds of the submissions.
- 6.Repeat the private rating and public ranking process on the remaining scenarios with the remaining selection factors. Winnow the scenario population down to, at most, a favored few.
- 7. Depending on outcome, proceed as follows:
 - Group agrees on beachhead segment. Go forward on that basis.
 - *Group cannot decide among a final few.* Give the assignment to one person to build a bowling pin model of market development, incorporating as many of the final few as is reasonable, and calling out a head pin. Attack the head pin.
 - *No scenario survived*. This does happen. In that case, do not attempt to cross the chasm. Also, do not try to grow. Continue to take early-market projects, keep burn rate as low as possible, and continue the search for a viable beachhead.

5 Assemble the invasion force

I have always found you get a lot more in this world with a kind word and a gun than you do with just a kind word."

—Willie Sutton

Willie is only restating what any military leader will confirm: If you are committing an act of aggression, you'd better have the force to back it up. Or, to put this in terms closer to our immediate topic, marketing is *warfare—not wordfare*.

Which of us, about to launch an invasion, would prefer a good set of slogans to a good set of offensive and defensive weapons? Who would rather buy advertising time on television than missiles and munitions? Who would rather publish a manifesto than have guaranteed treaties with neighboring countries? Most high-tech executives—that's who.

There is a widespread perception among high-tech executives that marketing consists primarily

of some long-range strategic thinking (when you can afford to take the time for it) and then a lot of tactical sales support—with nothing in between. In fact, marketing's most powerful contribution happens right in between. It is called *whole product marketing*, a term introduced earlier, and it is the fundamental basis for assembling the invasion force.

Consider the following scenario. When I was a salesman, I had a dream. The dream was simple. There was a monster bid coming up—with a \$5 million minimum—and I had *wired* the request for proposal (RFP). I had, in the words of gamblers everywhere, a *mortal lock* on the thing. The client had met with me for long hours of consultation during which he had bought into every selling argument in favor of my product. He had then constructed the RFP so that only my product could get a 100 percent evaluation. The deal was mine. Then I woke up.

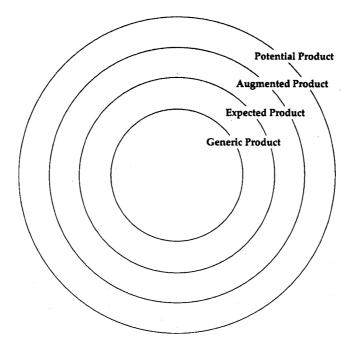
Okay—so that's a fantasy. But a version of that fantasy can be executed in the real world. We might call it *wiring the marketplace*. Again, the concept is simple. For a given target customer and a given application, create a marketplace in which your product is the only reasonable buying proposition. That starts, as we saw in the last chapter, with targeting markets that have a *compelling reason to buy* your product. The next step is to ensure that you have a monopoly over fulfilling that reason to buy.

To secure that monopoly, you need to understand 1) what a *whole product* consists of and 2) how to organize a marketplace to provide a whole product incorporating your company's offering.

The Whole Product Concept

One of the most useful marketing constructs in all of high-tech marketing is the concept of a whole product, an idea described in detail more than four decades ago in Theodore Levitt's *The Marketing Imagination*, and one that played a significant role a decade later in Bill Davidow's seminal *Marketing High Technology*. The concept is very straightforward: There is a gap between the marketing promise made to the customer—the compelling value proposition—and the ability of the shipped product to fulfill that promise. For that gap to be overcome, the product must be augmented by a variety of services and ancillary products to become the whole product.





The formal model, as diagrammed by Levitt, identifies four different levels of whole product completeness:

- 1. Generic product: This is what is shipped in the box and what is covered by the purchasing contract.
- 2. Expected product: This is the product that the consumer thought she was buying when she bought the generic product. It is the *minimum* configuration of products and services necessary to have any chance of achieving the buying objective. For example, when you buy a tablet, you need to have either a Wi-Fi network at home or a cellular connection for it to work, but either one is likely to have to be purchased separately.
- *3. Augmented product:* This is the product fleshed out to provide the *maximum* chance of achieving the buying objective. In the case of a tablet, this would include email, a browser, a calendar, a personal directory, a search engine, and an app store, for example.
- 4. Potential product: This represents the product's room for growth as more and more ancillary products come on the market and as customer-specific enhancements to the system are made. The fact that for the Apple iPad there are, at the time of this writing, some 374,090 apps on its App Store that I can buy to extend its reach and value is one of its key selling points.

[A]t the introduction of any disruptive innovation, the marketing battle initially takes place at the level of the generic product—the thing in the center, the product itself. This is the hero in the battle for the *early market*. But as marketplaces develop, as we enter the *mainstream market*, products in the center become more and more alike, and the battle shifts increasingly to the outer circles. To understand how to dominate a mainstream marketplace we need to take a closer look at the significance of what Paul Harvey might once have called *the rest of the whole product*.

The Whole Product and the Technology Adoption Life Cycle

First, let's look at how the whole product concept relates to crossing the chasm. If we look at the Technology Adoption Life Cycle as a whole, we can generalize that the outer circles of the whole product increase in importance as one moves from left to right. That is, the customers least in need of whole product support are the technology enthusiasts. They are perfectly used to cobbling together bits and pieces of systems and figuring out their own way to a whole product that pleases them. In fact, this is in large part the pleasure they take from technology products—puzzling through ways to integrate an interesting new capability into something they could actually use. Their motto: Real techies don't need whole products.

Visionaries, by contrast, take no pleasure in pulling together a whole product on their own, but they accept that, if they are going to be the first in their industry to implement the new system—and thereby gain a strategic advantage over their competitors—then they are going to have to take responsibility for creating the whole product under their own steam. The rise in interest in systems integration services is a direct response to increasing visionary interest in information systems as a source of strategic advantage. Systems integrators could just as easily be called whole product providers—that is their commitment to the customer.

So much for the market to the left of the chasm, the early market. To get to the right of the chasm—to cross into the mainstream market—you have to first meet the demands of the pragmatist customers. These customers want the whole product to be readily available from the outset. They like a product such as Microsoft Office because virtually every desktop and laptop supports it, files are exchangeable without fuss, there are books in every bookstore about how to use it, not to mention

seminars for training, hotline support, and a whole cadre of temporary office workers already trained on its core products of Word, Excel, and PowerPoint. If instead the pragmatists are offered a "great deal" on an alternative suite of products—say, Google Apps, for example—they are reluctant to switch because they fear some part of the whole product will be missing, and they will be left holding the bag.

To net this out: *Pragmatists evaluate and buy whole products*. The generic product, the product you ship, is a key part of the whole product, make no mistake. But once there are more than one or two comparable products in the marketplace, then investing in additional R&D at the generic level has a decreasing return, whereas there is an increasing return from marketing investments at the levels of the expected, the augmented, or the potential product. How to determine where to target these investments is the role of whole product planning.

Whole Product Planning

As we have just seen, the whole product model provides a key insight into the chasm phenomenon. The single most important difference between early markets and mainstream markets is that the former are willing to take responsibility for piecing together the whole product (in return for getting a jump on their competition), whereas the latter are not. Failure to recognize this principle has been the downfall of many a high-tech enterprise. Too often companies throw their products into the market as if they were tossing bales of hay off the back of a truck. There is no planning for the whole product just the hope that their product will be so wonderful that customers will rise up in legions to demand that third parties rally about it. Well, God did divide the Red Sea for Moses.

For those who wish to take a more prudent course, however, whole product planning is the centerpiece for developing a market domination strategy. Pragmatists will hold off committing their support until they see a strong candidate for leadership emerge. Then they will back that candidate forcefully in an effort to squeeze out the other alternatives, thereby bringing about the necessary standardization to ensure good whole product development in their marketplace.

