My Demand Management Manifesto

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Introduction—Principles

Every manifesto needs principles as its foundation. Ponder these:

- Forecasting is not Demand Management.
- Forecasting systems live in the office—not in the customer's world.
- Forecasting systems are based on history. The problem is that history did not turn out the way we planned—or wanted.
- Companies spend millions on engineering products, but no money on engineering an experience. Lousy experiences are sure to reduce future demand.
- Forecasting systems are focused on products—not customers.
- Forecasting systems do not anticipate; thus, they have no idea there could be an upside.

Forecasting systems may be really smart and forecast well within any given parameters, but they don't manage demand. *They don't see potential demand.* Hence, having all the potential in the world is not enough. If, as a product company or retailer, I don't see that potential, see the challenges I need to address, and don't understand my markets well, I will never reach that sales potential.

We have a new era—with a new generation and new opportunities—in which we can embrace globalization, new generational demographics, new technology. This new era opens a world of possibility, of rethinking our challenges, and creating new opportunities.

One of the most exciting areas is in the domain of customer engagement. And I believe we can do it in a way that is not intrusive to privacy, yet betters the lives of customers and still provides better methods to create products, sell to and service customers, and make the quality of our work more enriching. Customer engagement—using streams of information we gain from social, search, mobile, web, customers' own contributions, environmental analyses of locales and societies as a new front-end to forecasting systems—allows for the creation of a richer picture that can be leveraged in profound ways.

My manifesto is a simple one, I suppose: let's use our insights and technologies to listen to our customers.

Chapter One: Demand Management's New Era

Demand forecasting, i.e. product forecasting has always been there. But predicting customer demand has always been problematic. In B2B markets, forecasting based on direct customer sales has been possible through the sales force's forecast. Though not 100% accurate, at least there was dialogue with a prospect. In contrast, *consumer* demand in B2C markets has been most challenging: trying to forecast people's behavior—not products.[1]

But now through social and mobile, and some retail forecastable business models such as home delivery that have 'subscriber elements' (i.e. weekly home delivery of staple food items, for example), we should have the making of a customer forecast.

Customer vs. Product Demand Planning…

I'm offering an opinion piece here, since the path forward described here is somewhat experimental. That is, not many companies have fully formed their consumer/customer demand strategies using the methods and technologies talked about here.[2] Many of the techniques talked about in this report are being piloted. They just are not present in the business community at scale today. So this will be my prediction—*our supply chain planning and forecasting methods are about to get a makeover—using new analytics based on entirely new sources of information*. But first, let me ruminate a bit here and then walk a potential roadmap to the future. (Those who know me know that I can do a couple of streams of ideas, so I request a bit of patience.)

Customer Demand?

When we read articles, reports, and academic books about demand forecasting or 'customer demand,' they say, "To understand demand, start with a product forecast." But isn't that product forecasting? To explain further: A product forecast is a projection by the 'sell-side'—manufacturers or retailers—based on their existing products. And wouldn't a customer forecast be one that forecasts *customers' behavior*? It is not just a matter of semantics.

From decades of experience we *know* we are working with a faulty premise, since the world is littered with excess inventory—on the shelf, in the home, or as throwaways. (In my personal life, I will admit to having bought items I didn't really need and making trips to thrift charity stores or Goodwill to dispose of them.) Fundamentally, there is nothing wrong with those items. We know that in all industries the disposal of unsold or obsolete goods is a huge problem, incurring losses in the form of logistics costs, and

[1] I have had debates with retailers and consumer products companies who posit that their forecasts are accurate. However, this is often due to 'make-do' purchasing on the part of the customer. If the customer is offered limited choice, they may substitute, confirming your forecast. But are they happy? Will they be loyal? But there are also many planners who do agree we have a very long way to go in understanding consumers, and their excess inventory is merely one symptom of the inaccuracy of the forecast.

[2] In our business we talk to many end-users about their pilots, new initiatives, and the approaches they used to envision and plan their new blockbuster products. And many of the techniques that will be discussed in this article are being used. Just not at scale….yet.

product design and creation costs. And the truth be told, the total cost/loss for these items is not completely understood, especially if we factor in environmental impact.

Thought: New product introduction is an inexact process due to poor insight into the future.

