

MARKETING AT AN ENGINEERING-DRIVEN COMPANY

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(Paper Ghost- Written by Laird Durham for the CEO of Boundary Technology, Inc.)*

THE PROBLEM

It has become apparent over the past year that Boundary Technology is not as competent at marketing as we are at engineering.

Because of that, customers often are dissatisfied with our responsiveness to their needs for service and new products. Although our technology is more advanced than that of our competitors, we are not viewed in the industry as an innovator, and we have lost sales to competitors who offer inferior products at the same price.

Our lack of marketing competence has resulted in lower growth and income than we and our investors expect.

I do not believe we lack the skills to be competent marketers. I believe the reason is that BTI managers and staff members hold differing and often conflicting views of marketing as a discipline and as a set of functions and tasks. Many also believe marketing is less important than engineering. That lack of consensus about marketing has prevented us from acting effectively as team. Many essential marketing tasks have been overlooked or executed poorly. At other times there has been a duplication of effort among engineering, sales, and marketing, confusing our customers, field engineers, and support staff.

PURPOSE

This paper presents a standardized view of marketing which I ask everyone at BTI to adopt and use as a working guide. I will assume the role of CEO and CMO (Chief Marketing Officer) of Boundary Technology, Inc. in order to implement a unified BTI effort.

I ask every manager to review this paper with all of their reports, and to incorporate it into position guides and performance reviews. Within the next two weeks I will schedule a series of meetings with all managers and supervisors to review this paper, and its implications to our operations. Please bring all questions and concerns to those meetings so that we can clear up any misunderstandings.

WHAT IS MARKETING?

Peter Drucker defines marketing as the total of all activities needed to transfer ownership from manufacturing to the end user. By this definition, a company has only two functions: manufacturing and marketing. If an employee is not engaged in manufacturing, the employee

* BTI is a pseudonym for this real company.

is engaged in marketing. I like this definition, and so did Dave Packard; here's what he said: "Marketing is far too important to leave just to the marketing department."

There are some functions in marketing, listed in Table 1, which require specialists, such as advertising, marcom, and channel sales. It is most efficient to organize many of those functions into a "marketing department" and, for channel sales, a "sales department". But don't confuse the "marketing department" with marketing. Marketing is the responsibility of everyone at BTI not engaged in manufacturing.

Although this view of marketing is applicable to any business it is especially applicable to a high technology business such as BTI, for no marketing decision at BTI, from packaging to pricing, can be made without engineering input; similarly, no engineering decision at BTI should be made without marketing (that is to say, customer) input.

That is what marketing must become at Boundary Technology.

Table 1

MARKETING FUNCTIONS

<ul style="list-style-type: none"> ❑ MARKET RESEARCH <ul style="list-style-type: none"> ✓ <i>Customer Needs</i> ✓ <i>Competitive Environment</i> ❑ MARKETING COMMUNICATIONS <ul style="list-style-type: none"> ✓ <i>Advertising</i> ✓ <i>Publicity</i> ✓ <i>Press</i> ✓ <i>Journal Papers</i> ✓ <i>Trade-Shows</i> ✓ <i>Internet</i> ✓ <i>Collateral</i> ❑ PRODUCT MARKETING <ul style="list-style-type: none"> ✓ <i>Requirements</i> ✓ <i>Life cycle management</i> ✓ <i>Roll Outs</i> ✓ <i>Phase Outs</i> ✓ <i>Distribution</i> ✓ <i>Pricing, incentives, contests</i> ✓ <i>Targeting</i> ✓ <i>Warranties</i> 	<ul style="list-style-type: none"> ❑ BUSINESS DEVELOPMENT <ul style="list-style-type: none"> ✓ <i>New Customers</i> ✓ <i>Partnerships</i> ✓ <i>Acquisitions/Diversification</i> ❑ CHANNEL MARKETING <ul style="list-style-type: none"> ✓ <i>Channel development</i> ✓ <i>Discounts and Incentives</i> ❑ TRAINING <ul style="list-style-type: none"> ✓ <i>Customer training</i> ✓ <i>Management training in marketing</i> ❑ CUSTOMER SUPPORT AND SERVICE ❑ INDUSTRY RELATIONS <ul style="list-style-type: none"> ✓ <i>Standards Committees</i> ✓ <i>Industry Panels</i> ✓ <i>Association Membership</i> ❑ MARKET AUDIT
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THE GOAL OF MARKETING

Marketing creates customer satisfaction by fulfilling customer needs, desires, and expectations. In doing so, marketing creates growth.