A good generic product is a great asset in this battle, but it is neither a necessary nor a sufficient cause of victory. Oracle did not have the best product when the market standardized on it. What Oracle offered instead was the best case for a viable whole product—a query language (SQL) based on an IBM standard plus all the major portability across hardware platforms plus an aggressive sales force to drive product into the market quickly. That is what the pragmatists in the IT department got behind.

In short, winning the whole product battle means winning the war. And because perception contributes to that reality, looking like you are winning the whole product battle is a key weapon to winning the war. On the other hand, *pretending you* are winning the whole product battle is a losing tactic—people check up on each other too much in the high-tech marketplace. These distinctions will become critically important in our next chapter, where we deal with *positioning*.

For now, our focus should be on the minimum commitment to whole product needed to cross the chasm. That is defined by the whole product that assures that the target customers can fulfill their compelling reason to buy. To work out how much whole product this is, you only need a simplified version of the whole model:

Standards Additional and Software Procedures **Anything else** Training Additional and Generic Hardware you would need Product Support to achieve your compelling reason to buy Change System Management Integration Installation and Debugging

In the simplified model there are only two categories: 1) what we ship and 2) whatever else the customers need in order to achieve their compelling reason to buy. The latter is the *marketing promise* made to win the sale. The *contract* does not require the company to deliver on this promise, but the *customer relationship* does. Failure to meet this promise in a business-to-business market has extremely serious consequences. As the bulk of purchases in this marketplace are highly reference oriented, such failure can only create negative word of mouth, causing sales productivity to drop dramatically.

Classically, high tech has delivered 80 to 90 percent of a whole product to any number of possible target customers, but 100 percent to few, if any. Anything less than 100 percent, unfortunately, means that the customers either supply the remainder themselves or feel cheated. Significantly less than 100 percent means that the target market simply does not develop as forecast—even if the generic product, the product in the box being shipped, is superior to anything else in its class.

In short, if you wanted to trace disillusionment with high tech's inability to deliver on its promise to its investors and its customers, lack of attention to whole product marketing is the closest thing to a wellspring. This is actually great news—it means that the converse applies as well. By solving the whole product equation for any given set of target customers, high tech has overcome its single greatest obstacle to market development.

......[E]ven a single target customer scenario implies a chain of commitments that any product manager serious about delivering a whole product to an emerging market opportunity must pursue to a satisfactory conclusion.

....[E]very additional new target customer [type] will put additional new demands on the whole product. That is, the total sum of products and services needed in order to get the desired benefit changes any time you change the value proposition. It soon becomes clear to even the most optimistic product marketing managers that they cannot go after all markets at once, that at minimum they have to sequence and prioritize opportunities, and that each opportunity has very real support costs.

Now, given the need for a whole product in order to fulfill the customer's reason to buy, what is the responsibility of the vendor—and specifically of the product manager—for seeing that this whole product is in fact delivered? The answer is, it has nothing to do with responsibility, it has to do with marketing success. If you leave your customer's success to chance, you are giving up control over your own destiny. Conversely, by thinking through your customer's problems—and solutions—in their entirety, you can define—and work to ensure that the customer gets—the whole product.

At no time is this marketing proposition more true than when crossing the chasm. Prior to the chasm there is some hope that the visionaries will backfill the whole product through their own systems integration efforts. Once the product is established in the mainstream, there is some hope that some third party will see an opportunity for itself to make money fleshing out the whole product. *But while you are crossing the chasm, there is no hope of any external support that is not specifically recruited by you for this purpose.*

Some Real-World Examples

.....Basically, there are two types of scenarios —one where there is installed competition, and the other where there is not. [Let's look at the case where there *is* competition.]

Aruba and Wireless Networks for Enterprises

[Let's explore] the competitive example, imagine yourself back in 2006, leading a wireless networking company focused on bringing Wi-Fi to the enterprise. ...[T]he company is Aruba....[and] the competitor they were targeting: *Cisco*!

Aruba at this point was growing very fast, but off a very small base, from \$12 million in 2005 to \$72 million in 2006—pretty amazing, to be sure, but enough to take on a competitor four hundred times its size? Welcome to the world of Silicon Valley start-ups. This is what you do. The only question to answer is, how?

The first rule is you have to leverage a point of disruption, one that puts the incumbent a bit back on its heels. In this case, wireless networks taken to their extreme threatened to cannibalize wireline networks, which were and still are the heart and soul of Cisco's franchise.

The second rule is, remember the fish-to-pond ratio principle from the prior chapter, and target a market segment that is big enough to matter, small enough to lead, and a good fit with your crown jewels. Here small enough to lead means, in part, too small for the much bigger incumbent to spend a lot of time focusing on. Big fish have trouble competing in small niches.

For Aruba, applying this rule led them to the U.S. college and university market.

Now we come to the third rule, the one this chapter is about: Surround your disruptive core product, the thing that got you to the dance, with a whole product that solves for the target customer's problem end to end. That will keep you on the dance floor for a long time to come.

The way you design a whole product is to work backward from the target customer's use case, filling in the blanks as you go along, either with new R&D, an acquisition, a partnership, or an alliance.

..... nothing in the whole product is a showstopper from the point of a competitor seeking to neutralize Aruba's differentiation, but taken as a whole, for a large competitor who has much bigger fish to fry, it takes more focus to accomplish this outcome than it is worth. And from the customer's point of view, the fact that companies like Aruba are willing to go the extra mile just for them builds a level of loyalty that is long-lived indeed. This is the core dynamic that enables start-ups to cross the chasm despite direct opposition from installed incumbents.

Partners and Allies

"Strategic alliances" with partners and allies have always been trendy items in high-tech marketing. One expects to see ads on Facebook reading:

Large, well-heeled company with established distribution channels and aging product line seeks small, entrepreneurial, cash-starved technology leader with hot new product. Photos available upon request....

As a rule, however, these types of alliances do better in PowerPoint presentations than on the street. To start with, the company cultures are normally too antithetical to cooperate with each other. Decision cycles are wildly out of sync, leading to enormous frustration among the entrepreneurs and patronizing responses from the established management. To make matters worse, each side has probably misrepresented itself one way or another during partnership negotiations, such that there is plenty of ammunition for each group to fire at the other once tempers get hot. This is particularly likely to be the case when the entrepreneurs have been angling for acquisition as an exit strategy. So, for the most part, despite the impeccable logic of these mergers, they are very tough to bring off.

What does work for product managers, on the other hand, are tactical "whole product" alliances. These alliances have one and only one purpose: *Accelerate the formation of whole product infrastructure within a specific target market segment in support of a segment-specific compelling reason to buy.* The basic commitment is to co-deliver a whole product and market it cooperatively. This benefits the whole product manager by ensuring customer satisfaction. It also benefits the whole product partners by expanding their marketplace without them having to do any of the marketing. As long as each side lives up to its part of the bargain, there is good reason to expect success.

Whole product alliances are readily initiated and managed at the product marketing manager level. Typically, the initial opportunity is first brought to the company's attention either by the salespeople or by customer support staff, one of whom has bumped into the potential ally at a particular customer's site. But they can also be anticipated through the exercise of thinking through the whole product solution to the customer's buying objective. The main point, again, is that these are tactical alliances growing out of whole product needs, not strategic alliances growing out of ... well, whatever strategic alliances grow out of (my personal feeling is that the number-one cause of strategic alliances is too many staff people with not enough to do).

....[The process of] whole product definition followed by a strong program of tactical alliances to speed the development of the whole product infrastructure is the essence of assembling an invasion force for crossing the chasm. The force itself is a function of actually delivering on the customer's compelling reason to buy in its entirety. That force is still rare in the high-tech marketplace, so rare that, despite the

overall high-risk nature of the chasm period, any company that executes a whole product strategy competently has a high probability of mainstream market success.