If we look at what is embedded in the numbers for product demand, the information contains several aspects. Product forecasting is the result of predicting demand by channel, location, or segment, and so forth. The rate at which products might be refilled or replaced (replenishment) can be adjusted according to the terrain—time and expense to get the item to a specific location. Terrain also has other attributes such as environmental factors—disease, weather, local events, etc. All these factors can impact demand on product categories. In addition, a location has other attributes such as the demographics that describe the consistency or stability of buyers in that locale plus their past history of buying your brands or products.

Thought: Thus forecast is relevant to, and often influenced by, the location.

In the age of the customer, I think we need to amend these concepts and look anew. I won't go as far as saying that technologies such as social, search, and mobile will destroy the past approaches; but surely the past approaches need to be amended, since location should no longer be considered a fixed coordinate of the terrain, but rather, *data attached to the customer who may also be mobile and not part of that neighborhood at all.* Now that they have access to the world, customers have shown their ability to shop globally, right from their chair. And conversely, with mobile, they have shown their ability to 'pop in' anywhere.

Thought: The attributes usually associated with the demographic belong to the customers—not the neighborhood.

So location is both a fixed coordinate and a dynamic data point. Demographics may point to a concentration of a certain wallet size, but they don't tell us much about individual customers. With mobile, the consumer has a way to be *self-declaring*. I write about this topic a lot because each year more options to understand customers and access data enable us to become more analytical and incisive about what customers will actually want.

Thought: So mobile technology and dynamic location—location-based data—are important elements in thinking about new modes for demand management.

However, there are location-specific demand issues as mentioned above—the terrain, the season, the population, for instance, skiers in the mountains and surfers at the beach. I may stock a few surfboards in Aspen because my customers travel to the beach in the summer. But the concentration of these products really belongs at the ocean. We have some handle on the stable side on this issue—seasons, but a poor view into the event aspect—unseasonable weather and local events.

Today, communities, economists, and planners are a bit better at understanding the impact of say, a big competitor moving into a locale, how a new big mall will impact the downtown, or how a discounter will affect traffic patterns and such. But ask yourself, "Does my demand system purposefully and systematically understand and quantify events and their impact on the forecast?"

Thought: Demand Management methods and systems should develop those techniques and statistical methods.

So far, I have just offered some serious issues associated with demand planning as practiced today. Now we will move on and explore areas of 'discovery.'

Search—Some Questions to Ponder

Is search *demand-side* (customer) driven or is it *demand shaping (supply-side)*? When universal search first made its debut, it appeared that the consumers were steering the queries. But after many years of search-engine-analytic-driven selections, I wonder. If you are a determined type, you can get beneath the front page and the ads to find *something you are looking for.* But otherwise, not.

So are search results reflective of buyers' interests or are they circular sell-side projections? Probably a little of both. And judging by the main sources of revenue for the search community, i.e. marketing professionals, search results are probably more a projection (i.e. marketing) than a reflection of customers' interests. Hence, they probably don't really increase our understanding of our customers. This approach of directed search does have selling merit. And that is a dilemma for consumer companies: We want to sell our products. And behavior modification works up to point, to help *sell.* But ultimately, it is not a good reflection of customers' thoughts.

Thought: To understand customers, we need their input—not ours.

Big Data and Analytic Engines

We are getting pretty good at observing data patterns and correlating them. For ten years at least, there have been advanced analytics that look at various patterns and glean some important insights. But in reality, we are still new at this. Sifting through web data is still in its early stages in terms of learning new things about customers in an empirically useful way—for example, connecting web data to a predictable

forecast of events or product purchasing behavior. The challenge for the sell-side is to not jump to conclusions too fast by applying a subjective filter to what they are seeing. It is all too easy to do this; hence, models have to be developed that test the observed patterns over time. We already have some experience with this in the demand-planning community. Forecasting systems that model new product introductions, for example, may propose a forecast, then rapidly test activities and sales to see if that is actually happening. The plans can be amended, if need be, as real data comes in. A more promising approach is complex event processing, or CEP. CEP looks at series of events over time and paints a richer picture of what is going on.

All forecasting systems need to be broad enough to look at the supporting or environmental events surrounding product sales—not just at the sales themselves—to determine if those factors are the cause of any unexpected results, and if it is possible (or desirable) to change those events to create the desired outcomes.