1. Marketing satisfies existing customers needs and expectations, so that they will continue to provide repeat business as they grow.
2. Marketing anticipates the need for new products and services to help make existing customers more successful.
3. Marketing anticipates the need for new products and services which will attract new classes of customers.

Marketing designs a product based on a customer's needs and then fulfill the need in a way that satisfies the customer's desires and expectations. Satisfying desires and expectations includes reliability and service, pricing and distribution. It includes all the steps involved in transferring ownership to the customer, including how the products interface to customer and end user systems, how the manuals are written, and how the product is packaged. Every step in this process must be focused on serving a customer need, fulfilling a desire, or satisfying an expectation. I call this activity marketing engineering. ***At BTI, every engineer not assigned full time to manufacturing is a marketing engineer.***

ANTICIPATING CUSTOMER NEEDS

Anticipating and satisfying customer needs is the essence of marketing engineering. What a BTI marketing engineer does is do to anticipate customer needs and desires. He does that by listening to the customer, developing a marketing strategy, and executing the strategy under a coherent marketing plan.

LISTENING TO THE CUSTOMER

The BTI marketing engineer listens to the customer in many ways.

- The BTI marketing engineer attends and participates in industry association and engineering society meetings where he or she has opportunities to interact with the customer. Active participation in such organizations, by attending meetings, presenting papers, and serving on committees and boards should be made part of every marketing engineer's job description and performance review.
- The BTI marketing engineer works with BTI's market research specialists to help design customer surveys and focus groups. The marketing engineer takes the initiative in pointing out the need for such market research to resolve engineering trade-offs among price, performance, and pricing options.
- The BTI marketing engineer attends regional meetings of engineering societies and professional information technology associations to present papers and to interact with members.
- The BTI marketing engineer participates in customer visits and presentations at BTI, and takes the initiative in setting up such visits and presentations.
- The BTI marketing engineer conducts one-on-one interactive discussions in person, and by telephone and email, with customer engineers and managers.

The BTI marketing engineer regularly gets out of his office and into the airport.

THE LISTENING PROCESS

There are two modes involved in listening to the customer and anticipating customer needs and desires: reactive and proactive.

Reactive

The easiest way to anticipate customer needs is to listen to the customer express them, and to react to the expressed need. But there is a danger in this approach. The need the customer is expressing may be impractical, or it may be so specific to that single customer than the potential demand for a product based on it would be too limited for commercial success. Of course, there are exceptions, such as when the customer alone is large enough to provide enough demand, or when the customer is willing to pay for NRE.

Proactive

The essence of BTI marketing engineering is to influence the customer to express needs and product specifications favoring BTI's technology and products line.

To do this successfully requires exceptional skill. It cannot be done by technological argument. It can only be done by understanding the customers' needs and showing, through interactive discussion, how BTI's approach meets those needs. Often, it also requires industry participation, such as in influencing standards bodies, and presenting papers which express successful applications of BTI products. The BTI marketing engineer must always be alert to the opportunity to let BTI's existing customers do the influencing by arranging demonstrations of BTI products at customer sites. Trade show demonstrations are another good way to influence customers because the customer often attends the shows to get ideas for new products, and is in an open frame of mind. Combining exhibits with presentations of technical papers is ideal.

Proactive marketing engineering is an activity that makes selling superfluous.

THE BTI MARKETING STRATEGY

The Marketing Strategy at BTI specifies how BTI is going to create customers and attain company growth. It identifies target customers and market share, specifies a market posture, specifies a product/customer mix, and describes how BTI will differentiate its products from those of the competitors. If you read the previous sections of this paper carefully, you will realize that in differentiating our products from those of our competitors we do so in a way that shows the customer we are better at meeting his needs and desires than the competitors.

The leader in any industry or market by definition sets the price and performance norm. Other market competitors posture themselves with respect to the leader. They may be a performance competitor, seeking to serve the niche that will pay more for a higher performance. A competitor may posture itself as the economy competitor, offering a reduced performance and lower price than the leader. Either of the two lesser postures can be a successful marketing strategy.