Recap: Tips on Whole Product Management

- Use the doughnut diagram [the simplified whole product model] to define—and then to communicate—the whole product. Shade in all the areas for which you intend your company to take primary responsibility. The remaining areas must be filled either by the customer or by partners or allies.
- 2. Review the whole product to ensure it has been reduced to its minimal set. This is the KISS philosophy (Keep It Simple, Stupid). It is hard enough to manage a whole product without burdening it with unnecessary bells and whistles.
- *3.* Review the whole product from each participant's point of view. Make sure each vendor wins, and that no vendor gets an unfair share of the pie. Inequities here, particularly when they favor you, will instantly defeat the whole product effort—companies are naturally suspicious of each other anyway, and given any encouragement, will interpret your entire scheme as a rip-off.
- 4. Develop the whole product relationships slowly, working from existing instances of cooperation toward a more formalized program. Do not try to institutionalize cooperation in advance of credible examples that everyone can benefit from it—not the least of whom should be the customers. Also, do not recruit directly competing partners to serve the same need in the same segment—this will only discourage them from making a full commitment to your program.
- 5. With large partners, try to work from the bottom up; with small ones, from the top down. The goal in either case is to work as close as possible to where decisions that affect the customer actually get made.
- 6. Once *formalized* relationships are in place, use them as openings for communication only. Do not count on them to drive cooperation. Partnerships ultimately work only when specific individuals from the different companies involved choose to trust each other.
- 7. If you are working with very large partners, focus your energy on establishing relationships at the district sales office level and watch out for wasting time and effort with large corporate staffs. Conversely, if you are working with small partners, be sensitive to their limited resources and do everything you can to leverage your company to work to their advantage.
- 8. Finally, do not be surprised to discover that the most difficult partner to manage is your own company. If the partnership really is equitable, you can count on someone inside your company insisting on taking a bigger share of the benefit pie. In fighting back, look to your customers to be your truest and most powerful allies.

6 Define the battle

On the eve of our invasion, let us regroup. We have already established the point of attack, a target market segment plagued by a problem that gives it a truly compelling reason to buy. We have already mapped out the whole product needed to eliminate this problem and have recruited the necessary partners and allies to deliver it. The major obstacle now is competition. To succeed in securing our beachhead we need to understand who or what the competition is, what their current relationship to our target customer consists of, and how we can best position ourselves to drive them out of our target market segment.

This is what we mean by defining the battle. The fundamental rule of engagement is that any force can

defeat any other force—if it can define the battle. (Comment: Well, has at least a better chance of success! But beware of certainty based on magical thinking.) If we get to set the turf, if we get to set the competitive criteria for winning, why would we ever lose? The answer, depressingly enough, is because we don't do it right. Sometimes it is because we misunderstand either our own strengths and weaknesses, or those of our competitors. More often, however, it is because we misinterpret what our target customers really want, or we are afraid to step up to the responsibility of making sure they get it.

How far must one go to serve one's customers? Well, in the case of crossing the chasm, one of the key things a pragmatist customer insists on seeing is viable competition. If you are fresh from developing a new value proposition with visionaries, that competition is not likely to exist—at least not in a form that a pragmatist would appreciate. What you have to do then is create it. (Comment: That is, create it in the mind of the customer.)

Creating the Competition

In the progression of the Technology Adoption Life Cycle, the nature of competition changes dramatically. These changes are so radical that, in a very real sense, one can say at more than one point in the cycle that one has no obvious competition.[But this does not suit the pragmatists.]

In our experience to date with developing an early market, competition has not come from competitive products so much as from alternative modes of operation. Resistance has been a function of inertia growing out of commitment to the status quo, fear of risk, or lack of a compelling reason to buy. Our goal in the early market has been to enlist visionary sponsors to help overcome this resistance. Their competition, in turn, has come from others within their own company, pragmatists who are vying with visionaries for dollars to fund projects. The pragmatists' competitive solution, in general, is to invest dollars to chip away at problems a piece at a time (whereas the visionaries aspire, like Alexander the Great with the Gordian knot, to cut through them with a single mighty—and mighty expensive—stroke). Pragmatists work to educate the company on the risks and costs involved. Visionaries counter with charismatic appeals to taking bold and decisive actions. The competition takes place at the level of corporate agenda, not at the level of competing products.

That's how competitions work in the early market. It is not at all how they work in the mainstream, in part because there are not enough visionaries to go around, and in part because visionaries themselves like to play not in the mainstream but rather out in front of it. Now we are in the true domain of the pragmatist. *In the pragmatist's domain, competition is defined by comparative evaluations of products and vendors within a common category.*

These comparative evaluations confer on the buying process an air of rationality that is extremely reassuring to the pragmatist, the sort of thing that manifests itself in evaluation matrices of factors weighted and scored. And the conclusions drawn from these matrices will ultimately shape the dimensions and segmentation of the mainstream market.

In sum, the pragmatists are loath to buy until they can compare. *Competition, therefore, becomes a fundamental condition for purchase. So,* coming from the early market, where there are typically no perceived competing products, with the goal of penetrating the mainstream, you often have to go out and *create your competition.*

Creating the competition is the single most important marketing communication decision made in the battle to enter the mainstream. It begins with positioning your product within a buying category that already has some established credibility with the pragmatist buyers. That category should be populated with other reasonable buying choices, ideally ones with which the pragmatists are already familiar.

Within this universe, your goal is to position your product as the indisputably correct buying choice.

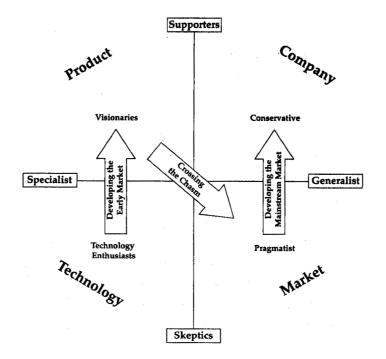
The great risk here is to rig the competition, that is, to create a universe that is too self-serving. You can succeed in creating a competitive set that you clearly dominate, but this set, unfortunately, is either not credible or not attractive to the pragmatist buyers. For example, I might claim that I am the greatest high-tech marketing consultant with a Ph.D. in Renaissance English literature. This claim might be credible, but it is not particularly attractive. On the other hand, I might claim that I am the greatest marketing consultant of all time—an attractive claim, perhaps (although it is not obvious to me how one can be a great consultant and egotistical at the same time), but, in any event, not a credible one.

So, how can you avoid selecting a self-serving or irrelevant competitive set? The key is to focus in on the values and concerns of the pragmatists, not the visionaries: It helps to start with the right conceptual model—in this case, *the Competitive Positioning Compass.* That model is designed to create a value profile of target customers anywhere in the Technology Adoption Life Cycle, identify what to them would appear to be the most reasonable competitive set, develop comparative rankings within that set on the value attributes with the highest ranking in their profile, and then build our positioning strategy development around those comparative rankings. Here's how it works:

The Competitive Positioning Compass

There are four domains of value in high-tech marketing: technology, product, market, and company. As products move through the Technology Adoption Life Cycle, the domain of greatest value to the customer changes. In the early market, where decisions are dominated by technology enthusiasts and visionaries, the key value domains are technology and product. In the mainstream, where decisions are dominated by pragmatists and conservatives, the key domains are market and company. Crossing the chasm, in this context, represents a transition from product-based to market-based values.

The Competitive-Positioning Compass illustrates these dynamics:



THE COMPETITIVE-POSITIONING COMPASS

(Comment: The sceptics referred to in this diagram are not the same as the sceptics in the earlier chapters.)