Thought: We have the ability to analyze and correlate many aspects of data. Understanding the environment is critical to deeply understand markets. Most CEP applications look to push alerts. They don't retain the information to correlate cause and effect over time.

Social—the Next Frontier

My recent experience purchasing a rainproof jacket highlighted a few things to me. After looking at more than 35 different products, I narrowed the selection down to the ones with the most favorable reviews. I am sure you often do this. Reading reviews has become a habit for many of us—from selecting a cab company (my driver was late!) to consumers' complaints about hotels, pricing, quality and *true-to-advertised* statements. A company that deals with consumers is smart to let these comments flourish (and of course address them). *But they should also remember that these comments do correlate to potential or actual product sales.* Recent attempts at social analytics are a bit crude at this point, but the early developers and users are learning a great deal.

Thought: Social data does have value in predicting low demand and providing insight into why it is low.

I Get Sentimental over… *Good Numbers*

Social has its issues, though, in gauging the accuracy of sentiment and how sentiment translates into hard forecast numbers. Today, sentiment is also a hotly debated/contested field. If consumers don't 'like' your product or actually voice displeasure in some way, you have a lot of challenges in getting around that. If you try to shape the dialogue, then you gain no real insight. On the other hand, social phenomena have allowed savvy marketers to gauge the public's reaction to certain ideas and impressions before they create marketing campaigns.

Most social analytics sit within a company's own website, so they can obviously monitor their own traffic. But they may not reach the wider world. Tools that go across browsers allow companies to see topics on Twitter, Facebook, and Google, for example, to see what is happening across the societal landscape. These views of consumers' online habits can provide very useful insights, but they also point to major challenges with the data. Consumer analytics (tracking cookies and other web analytics) are somewhat controversial, but they appear to be here to stay. The downside of the information is that it can be extremely inaccurate. Consumers can tailor their personas to avoid being targeted by certain types of advertisements by lying about their age, gender, and so forth.

The term 'social media sentiment' is used a lot. Here is the problem: Who's driving the conversation?

In B2B, these social sites are fairly useless, since they have become pure marketing sites. Business people are loathe to state in public what their experiences are with certain products. Consumers are more chatty about such things. We want more consumers to be generating content and sentiment. Again, we don't want the overlay of circular messaging by marketers. However, in all that data there still is co-relatable data that can be used for creating patterns and understanding consumers. A really savvy product team/enterprise that wants to do some honest sifting will be ahead here (as long as they don't drink their own or their competitors' 'web-based *Kool Aide'*).