Our posture at BTI is to be the market leader, and to set the price and performance norm. This requires that we develop a superior knowledge of the customer needs and desires, and offer both the price and performance options that are in demand by the largest number of customers.

THE BTI MARKETING PLAN

A marketing plan is the time-related details for executing a marketing strategy. It specifies the deployment of marketing functions; who is going to do what, or, at BTI, who is going to do what *together*. The plan specifies the resources that will be required to execute the marketing strategy successfully.

Finally, and most importantly, the marketing plan sets out the results expected from executing the plan – the “if, then what”. That is, *if* we expend the specified resources through the specified activities of the designated personnel, *what* are we going to get in return? Without the “if, then what”, the marketing plan is incomplete, regardless of the detailed activities it describes.

We have a marketing strategy at BTI, but we do not have a marketing plan at BTI. As CMO, it is my goal and my responsibility to have a such a marketing plan in place by the end of the second quarter of 2001.

It is my intent to create the marketing plan with the participation of all BTI marketing engineers and with the marketing, sales, financial, and administrative staffs.

Though we do not have a plan, I do have an outline of a plan, and we do have business objectives for growth which the marketing plan is to achieve.

I also have an understanding of the marketing process at which we must be successful to become the market leader. This process will form the basis for translating our marketing strategy to a marketing plan.

Here it is.

HOW OEM CUSTOMERS ARE CREATED

BTI's customers are OEMs,. We do not sell to end users, and only indirectly to channel partners. OEMs, as do individuals, only become customers if they have a need or a problem that recognizes a BTI product as a solution. They do not become customers through technology push.

CUSTOMER DEMAND

For an OEM, the most powerful need or problem is generated by customer demand. There is no surer way to sell an OEM than to have the OEM's customer tell the OEM to buy a BTI product. That is how BTI sold IBM. There is no OEM sales stimulant as powerful as customer demand.

The most important single issue to address in BTI's marketing plan is how to create end user and channel demand for our products, even though we do not sell to end users and channel partners..

There are at least six marketing functions through which BTI can create end user demand. The most important is to spotlight key end user sites, to show other end users, OEMs, and the channel how BTI products have been successful for end users. Of course, this means the end user must be successful.

Our number one marketing job, at this point in time, is to make end users successful in using our products, and to make sure everyone knows about it. This is the most important single task to plan.

Other activities which create demand pull through are leading meetings of industry and engineering society organizations, publishing papers in peer review journals, cultivating industry analysts, creating opportunities to speak at Society regional meetings, and by serving on industry committees and panels. Although discussing technology issues at these meetings is important in proactive listening, reporting on end user successes is even more powerful.

Other reasons that cause an OEM to see a need or problem are competitive pressure, internal needs for costs savings, or an internal need to increase market share.

COMPETITIVE PRESSURE

BTI also can win OEM business by offering the OEM an opportunity to increase market share, even without competitive pressure, or offer an opportunity to reduce product costs, but it depends on someone in the OEM organization believing that there is such a need or opportunity, and that is not always the case.

Once we have succeeded in establishing a customer, the most effective means to leverage that success to create additional OEMs is to show how the end user was well served. We want to show the next OEM prospect how it, too, can solve end user problems by employing BTI products.

PREFERENCE FOR AN OUTSIDE SOLUTION

Although end user demand is the most important single issue in creating OEM customers for BTI, it is not automatic. Despite customer demand, the OEM also must see buying from BTI as a preferable way to meet the demand than internal development.

Internal development is always the OEMs instinctive first choice in meeting demand. The closer the demand is to the OEMs key strategic focus, the more compelling internal development is. BTI cannot hope to show the OEM that we are a superior choice than internal development by claiming superior technology, or by fielding a superior sales force, or through negotiating skill. We can only do so by demonstrating success.

DEMONSTRATING SUCCESS

We can show the OEM how our solution is successful in an end user environment, how it can shorten his time to market, and how we can work with the OEM to use the BTI to differentiate.

We must demonstrate for the OEM at end user sites how the BTI product is more reliable, better supported, and more in demand than an internal development might be.

How can we do that in the fastest way, starting now? That is one of the tasks the marketing plan must address.