There is a lot of information packed into this model, so let's sort it out piece by piece:

- The directionality provided by the compass comes in the form of the two labeled axes. The horizontal dimension shows the range of buyer interest in and understanding of hightechnology issues. In general, the early market is dominated by specialists who, by their nature, are more interested in technology and product issues than in market standing or company stature. By contrast, the mainstream is dominated by generalists who are more interested in market leadership and company stability than in the bits and bytes or speeds and feeds of particular products.
- The vertical dimension overlays a second measure, the buyer's attitude toward the proposed value proposition, ranging from skepticism to support. Markets begin in a state of skepticism and evolve to a state of support. In the case of the early market, the technology enthusiasts are the skeptical gatekeepers; in the case of the mainstream market, it is the pragmatists. Once they have given their blessings, then their companions—visionaries and conservatives, respectively—feel free to buy in.
- The model also points to the fact that people who are supportive of your value proposition take an interest in your products and in your company. *People who are skeptical of you do not.* This means that, at the beginning of a market, when skepticism is the common state, basing communications on product or company strengths is a mistake. You have no permission to tout these elements because the market players do not yet believe you are going to be around long enough to make a difference.
- However, there are ways to win over skeptics. Even the most skeptical specialists are always on the lookout for new technology breakthroughs. Thus, although you cannot initially get them to sponsor your product, you can get them involved in understanding its technology, and from that understanding, to gain an appreciation for the product itself. The more they appreciate the technology, the easier it becomes for them to support the product.
- Similarly, skeptical generalists may not take an interest in an unproven company but are always interested in new market developments. If you can show the generalists that there is an emerging unmet market requirement, one that you have specifically positioned your products and your marketing efforts to meet, then out of their appreciation for the market opportunity, they can learn to appreciate your company.
- These are the two "natural" marketing rhythms in high tech—developing the early market and developing the mainstream market. You develop an early market by demonstrating a strong technology advantage and converting it to product credibility, and you develop a mainstream market by demonstrating a market leadership advantage and converting it to company credibility.
- By contrast, the "chasm transition" represents an unnatural rhythm. Crossing the chasm requires moving from an environment of support among the visionaries back into one of skepticism among the pragmatists. It means moving from the familiar ground of product-oriented issues to the unfamiliar ground of market-oriented ones, and from the familiar audience of like-minded specialists to the unfamiliar audience of wary generalists.

Now let's tie all this back into creating the competition. If we are going to succeed in winning over

the lower right quadrant, the skeptical pragmatists, then any dialogue about an emerging competitive set has to be based in market-oriented concerns. That's what the pragmatists care about. In other words, we must shift our marketing focus from celebrating product-centric value attributes to market-centric ones. Here is a representative list of each:

PRODUCT-CENTRIC	MARKET-CENTRIC
Cool product	Most complete whole product
Easy to use	Solid user experience
Elegant architecture	Compatibility with standards
Product price	Whole product price
Unique functionality	Situational value
	Fit for purpose

In the previous chapter, the entire basis of the focus on whole product and partners and allies was to move our leadership premise from the left-hand list to the right. That is, lacking an existing market leadership position, we wanted, within the confines of a manageable market segment, to create the valued attributes of one, and thereby bring a state of true market leadership into existence. Now we need to communicate what we have accomplished so as to win the pragmatist buyers' support.

To sum up, it is the market-centric value system—supplemented (but not superseded) by the productcentric one—that must be the basis for the value profile of the target customers when crossing the chasm.

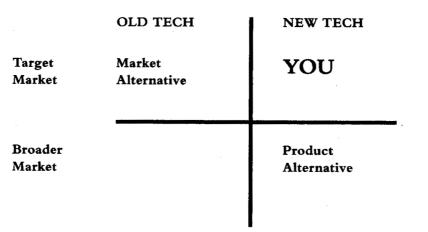
This value profile, in turn, will model how the target customers are likely to perceive the competitive set and what position they are likely to accord to a new player coming into that set.

More specifically, creating the competition involves using two competitors as beacons so that the market can locate your company's unique value proposition. The first of these two competitors we will call the *market alternative*. This is a vendor that the target customer has been buying from for years. The problem they address is the one we will address, and the budget that is allocated to them represents the money we as the new entrant are going to preempt. To earn the right to this budget, we are going to use a disruptive innovation to address a stubbornly problematic limitation in the traditional offer.

The second reference competitor we will call the *product alternative*. This is a company that is also harnessing the same disruptive innovation we are—or at least close to it—and is positioning itself like us as a technology leader. Their very existence gives credibility to the notion that now is the time to embrace this new discontinuity. Our intent here is to acknowledge their technology but to differentiate from them by virtue of our own segment-specific focus.

Creating the Competition

...[T]he perfect positioning situation......[is] captured in [this] simple 2x2 matrix, as follows:



The two alternatives called out in this diagram are your reference competitors.

The company still has to deliver on these promises and still has to compete vigorously to win, but nobody is confused about what game it is playing.

......[L]et me just close this section with a word of warning. If you try out this exercise of choosing the competition, and have trouble finding either a single, clear market alternative, or a credible second vendor leveraging your type of disruptive technology, this is a clue. It means that you are probably not ready to cross the chasm.

Chasm crossing requires a single target beachhead segment, and in that segment, there needs to exist already the budget dollars to buy your offer. To be sure, the budget will be "misnamed," because it will be allocated to some brain-dead, ineffective Band-Aid approach to solving what has become a broken, mission-critical process. But it must exist, or else you will lose a full year just in educating the market to put aside money that might be used to buy your product in the following year.

Choosing your market alternative wisely is the solution to this problem. But it has to be credible. And understand that, as soon as you call out your choice, you are in for a fight. That market alternative, whoever it may be, had plans for the money you are targeting. Indeed, it considers that budget as *its* budget, and it will not take kindly to your actions.

That's where the product alternative comes in. You need to make clear to everyone involved that a technology shift is under way here and that old solutions simply cannot hope to keep up. Trade magazines on their best day cannot be interactive. Direct mail programs on their best day cannot catch me at the golf course. General agents on their best day cannot provide round-the-clock answers to consumer questions—at least not cost-effectively. It is not your intent to deride the performance of the established Old Guard. Indeed, you should honor it, as your target customer has long-standing relationships with these vendors. Rather, it is to suggest that a new wave is coming, and that you intend to domesticate that technology to the same ends as these tried-and-true solution providers.

So, market alternatives call out the budget and thus the market category, and product alternatives call out the differentiation. It sounds a lot like positioning, the topic to which we will now turn.

Positioning

Creating the competition, more than anything else, represents a watershed moment in positioning. Positioning is the most discussed and least understood component of high-tech marketing. You can keep yourself from making most positioning gaffes if you will simply remember the following principles:

- 1. Positioning, first and foremost, is a noun, not a verb. That is, it is best understood as an attribute associated with a company or a product, and not as the marketing contortions that people go through to set up that association.
- Positioning is the single largest influence on the buying decision. It serves as a kind of buyers' shorthand, shaping not only their final choice but even the way they evaluate alternatives leading up to that choice. In other words, evaluations are often simply rationalizations of pre-established positioning.
- 3. *Positioning exists in people's heads, not in your words.* If you want to talk intelligently about positioning, you must frame a position in words that are likely to actually exist in other people's heads, and not in words that come straight out of hot advertising copy.
- 4. People are highly conservative about entertaining changes in positioning. This is just another way of saying that people do not like you messing with the stuff that is inside their heads. In general, the most effective positioning strategies are the ones that demand the least amount of change.

Given all of the above, it is then possible to talk about *positioning* as a verb—a set of activities designed to bring about *positioning* as a noun. Here there is one fundamental key to success: when most people think of positioning in this way, they are thinking about how to make their products *easier to sell*. But the correct goal is to make them *easier to buy*.

Companies focus on making products easier to sell because that is what they are worried about selling. They load their marketing communications with every possible selling argument, following the age-old axiom that if you throw a lot of mud at a wall, some of it is bound to stick. Prospective customers shrink from this barrage, which in turn causes the salespeople to chase after them that much harder. Even though the words appear to address the customers' values and needs, the communication is really focused on the seller's attempt to manipulate them, a fact that is transparently obvious to the potential consumer. It's a complete turnoff—all because the company was trying to make its product easy to sell instead of easy to buy.

Think about it. Most people resist selling but enjoy buying. By focusing on making a product easy to buy, you are focusing on what the customers really want. In turn, they will sense this and reward you with their purchases. Thus easy to buy becomes easy to sell. The goal of positioning, therefore, is to create a space inside the target customer's head called "best buy for this type of situation" and to attain sole, undisputed occupancy of that space. Only then, when the green light is on, and there is no remaining competing alternative, is a product easy to buy.