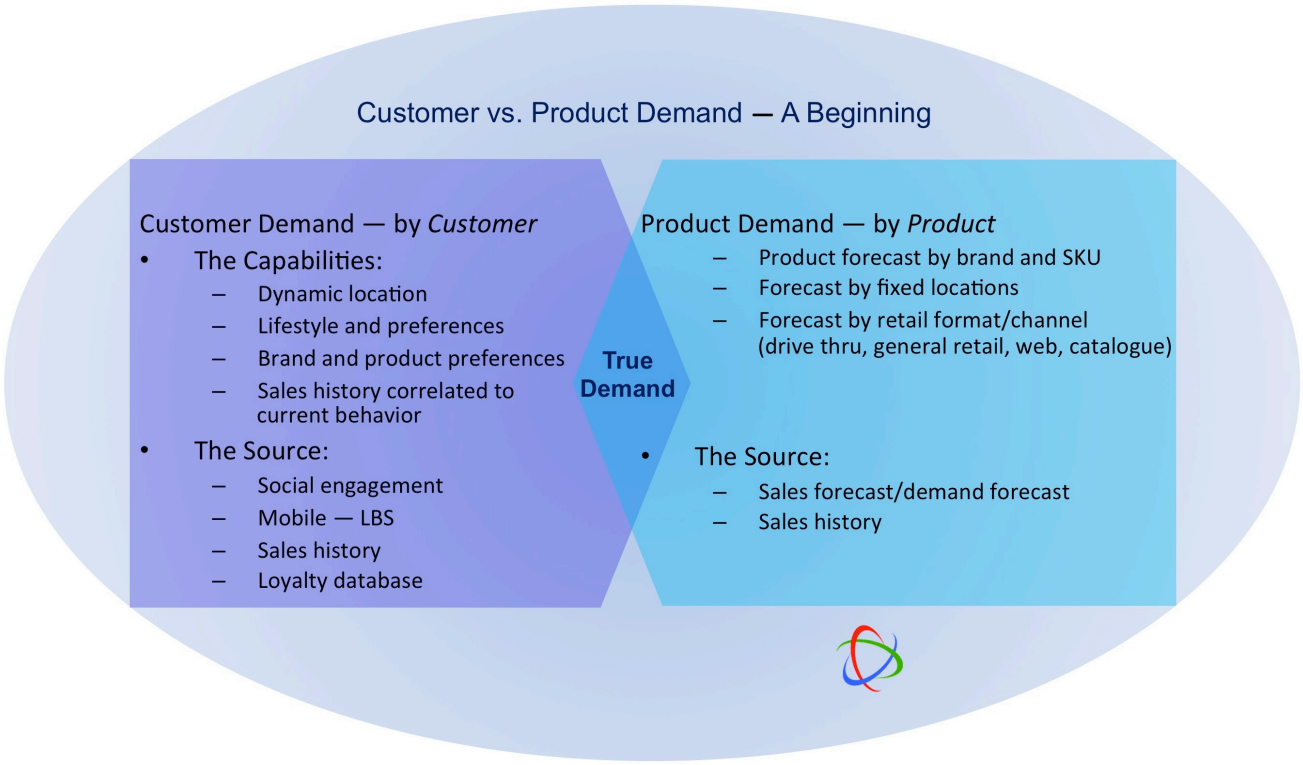


Figure 1: Customer vs. Product Demand

If it sounds 'mashed up,' it is. We are still pretty far off from the precision required to use this data for financials and supply chain planning, but insights are there. Today, it is high-value information for early-stage category or brand-launching ideas. Unmet demand is pretty obvious already if you use the right

search and analytics—and the right groups. Purpose-driven, social groups tend to have better concentrations of the type of consumers that might be of interest to your research.

This year (2013) we have seen the launch of some tools that correlate social sentiment to create a forecast model. Early users in end-user companies are in pilots to bring really useful products to the market.

Thought: Social data that indicate popularity of brand, category, and reputation can serve as a signpost of early-stage demand for marketing and product planning.

An Opportunity within Easy Reach

Consider this: lifetime value or follow-on sales. Here is an opportunity to harvest a low-hanging fruit, if we can get it right. We can leverage the data from existing customer relationships to educate the market and gauge results. Many companies already have decent data about their lifetime relationships with their customers. Computer and automobile purchases are markets in which the continued customer relationships are known through services, add-ons, upgrades, and eventual replacements. Some smart loyalty-program databases also contain information about customers' brand preferences and interests and will market to them. (When my hotel loyalty program stopped sending me Caribbean getaway package promotions and switched to the London packages, I knew their analytic engine must have kicked in!)

Now there are better ways to engage consumers, and if used intelligently (i.e., *not* daily email offers and useless marketing), they can allow companies to design and sell products that result in additional sales.

It's an easy opportunity. If you have a customer who spends $500 a year buying slacks for ten years and then suddenly stops, your analytical system—social or not—should be flagging this issue. And if it is

statistically relevant—many customers' behaviors are similar—you know you have a BIG issue to resolve. Using social networks allows you to dialogue with the customer and understand if you are taking your products and services in the right direction. I bring this up because, unfortunately, we don't see much of this. One or two companies send out "we miss you" emails. But most of these emails are projections. Rather, they are, "Here is a coupon—*come spend*." They don't ask, "Why have you stopped?" There is no analysis of the root cause of the absence, no opportunity to "tell us how/why we are not making the most of our relationship." Herein lies the power of social networking—it is a scalable way to engage the consumer.

Thought: Social can be used as input into loyalty programs, to shape future demand, and forecast long-term demand.

Those are early ideas of where we need to go to actually forecast *customer demand* and some ways in which to begin to leverage our new world to do so. Skeptics have told me that they already have customer demand since they have sales history and web analytics. My retort: Tell me about your inventory turns, your markdowns and your excess inventory. But again, those look at current or past behavior—they are not forecasts.

Many successful companies or product launches are attributable to deep and painstaking *customer* analytics. How refreshing when consumers are delighted with a product and how disappointing when they see the same old thing or poorly thought out products. And sadly, most companies have very sketchy insights into why they are failing or succeeding with a certain product. Creating customer relationships and analytics is the new way forward. It's time to move beyond Facebook and create a new face for the company.