Now, the nature of that best-buy space is a function of who is the target customer. Indeed, this space builds and expands cumulatively as the product passes through the Technology Adoption Life Cycle. There are four fundamental stages in this process, corresponding to the four primary psychographic types, as follows:

1. Name it and frame it. Potential customers cannot buy what they cannot name, nor can they seek out the product unless they know what category to look under. This is the minimum amount of positioning needed to make the product easy to buy for a technology enthusiast.

The goal here is to create a technically accurate description of the disruptive innovation that puts it into its ontologically correct category with a descriptive modifier that sets it apart from the other members of that category. Think Linnaeus cataloging the world of biological organisms.

2. *Who for and what for.* Customers will not buy something until they know who is going to use it and for what purpose. This is the minimum extension to positioning needed to make the product easy to buy for the visionary.

Visionaries do not care about the ontology of the new innovation—they care about its potential impact. What disruptive change can it enable in their environment that they can leverage for dramatic competitive advantage?

The key idea here is to focus on the *So what*? and the *Who cares*? part of the value proposition. If the *who* has the clout and the budget, and the *what* is a big enough reward, then the risk of sponsoring an early market purchase is worth taking.

3. *Competition and differentiation.* Customers cannot know what to expect or what to pay for a product until they can place it in some sort of comparative context. This is the minimum extension to positioning needed to make a product easy to buy for a pragmatist.

This is by definition a post-chasm situation, for the category is now sufficiently viable that there are multiple vendors competing to fill the same budget.

In the prior pages we talked about how when crossing the chasm you have to "create" the competition, leveraging the intersection of a market alternative and a product alternative. That is a special case. The more general case, and the one more familiar to marketing agencies with whom an entrepreneur might be working, is for more established markets. There the goal is to position offerings relative to their adoption status.....

These sorts of distinctions help a generalist sign off on technology purchase decisions by creating points of reference with "adopters like me."

4. *Financials and futures.* Customers cannot be completely secure in buying a product until they know it comes from a vendor with staying power who will continue to invest in this product category. This is the final extension of positioning needed to make a product easy to buy for a conservative.

These four positioning strategies correspond to the four quadrants of the Positioning Compass. The key takeaway from this section is that positioning is more about the audience's state of mind than yours. Most failed positioning statements arise from vendors being unable to see themselves from someone else's point of view.

The Positioning Process

When positioning is thought of primarily as a verb, it refers to a communications process with four key components:

- *1. The claim.* The key here is to reduce the fundamental position statement—a claim of undisputable market leadership within a given target market segment—to a two-sentence format outlined later on in this chapter.
- *2. The evidence.* The claim to undisputed leadership is meaningless if it can, in fact, be disputed. The key here is to present sufficient evidence as to make any such disputation unreasonable.
- *3. Communications.* Armed with claim and evidence, the goal here is to identify and address the right audiences in the right sequence with the right versions of the message.

4. *Feedback and adjustment.* Just as football coaches have to make halftime adjustments to their game plans, so do marketers, once the positioning has been exposed to the competition. Competitors can be expected to poke holes in the initial effort, and these need to be patched up or otherwise responded to.

This last component makes positioning a dynamic process rather than a one-time event. As such, it means marketers revisit the same audiences many times over during the life of a product. Establishing relationships of trust, therefore, rather than wowing them on a one-time basis, is key to any ongoing success.

The Claim: Passing the Elevator Test

Of the four components, by far the hardest to get right is the claim. It is not that we lack for ideas, usually, but rather that we cannot express them in any reasonable span of time. Hence the elevator test: Can you explain your product in the time it takes to ride up in an elevator? Venture capitalists use this all the time as a test of investment potential. If you cannot pass the test, they don't invest. Here's why:

- Whatever your claim is, it cannot be transmitted by word of mouth. In this medium the unit of thought is at most a sentence or two. Beyond that, people cannot hold it in their heads. Since we have already established that word of mouth is fundamental to success in high-tech marketing, you must lose.
- 2. Your marketing communications will be all over the map. Every time someone writes a brochure, a presentation, or an ad, they will pick up the claim from some different corner and come up with yet another version of the positioning. Regardless of how good this version is, it will not reinforce the previous versions, and the marketplace will not get comfortable that it knows your position. A product with an uncertain position is very difficult to buy.
- 3. Your R&D will be all over the map. Again, since there are so many different dimensions to your positioning, engineering and product marketing can pick any number of different routes forward that may or may not add up to a real market advantage. You will have no clear winning proposition but many strong losing ones.
- 4. You won't be able to recruit partners and allies, because they won't be sure enough about your goals to make any meaningful commitments. What they will say instead, both to each other and to the rest of the industry, is "Great technology—too bad they can't market."
- 5. You are not likely to get financing from anybody with experience. As just noted, most savvy investors know that if you can't pass the elevator test, among other things, you do not have a clear—that is, investable—marketing strategy.

So how can we guarantee passing the elevator test? The key is to define your position based on the target segment you intend to dominate and the value proposition you intend to dominate it with. This is the *who for and what for* positioning statement that resonates with visionaries and kicks off the early market competition. At the same time, you also want to foreshadow your mainstream market future, leveraging the *competition and differentiation* positioning we discussed relative to market and product reference competitors.

Here is a proven formula for getting all this down into two short sentences. Try it out on your own company and one of its key products. Just fill in the blanks:

- For (target customers—beachhead segment only)
- Who are dissatisfied with (the current *market alternative*)
- Our product is a (product category)
- That provides (compelling reason to buy).
- Unlike (the product alternative),
- We have assembled (key whole product features for your specific application).

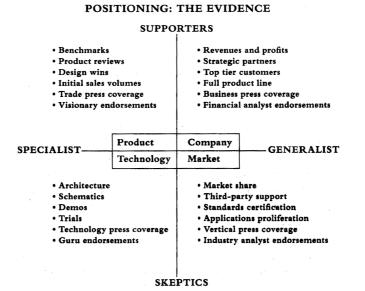
Now what is often interesting about writing a statement like this is not what you write down but what you have to give up...... Wouldn't it have been better to have included extra value statements for a bigger effect?

The answer here is an emphatic no. Indeed, this is just what defeats most positioning efforts. *Remember, the goal of positioning is to create and occupy a space inside the target customers' head.* Now, as we already noted, people are very conservative about what they let you do inside their head. One of the things they do not like is for you to take up too much space. This means they will use a kind of shorthand reference: That's all the space you get for your primary differentiation statement. It's like a [tweet] with less than one line. If you don't make the choice to fill the space with a single attribute, then the market will do it for you. And since the market includes your competition trying to deposition you, don't count on it to be kind.

One final point on claims before moving on to other issues: *The statement of position is not the tagline for the ad*. Ad agencies come up with taglines, not marketing groups. The function of the statement of position is to control the ad campaign, to ensure that however "creative" it may become, it stays on strategy. If the point of the ad is not identical with the point of the claim, then it is the ad, not the claim, that must be changed—regardless of how great the ad is.

The Shifting Burden of Proof

The toughest thing about high-tech marketing is that just about the time you get the hang of something, it becomes obsolete. This is even true of something as innocent as providing evidence. That is, like everything else in high tech, the kind of evidence that is needed evolves over the course of the Technology Adoption Life Cycle. This can be summarized within the structure of the Competitive Positioning Compass:



By working your way up the left and then up the right of the compass, you can trace the evolution of desired evidence as the market evolves from the technology enthusiast to the visionary to the pragmatist and conservative. The key point to notice is the transition from product to market, corresponding to crossing the chasm. This is simply a corroboration of a point we have been making all along, that pragmatists are more interested in the market's response to a product than in the product itself.

What is particularly awkward for a high-tech company making this transition is that for the first time the major sources of desired evidence are not directly under its control. This is not a matter of having the right features or winning the right benchmark war.

It is a matter of other people—theoretically disinterested third parties—voting to endorse your product not only in word but in deed. It is actual investment in building the whole product that demonstrates to the pragmatist that, if you are not already the market segment leader, you are destined to become so.

In sum, to the pragmatist buyer, the most powerful evidence of leadership and likelihood of competitive victory is market share. In the absence of definitive numbers here, pragmatists will look to the quality and number of partners and allies you have assembled in your camp, and their degree of demonstrable commitment to your cause. The operating principle here is that you identify leaders by their followers. The kind of evidence this buyer is looking for is signs of co-marketing, such as joint sales calls and cross-referencing each other's products in sales literature, and consistent mutual support even when the other party is not present in the room.

This point leads directly into communications strategy for crossing the chasm. Not only do you have to develop this kind of evidence of whole product support; you also have to make sure that everyone hears about it.

Whole Product Launches

The concept of a *whole product launch is* a derivative of the widely known practice of a product launch. That is, whenever a new high-tech product is introduced, it is customary to launch it by first briefing the industry analysts and long-lead press editors well in advance of the launch date (so they can serve as references), and then taking the top company executives on a tour to the weekly trade press the week prior to announcement, with the announcement itself capped by an event.

These product launches work just fine when the product itself is "new news." Then they are an appropriate tool for the development of early markets. By the same token, however, they are not appropriate for crossing the chasm. At this point the product is not new news—at least it had better not be if we are planning to win over the pragmatist buyer. The trade press is [rarely] interested in a great trumpeting article on Release 2.0.... So if the message is not "Look at my hot new product," then what is it going to be, and how are you going to get it out?

The message that will resonate now is much more likely to be "Look at this hot new market." This message typically consists of a description of the emerging new market, anchored by a new approach to a problem stubbornly resistant to conventional solutions, fed by an emerging set of partners and allies, each supplying a part of the whole product puzzle, to the satisfaction of an increasingly visible and growing set of customers. The lure embedded in this story is that we are seeing a new trend in the making, and everyone who has a seat on this bandwagon is going to be in on the Big Win. This is a great story for small entrepreneurial companies to be able to tell because it gives them a

credibility that they cannot achieve on their own. Their product does not even have to be the centerpiece of the whole product—it just has to be an indispensable component.....

Now, how can marketing communications improve your odds of winning such a position? First, marketers have to pick the right communications venue. There are two venues, in general, that lend themselves to whole product stories. The first is the business press. Whole product stories, particularly ones sparked by partnerships and alliances coming together to bring off some wonderful result for a particular company, are the bread and butter of business fare. Companies organizing to bring off this feat consistently, and thereby dominate a particular market segment, are particularly of interest.

If the company is brand-new, to be sure, the business press is leery. In this instance it is important first to build some references in the financial analyst community, based not on the company per se but on the market opportunity it has in its sights. Financial analysts are usually quite open to briefings on emerging market opportunities, and in that context, can be wooed to take an interest in an emerging entrepreneurial venture. Once they have bought into the market, then they can be used as a reference point by the business press in developing a story.

In bringing this story to the business press, it is important to bring along as many of the other players in the market as possible. One effective tactic is to hold a press conference with multiple spokespersons on the dais—customers, analysts, partners, distributors, and so on. A more elaborate version of the same approach is to sponsor a conference on the core issue that is driving the development of this market. The key objective in either case is to communicate the bandwagon effect in progress.

Finally, communicating via the business press has to be done within the framework of a big idea. Technology stories, told at the level of technology, are only interesting as vignettes, squibs to be used as filler between the main articles. For a technology story to be a *business story*, it has to be about something that transcends high tech. Typically, the seed of the story is either a new type of opportunity or problem that can now be addressed effectively because of advances in the industry. These advances will have been sparked by technology breakthroughs, and that will be part of the story, but they are now seen to extend to the entire whole product infrastructure, and that will be the main thrust of the story.

The great benefit of the business press as a medium of communication is its high degree of credibility across virtually all business buying situations. This is a two-edged sword for the entrepreneurial company. In order to preserve its credibility, the business press is reluctant to endorse entrepreneurial enterprises until they have been well proved. It takes a long time, in other words, to earn coverage. On the other hand, having broken through in this medium once, it is much easier to do so again. Furthermore, subsequent product-oriented coverage in the trade press tends to become more thorough as the company attains greater stature in the business press.

So building relationships with business press editors, initially around a whole product story, is a key tactic in crossing the chasm. In addition to the business press, the other communications channel for getting out a whole product message is what could be loosely termed "vertical media"—that is, media specifically dedicated to a particular industry or a particular profession. Industry trade shows and conferences, meetings of professional associations, and publications dedicated to a specific market segment all tend to attract pragmatists and conservatives, people who put a high value on maintaining relationships within their group. These associations are relatively open to participation from supporting vendors, provided that the vendors are not too obtrusive with their sales messages.

Whole product issues are ideal for this kind of communication. The idea is to get in a room with a number of people in a given industry and outline the current state of technology innovation in the vendor's marketplace as it relates to their business. Correctly framed, these sessions put the customer,

rather than the vendor or the vendor's product, at the center of things. They align themselves with the customer's needs and the alternatives available to meet those needs. Thus, although they are at one level clearly self-serving to the vendor, they do not *feel* self-serving, positioning the vendor more as a consultant than as a salesperson.

The goal of a whole product launch campaign, overall, is to develop relationships in support of a positive word-of-mouth campaign for your company and products. The first thing to remember is that developing these relationships takes time—time to ferret out who are the key influencers, time to get to know them on more or less equal footing, time to get up to speed on the industry issues so that the relationship is pertinent and valuable to both parties. The other thing to remember is that, once these relationships are in place, they represent a major barrier to entry for any competitor. Pragmatists and conservatives—the core of any mainstream market—like to do business with people they know.

Recap: The Competitive Positioning Checklist

To define the battle effectively so that you win the business of a pragmatist buyer, you must:

- 1. Focus the competition within the market segment established by your must-have value proposition—that is, that combination of target customer, product offering, and compelling reason to buy that establishes your primary reason for being.
- 2. Create the competition around what, for a pragmatist buyer, represents a reasonable and reasonably comprehensive set of alternative ways of achieving this value proposition. Do not tamper with this set by artificially excluding a reasonable competitor—nothing is more likely to alienate your pragmatist buyer.
- 3. Focus your communications by reducing your fundamental competitive claim to a two-sentence formula and then managing every piece of company communication to ensure that it always stays within the bounds set out by that formula. In particular, always be sure to reinforce the second sentence of this claim, the one that identifies your primary competition and how you are differentiated from it.
- 4. Demonstrate the validity of your competitive claim through the quality of your whole product solution and the quality of your partners and allies, so that the pragmatist buyer will conclude you are, or must shortly become, the indisputable leader of this competitive set.

7 Launch the invasion

(read the book)

Conclusion: Leaving the chasm behind

(read the book)

Appendix 1: The (full) high-tech market model

(read the book)

Appendix 2: The four gears model for digital consumer adoption

Crossing the chasm is a B2B [business to business] model—unapologetically. Wherever there is heavy lifting required to bring a disruptive technology to market, institutions must play an active role early in the life cycle, hence the widespread applicability of this approach. That said, as more and more technology gets deployed, it becomes increasingly possible that a new disruptive innovation could proliferate without direct engagement of any kind of institutional support. Welcome to the world of Google, Face-book, YouTube, Skype, and their ilk.

These companies also passed through an adoption process—that's how they left their legions of competitors behind—but they did not cross a chasm to do so. Instead their journey looks more like a new CPG (consumer packaged goods) offering, where trial and test markets are followed by product launches and mass-market promotions. But even here, digital is different.

Online adoption is best characterized in terms of four fundamental activities:

- 1. Engage users
- 2. Acquire traffic
- 3. Enlist the faithful
- 4. Monetize [users] engagement

We call this model the Four Gears, each of which makes a fundamental contribution to driving a digital enterprise to scale.