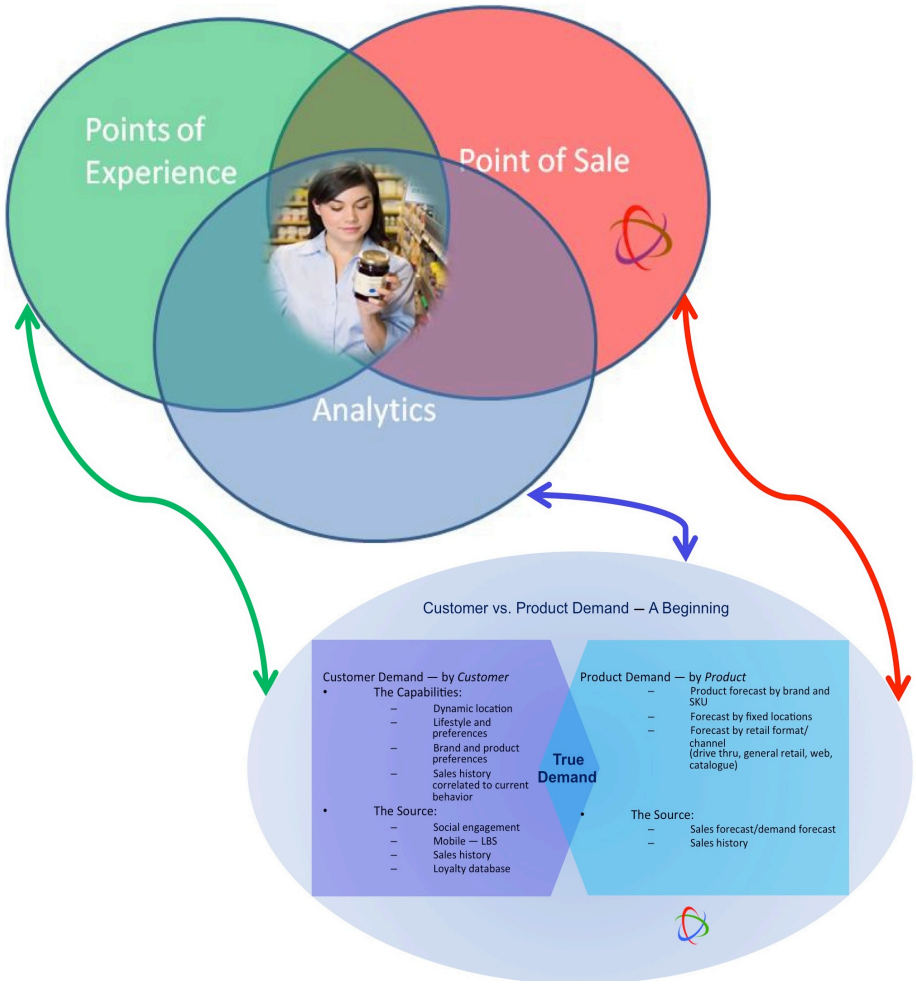


Figure 2: Points of Experience/Sale

Chapter Two: Rethinking the Customer at the Point of Experience

Social Is Not Enough

We all have been subjected to way too much canned, paid-for, ad-video marketing content. As I did research for this report, I saw more than a dozen so-called social videos, spoken by marketing professionals. Honestly, I did not see dialogue. That's social? Real social networking is to connect the people in a company to their customers. Yes, that is the point: P2P!

But here is my issue, and it gets to the heart of the real opportunity for businesses in the future: All the videos depicted people at desks in offices communicating through laptops or mobile devices. They did not show the consumer vantage point at the *'Point of Experience.'* No doubt, in the last year or two, the social networking mantra has been about demonstrating that Enterprise Social Networking has value for the B2B world. And that is important. But if we want to understand consumers, we have to be out there where it counts. Otherwise, we fall into the circular-argument trap once again.

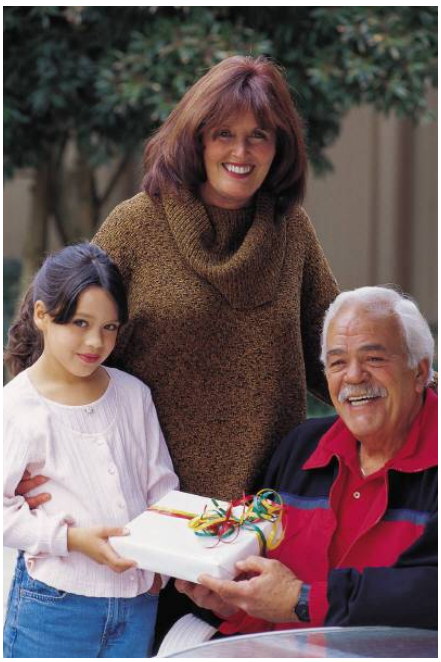
Retracing Our Steps

Many of the system paradigms we still use today are based on models of the past. They are top-down, centralized ERP concepts (with management in control at the core of the design). People are chained to desks. This concept may work for accounting, but the accounting department does not think or act like the customer. Over the decades, many models (such as demographics, sales history by customer) have been developed to represent customers. But that perspective only gives you that myopic historical model—what you *did*—not what you *could do*. Real customers' desires, dreams, needs (and wallet) may be *far greater than anything dreamt of by your system*.

This internal database built on an accounting paradigm has no dialogue whatsoever with customers. Thus, social is incredibly valuable since it has the customers' own words. Above, we discussed looking at social networking data to gauge customer sentiment, attitudes, etc. But customers' data is messy (in its raw form, it does not lend itself to tidy fields on spreadsheets) and it requires new analytical approaches to assess its meaning. In fact, we live in a multi-dimensional world. (Hopefully, the extent of our life's experiences is not just sitting at our screens!)

Thought: Customers' data is different than the old paradigm of 'customer data.'

Living in 3 Dimensions



Our lives are played out in multi-dimensional worlds filled with encounters, thoughts, and behaviors that are the real measure of *us*. Let's call that an *experience cycle*. So the real challenge for businesses that want to understand their customers is to engage with them at those points of experience. And that takes a different technology paradigm.

It also takes a different skill set to take a different perspective. Lately, the stampede has been to redesign websites or build cool mobile apps. That is important, but what about the customers' multi-dimensional experiences—***where and how*** they shop, get entertained, travel, or dine out. We might like ways to capture those experiences. This goes beyond omni-channel which, though also important, is really about the point-of-sale, not *the shopper* or the shopping. POS data, again, is removed from the person. It is still a record of what you *did*—not what you *could* do.

And, I must say, POS is rarely about selling. It's about transaction management—taking money. That is the last part of the sales process, and it only happens if you do other things right.

Another part of the multi-dimensional life, of course, is what people are saying to each other. Here I will drop the presumptive 'customer' phrase for a second, because we are people first, not customers, in spite of society's commercialism. Once again, the old systems' need to put people in boxes misses really seeing them as they are. One of the issues that Facebook, for example, is clearly struggling with is the obvious conflict between the one billion people who use Facebook because it is free, and the real customers of the social network—the advertisers. Zuckerberg is trying to walk that fine line between these two perspectives. This is an important issue that is underappreciated by Wall Street, but certainly worth noting here. People are sharing quite openly, but it is all unstructured data. Marketing is trying to pull numbers from it—how many visitors, how many clicks, and so on.
But, *clicks do not equal cash!*

The obvious question is whether the 'experience purveyors' have the technology to capture people's impressions in real time, not just the subsequent sales data should a sale occur. Such technologies are emerging. (I covered that topic in another article, *Cool Companies in the Age of the Customer.)*

Thought: We need technologies that can capture impressions, as well as location and other data.

What We Need To Do to Engineer an Engaging and Valuable Customer Experience

Let's think about this in totality for a moment. Figure 3 shows a pretty typical view of channels and points of experience.

Figure 3: From Design to the Points of Experience

Using myself as the 'victim' in this example, let's examine the Point of Experience to illustrate a few points. As a person who enjoys the hobby of jewelry making, I literally have traveled the earth (as well as assigned family members) to find the most incredible beads. In the process, I have had a lot of *experiences*. I am bombarded by advertising from manufacturers of equipment like lathes, torches, drills, work tables and safety garments—for you male readers, making this stuff is more interesting than you might think. Advertising also includes craft how-tos, beads, and supplies. Beyond that, there are massive trade and craft shows all over North America with vendors from all over the world including from Africa and Asia; and mining companies that sell minerals and precious stones as well as finished products, beads, and supplies. All these points of experience prompt online, catalogue or in-person shopping and purchasing before I even use the products (another layer of experience).