Engagement comes first. Can you create a digital (or digitally mediated) experience that is sufficiently compelling and differentiated that end users will want to repeat it, hopefully many times over? Such repetition establishes a pattern of consumption, the first key underpinning of a mass market. You have found at least a few dogs who will eat the dog food and like it.

Once the engagement gear begins to spin, then it is time to introduce the acquisition gear. These two interact with each other, each modifying the other, as you seek to answer the second big challenge facing your fledgling enterprise: Can your compelling experience scale? This means grow both on the demand side (onboarding new users, eventually those who want something more or different from your initial users) and on the supply side (onboarding new content or product features to broaden the offering from its initial footprint). Scaling always requires modifying the offer, and modifying the offer always has an impact on scaling (though not always a happy one). This is not for the faint of heart.

That said, there is a light at the end of the tunnel, or rather, a tipping point. Tipping points are as key to consumer adoption as they are to B2B. Prior to reaching one, all efforts to scale require pumping in additional fuel—if you cut off the fuel supply, the system will revert to its initial state. But after you pass the tipping point, the system restabilizes around a new status quo, and actually pulls you forward to get you to your new "right" position. You can still screw this up (just ask the investors at Myspace or Groupon), but it takes some real effort to do so.

Given this context, the goal of the acquire-engage phase of the consumer life cycle is to get past this tipping point as quickly as possible. On the Web, depending on the size of the target market, this could call for you engaging hundreds of thousands to millions of users, on your way to even more ambitious goals. Where the tipping point actually comes is not predictable in advance—it only shows up in the rearview mirror—but when it does, when you feel the world pulling you forward rather than pushing back, then, if you have not done so already, you want to activate your enlistment gear.

Enlisting the faithful involves "hyper-*engaging*" with a small but vocal minority of consumers who have already demonstrated a propensity to evangelize and proselytize on your behalf. They do this because they believe in you and what you are doing so much they have made it part of their own identity. You don't pay them—indeed, to do so would be insulting; they are doing this because it has become part of who they are. It just changes the whole dynamic of the situation. This is why Simon Sinek says in his much-viewed TED talk on innovation that the goal of an *innovative* company is not to do business with customers who need what you have (which is indeed the goal of most established enterprises, and should be) but rather to do business with customers *who believe what you believe*.

A consumer's degree of enlistment manifests itself in three states. At its highest level, it's the kind of evangelical behavior we are talking about here. This is the key to viral marketing, where your cost of customer acquisition plummets because your existing customers act as your best marketing campaign. Think of this as the equivalent to an NPS (Net Promoter Score) of 9 or 10 ("I would definitely recommend this to a friend").

A lesser state of enlistment, one more akin to an NPS of 7 or 8 ("I would probably recommend this to a friend"), does not fuel viral marketing, but it does ensure consumer retention. This is equivalent to an entrenched brand preference—when I buy beer it is Heineken or Beck's Non-Alcoholic. I don't evangelize either brand, but they always get my business. This is the level of enlistment needed to forestall churn.

When enlistment falls below this level, one now more akin to an NPS score of 1 through 6 ("I would have reservations about recommending this to a friend"), that can signal anything from openness to switching to outright defection. Indeed, at the bottom of the range, it likely indicates counterevangelism, which is about as bad as it gets in consumer marketing, as in the 2004 film about McDonald's, *Super Size Me*.

In a consumer model, the goal of the enlistment gear is, at minimum, to keep churn below, say, 2 percent per month (giving you a lifetime customer value of about four years), and more positively, during the growth phase of the category, to catapult you into hypergrowth. You begin to work the enlistment gear, therefore, once you are confident that your engagement and acquisition gears are humming, seeking to use its acceleration to get you past your anticipated tipping point.

All this leads us to the fourth and final gear, monetization. Whereas crossing the chasm is definitely a pay-as-you-go model, the four gears represent a "URL" approach (not *uniform resource locator*, but rather "Ubiquity now, Revenue Later"). Most of the great consumer Internet successes in the first decade of this century followed this approach, introducing the monetization gear very late in the game, in some cases not until after they had sold themselves to a monetization engine (YouTube to Google, Instagram to Facebook, Tumblr to Yahoo!).

The key idea here is that monetization, regardless of when it is introduced, will slow down the other three gears. If you invoke too early or too swiftly, it is like popping the clutch on a manual transmission—you stall the engine. The art instead is to feather in the monetization gear in such a way as to minimize and absorb its retarding effects, ramping the engine back up to full speed over the least amount of time possible. In that context, the underlying goal is to determine the optimal pricing for both present and future returns, a never-ending set of experiments that must continually adapt as competition and innovation restructure the landscape.

So those are the four gears. While they evolved initially independently from, and in some sense in contradistinction to, the crossing-the-chasm model, going forward I believe the two will increasingly be invoked in a kind of pincer movement, in which grassroots movements will generate waves of mass adoption, and institutional marketing will find ways to invest and capitalize upon them. This will call on management teams to pursue two courses in parallel, with the B2C [business to consumer] course in the lead, since until there is proven traction with the ... [the first three] gears, there is no material to feed the monetization engine. This pattern seems most likely to emerge in areas where public and private interests and funding intersect, such as health care, education, and public services, where both user and institutional behavior play seminal roles.

CHECKLIST OF POWERFUL IDEAS FROM 'CROSSING THE CHASM'

Word or phrases in the 'comments' section that have been bolded are defined elsewhere in the table.

Powerful idea	Key location in text	Comments
alienation, of pragmatists by visionaries	pages 25-26	There are four reasons why visionaries alienate pragmatists – see the pages.
alliances	pages 48-49	In most case it takes an alliance (of partners and allies) to deliver the whole product . Whole product alliances tend to work well because of the clear common interest. Strategic alliances with bigger and more abstract goals are harder to hold together.
beachhead	page 30	The niche market targeted for the campaign to 'cross the chasm'. (See also: head pin .)
big picture strategy	page 32	The very tactical focus of the process of 'crossing the chasm' needs to be set within a big picture strategy framework.
"bowling pin" strategy	page 17, 33, 40, 42	The strategy of finding an initial niche market on the other side of the chasm that, once secured, leads to a cascade of other niche markets successes. (See also: head pin .)
catch-22 (of pragmatism)	page 20	Pragmatists won't buy from you until you are established, yet you can't get established until they buy from you.
chasm	pages 4, 10, 25	A really difficult bridging from one market segment to another (or from one social network to another). In high- tech marketing the chasm lies between the market for visionaries and pragmatists .
competition	pages 50- 51, 51-53, 53-54	Pragmatists want to see how new ideas sit in relation to other options – so they want compare a new idea with the competition.
conservatives	pages 6, 21- 22	A segment of people who are nervous about disruptions to established patterns. (Also known as the 'late majority'.)
continuous or sustaining innovation	page 6	This type of innovation refers to the normal upgrading of products that does <i>not</i> require significant behaviour change, or modification of other products, services or infrastructure.