I would think that savvy manufacturers or the many trade channels might like a little more information about customers like me—information that provides the more holistic view, more than just Ann popping up in Toronto and spending a few hundred dollars, or spending €80 at a shop in Brighton, UK. They might like to know how she wound up in those locations.

Thought: Don't confuse the channel with the experience.

What about Mobile?

If you look closely at these social or mobile apps, *they are the new disruption*. I am using my mobile app while in the grocery store—but really, does that allow me to *smell* the fresh bread? Can I *see* if the products are displayed well? Can I *taste* the new party snack?

From Great Product Design to Great Experience Design—Is There an Experience Lifecycle?

We have talked extensively about designing business models based on experience. But those models were still very much focused on a product or service design—i.e. *enhancing the product* to include the environment in which it is experienced. Those who can do that stand to gain a lot more revenue from that customer relationship.

If we reorient our thinking from *product lifecycle* to *experience lifecycle,* a new and more engaging business model (or product) may emerge, such as shown in Figure 4. Toy companies reap far more revenue from creating an experience—building bears, hosting parties—than from sales of the physical product alone. Of course, we are all familiar with the massive branding and cross-product ventures of the entertainment/movie industry, extending the life of adventure heroes such as Star Wars characters, Batman, etc. in toys, games, and apparel. That takes a new vision, a lot of engineering, different skill sets, and new ways to understand the customer.

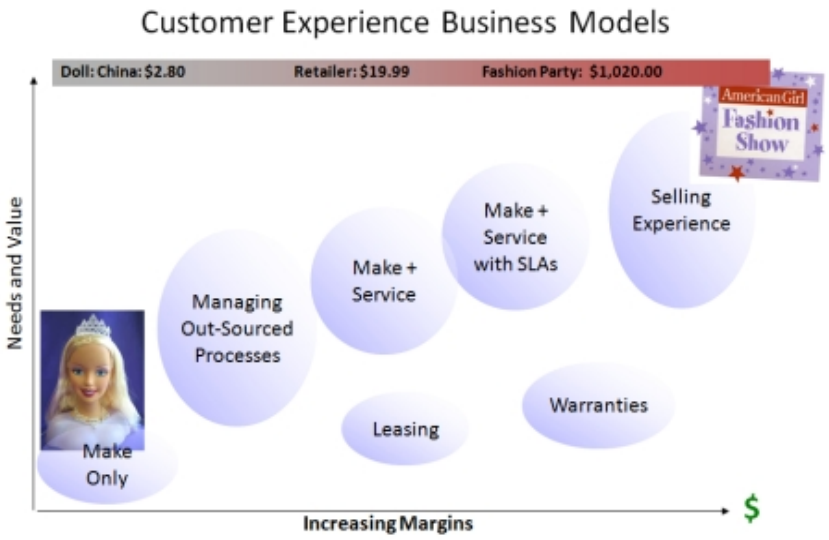


Figure 4: Moving from Product to Experience

Voice-of-the-customer programs are in short supply in many companies. Customers are 'voicing' their valuable opinions every day. But are we listening? Surely, not enough.

So, what's that got to do with demand management? A lot. If you follow one idea here: Can we create an experience environment where we can test out new ideas for products, services, or the combinations thereof to determine if a product should even be built? Of course, many companies have such labs and they do bring consumers into their confidence to use prototypes. However, past experience has shown that these focus groups and lab successes don't always translate into successful products due to an inability to scale.

Part of the issue, of course, is pricing. One technique on the web, gamification, leverages many of the concepts we have been talking about such as crowd sourcing and behavior segmentation (rather than traditional demographics).

In the next chapter we will look at one aspect of the gap between 'provider' and customer: the so-called point of sale. In our new demand management manifesto, the point of sale must be re-engineered to help support *demand creation*.

Demand Management Goes to the Customer: Rethinking Point of Sale

In the past, we thought about the point of sale (POS), if we thought about it at all, as a store operations function: finding hardware that works well and designing a controlled exit—what is commonly called a chokepoint—that serves to keep an eye on people who might be tempted to leave without paying.