		65
Powerful idea	Key location in text	Comments
cracks in the bell curve	page 9	Cracks or gaps in the bell curve represent difficulties in engaging the next psychographic category in the innovation bell curve.
digitally mediated consumers (marketing to)	pages 62-64	The "Crossing the chasm" theory of change was developed for a context where products are disruptive to the consumer and the marketing to the final consumer is mediated by other organisations. But with the emergence of digital use platforms and products as a service a new model of marketing is possible. Also hybrid strategies are possible.
discontinuous or disruptive innovation	page 6	This type of innovation demands significant changes to achieve a successful application, for example in the behaviour of a user of a product, or consequential changes in other products, services or infrastructure.
dynamics of successfully crossing the chasm	pages 32-33	Because of the dynamics of technology adoption [the need to start with a small distinct market], and not because of any niche properties in the product itself, vendors of disruptive infrastructure must take a vertical market approach to crossing the chasm even though it seems unnatural later on, when a mass market emerges and horizontal [ie. spanning many niches] marketing prevails, it is much easier to take advantage of the opportunity.
early adopters	(see visionari	
early majority	(see pragmat	
early markets	pages 13-18	Markets created by enthusiasts and visionaries .
enthusiasts	pages 6, 13- 14	A segment of people who are enthusiastic about exploring/developing innovations. Enthusiasts are like kindling: They help start the fire. (Also known as 'innovators'.)
flagship application	page 10	An application that showcases the power and value of the new product.
head pin	page 42	Like in bowling games with multiple pins, the aim is to hit the head or lead pin and use it to knock over the other pins in a cascade. In high-tech marketing, the 'head pin' is the first niche market that is targeted when crossing the chasm, in the hope that success with this niche will increase the chances of succeeding with other niches, setting up a cascade of niche successes. (See also: beachhead .)
high-risk, low- data decision	pages 34- 35, 40	A very consequential decision, that <i>must</i> be made, but cannot be made on the basis of an extensive and reliable research base. In "Crossing the Chasm" the decision relates to the selection of the head pin/beachhead /initial niche market.
informed intuition	pages 35-36	Informed intuition, rather than analytical reason, is the most trustworthy decision-making tool when dealing with high-risk , low-data situations .
innovators /	(see enthusia	sts)
laggards	(see sceptics)	
late majority /	(see conserva	
mainstream markets	pages 18-22	Markets created by pragmatists and conservatives .

Powerful idea	Key location in text	Comments
market	page 12	 In "Crossing the chasm" a market is defined as: a set of actual or potential customers for a given set of products or services who have a common set of needs or wants, and who reference each other when making a buying decision.
positioning	pages 54- 56, 56-57, 57-58, 58- 59, 59-61, 61.	Positioning of a product is the biggest influence on a decision buy. Positioning exists in people's <i>heads</i> not in the marketers words/images. People are in general highly conservative about changing their ideas about positioning. Positioning should focus on making a product easy to buy, not easy to sell.
pragmatists	pages 6, 19- 21	A segment of people who want things to work well and will adopt innovations when they have been proven in practice as judged by other pragmatists . (Also known as the 'early majority'.)
project orientation (of visionaries)	page 15	Visionaries like a project orientation. They want to start out with a pilot project, conducted in phases, with milestones, and the like. The visionaries' idea is to be able to stay very close to the development process to make sure it is going in the right direction and to disengage if they discover it is not going where they want to go.
sceptics	pages 6, 24- 24	A segment of people who strongly disagree with the vision or claims of innovators . (Also known as 'laggards'.)
size of initial target market	pages 41-37	The market developer must have enough resources to dominate the target market, so if resources are limited then a target market must be chosen that is both small enough and strategically valuable.
target customer	pages 36- 38, 38-40	In high tech marketing, in high-risk , low-data situations , the best way to identify a beachhead niche market is to first identify an initial target <i>customer</i> . In "Crossing the Chasm" this is discussed most in relation to finding the beachhead niche in the pragmatist market. But arguably it might also be a method that could be adapted for identifying an initial visionary customer.
target niche / target market	pages 17, 22, 28, 29, 32, 33, 34, 36, 39, 40, 41-42	A target niche or a target market is a niche market that is the focus of a specific marketing effort. The 'initial target niche' means the same (in "Crossing the Chasm") as the head pin or the beachhead .
technology adoption bell- curve (revised)	page 9	(diagram)
visionaries	pages 6, 14- 17	A segment of people who adopt promising but as yet unproven innovations to achieve a big leap in performance. The most influential visionaries have the capacity to apply innovations in a new strategic context. (Also known as 'early adopters'.)

Powerful idea	Var	Comments
r oweriui iuea	Key	Comments
	location in	
	text	
whole product	pages 43-	The whole product is the marketed product plus whatever
	44, 44-45,	else is needed to make the core product workable.
	45-47, 49-	-
	49, 59-61.	
whole product	page 46	(diagram)
simplified model		
word of mouth	page 13	No company can afford to pay for every marketing contact
		made. Every program must rely on some ongoing chain-
		reaction effects—what is usually called word of mouth.
		(This links to the idea of viral marketing.)

Adapting Geoffrey Moore's Model to the needs of the Climate Movement

Comments

- Markets, in the context of climate campaigning, are best thought of as social networks.
- People and groups map onto the enthusiast-visionary-pragmatist-conservative-sceptic in different ways for different issues and at different times. Beware of assuming that people have a fixed behaviour in all contexts. And people's leanings towards political parties are a pretty poor guide to their potential positioning on issues related to climate emergency campaigning.
- In the case of climate campaigning at the laggard end of the bell curve is an additional category of people and organisations that are not just slow to adopt a commitment to climate action but they are actively hostile and are trying to undo the work of the climate movement.
- The 'enthusiast' and 'visionary' categories need to explored in depth in the context of climate campaigning and especially, maximum protection/climate emergency campaigning.
- Unlike the classical high-tech development process, where a technology development is the starting point, in the case of maximum protection/emergency orientated climate campaigning the starting point is the big vision. So the climate social entrepreneur probably has to turn the vision into adoptable innovations before it will be possible to find 'visionaries' to drive the adoption process. The latter group of people should perhaps be called 'visionary adopters'. (So, in this context, what is the role of the 'enthusiasts'?)
- In high-tech marketing, it is extremely difficult to cross the chasm in a *consumer* market. Almost all successful crossings happen in business markets, where the economic and technical resources can absorb the challenges of an immature product and service offering. With climate campaigning, this suggests that the climate must build up groups with the intellectual capacity, financial capacity and other resources fill the gaps in the early vision.
- The role of the 'early market' players enthusiasts and visionaries– is to invent breakthrough products and then de-risk them for the pragmatists.
- The book "Crossing the chasm" makes quite a few references to the need for aggression (see page 28 & 42) or a war-like approach. This is a dangerous use of analogy but there is an insight to be found in this part of the text. The aim, in the case of climate campaigning, is certainly to change the status quo and this can be disconcerting for those being challenged but the aim is not to be aggressive for the sake of it. Nevertheless the change agent must be emotionally prepared not to be loved by everyone 100% of the time.

- The 'day in the life (before)' and the 'day in the life (after)' scenarios used to characterise the target customer, can be translated in the context of climate campaigning into 'the future to avoid' and 'the future to be achieved' (page 37)
- The size of the initial target social network (in the either the visionary or pragmatist domains) should be easily winnable with the currently available resources.

Questions

- What is the equivalent of the disruptive high-tech firm in the context of climate campaigning and especially maximum protection/emergency response campaigning?
- In the case of climate campaigning, and especially maximum protection/emergency response campaigning, should an effort be made to saturate the engagement of enthusiasts and visionaries before moving on to engage the mainstream? (The climate emergency campaign has not yet mobilised more than a small percentage of potential 'enthusiasts' and 'visionary adopters'.) An advantage of maximising the engagement of enthusiasts and visionaries is that it might maximise the resources that can be applied ultimately to the task of building the capacity to cross the chasm to the mainstream, The downside might be too long spent meeting the very specialised and possibly diverse needs of the enthusiasts and visionaries before trying to meet the (possibly) more standardised needs of the mainstream. The benefits and costs need to be assessed based on the real situation rather than theory based on the very different situation of high-tech marketing. (See text from pages 13 to 18.)
- On page 33 it says: "Because of the dynamics of technology adoption [the need to start with a small distinct market], and not because of any niche properties in the product itself, vendors of disruptive infrastructure must take a vertical market approach to crossing the chasm even though it seems unnatural.later on, when a mass market emerges and horizontal [ie. spanning many niches] marketing prevails, it is much easier to take advantage of the opportunity." Does this apply to climate emergency campaigning?
- In climate emergency campaigning, should the beachhead adopter network/organisation in the mainstream be identified using the "target customer' method (see page 36).