Some retail readers may be offended by that statement, but that is a fact. Loss prevention is as big an issue in point of sale/checkout design and systems as in creating welcoming entrances to the store. But is the checkout really a point of sale? Doesn't the sale really happen somewhere else? And as a so-called point of sale, clearly it creates a sense of resentment in customers when done poorly. And many times, it is.

And I must say again, POS as it is practiced today is rarely about selling. It's about transaction management—taking money. That is the last part of the sales process and again, it only happens if you do other things right. Is that any way to treat a customer? Surely it's not a great experience. Therefore, consumers are rebelling and shopping from home, or engaging in other modes of shopping such as at fairs, flea markets, etc.

Thought: The exit/payment process looks more like a system to 'keep people out' than to welcome or make it easy for them.

Go Where the Customer Is

If we think about the *POS as 'sales occur where the customer is,'* then we can innovate. And we can see other mobile POS concepts: Go to where the customer is; find what they are looking for; talk to them; serve them; then transact. We have seen these systems take off in mobile-oriented businesses. In these business sectors, there is a high level of contact between the customer and the provider—the customer-to-provider ratio is quite low—1:1, for example, in a cab ride. Or 3:1 at a trade show booth.

Though the inventors of the mobile POS envisioned these systems being used, say, in retail apparel, the reality is that in retail in general, there is a really high ratio of customers to salespeople. Any customer knows while walking around a big retailer that it can be very hard to find people to wait on you. So unless retailers want to invest in technology for the sales associates (and some will), we won't see too many of these systems around for awhile.

Sticking technology on a mobile device for the salesperson is getting pretty easy. That's not the problem. But in consumer markets, sales associates are rarely empowered with tools to sell. Could it be that retailers don't expect these people to sell, but just to provide that last element of the transaction that requires a human? With self-checkout, even that is reduced. A retailer spends millions on creating a store, presumably to have customers come and enjoy. Ironically, many customers wander around your multi-million-dollar establishment with little to no human contact from your employees. It is a missed opportunity.

Thought: Let's have salespeople sell! And let's have them spend time with potential customers to collect meaningful data about impressions then and there.

Source the Crowd? Go Where the Crowd Is!

What we are beginning to see is new ways to move retail to where people are. Location-based services (LBS) look at one customer at a time, and can look at the group was well. Current consumer applications try to bring the crowd to you. And this does have value. As discussed above, a local event can be leveraged for example, to alert the crowd that when "they leave the game, they can come to your establishment for your products and services." Or, a current weather condition alert could translate into "come to our store for your hurricane supplies," and so on. These bring the crowd to you.

Long term, LBS systems bring the retailer or product to the customer. Looking at traffic flows and locale/terrain data, as we talked about earlier in this report, combined with data about specific demographic information can help pinpoint where you might want to locate your next store. A few great cases of this do exist[3] and they are demonstrating increased sales due to improved customer convenience.

Conclusion

Organizations need to think of their POS as points of experience and rethink how these experiences work and what they say to the customer. Retailers can reorient their thinking and transform these points of experience into those that entice customers and, therefore, *bring in more sales.* Social contact is still a big driver of brick and mortar sales. If you have one of these locations and you don't maximize it for the customer, you will lose customers.

Conversely if you are an etailer and you don't maximize the last mile—through the delivery—you won't have repeat customers either. As a merchant, you can't sell if the whole process is not convenient and enjoyable.

If you have a business that is rated low by customers (airlines and cell phone companies come to mind), or you are facing incredible competition (retail), shouldn't you be rethinking your whole relationship with your customers while they are *still* your customers? Brand companies cannot rely on the retailer as their savior with the consumer. Even today, with so much going on in mobile and social, most brand companies have no idea who actually buys and uses their products.

That is bizarre, when you think about it. And *do* think about it. The customer does not *live* at your artificial points—and *this is the point*: they live in a process of learning, assessing, shopping, and paying in a multi-dimensional world. *And if you want that loyal customer, you really have to think about their world—not yours.*

As we continue to write the new playbook for Demand Management in this series, our next article will look at providers from our research into retail.

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[3] These methodologies are used by the big retailers, but not systematically. Logistics companies use these techniques all the time to pinpoint optimum locations for warehouses, for example. However, all types of product and customer service companies could be using these techniques.

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