

THE STRATEGIC MARKETING FUNCTION IN DYNAMIC MARKETS

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Abstract: Marketing has a glamorous role in the business world. It is at the forefront of the firm-market interaction, it represents the best compensated activity in an organization. Marketing assumes a leadership role in the firm and sets the tone of the strategic plans. The approach and strategies seen in marketing throughout the market lifecycle are influenced by factors and players, which significantly curtail its role and circumscribe its influence. This article examines the evolution, along the market lifecycle, of marketing's role and spheres of influence, and proposes two predictive mechanisms that allow for the estimation of "tipping points" for the different characteristics that define the marketing profile along the lifecycle. We introduce the big bang model of market dynamics and examine the behavior of the marketing function depending where the firm is relative to sink holes, transient and steady states and how the market is pulsing defines the marketing priorities. The article further identifies the factors circumscribing the functions and freedoms of marketing along the lifecycle in hi-tech, to develop a clear picture of the various roles that marketing plays as the firm proceeds along the lifecycle from incubation to market maturity.

Key words: marketing function evolution, marketing tipping points, lifecycle model, big bang model, market dynamics

Introduction

Marketing does not operate in a vacuum; rather it takes its cues from one of the primary functions of a firm – strategy. Strategy as it evolves along the market lifecycle will send different "coding instructions" into the marketing function.

To better understand the main constraints and opportunity sets for marketing activities, we observe the changing profile of a firm's strategy and how it responds to major anchoring events in the market as the firm proceeds from start up through incubation, to high growth to levelling off, and through the dark phase of shakeout to market maturity and eventual decline. Our template will focus on the hi-tech sector, but generally any market that experiences rapid changes will fit the model.

The Market Landscape; the Lifecycle Approach

From the perspective of the lifecycle model the young firm starts out in the primordial market darkness looking for its universe to be born. This is the incubation stage prior to the market even signalling its existence; entrepreneurs abound, and new ideas float, often aimlessly. Various product offerings are put forth to test market appeal until some combination triggers the interest of the early

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market customer base, known in the hi-tech universe as the technology enthusiasts, or early-adopters. These technology motivated customers are attracted to inherently cutting edge products and actively seek them out, but they represent only a very small percentage of the total market. However, they are a necessary and sufficient mass to confirm the firm's market acceptance and to push the incubating firm towards the take off point for exponential growth (*Inside the tornado*, Moore). Figure 1 provides the overview of the succession of the customer groups during the market lifecycle along with market periods where behavior shifts due to different emerging dynamics and risk profiles.

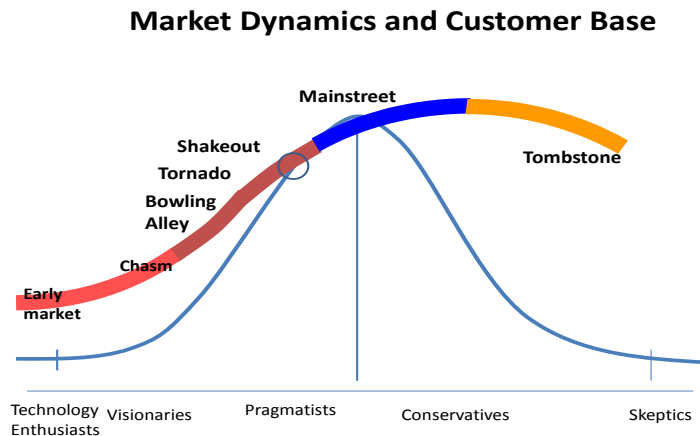


Figure 1. Market evolution and the customer base

Eventually the pragmatists (the early majority) become aware of the product through the endorsement of the visionaries and enthusiasts. The early majority will buy once they are convinced that the product is complete and offers value for money. Pragmatists look for higher quality and more rigorous QA in the product development. Early adopters do not care about quality, they are motivated by the "newness" of the product, and the fact that they can be ahead of the rest of the population.

The bridge to the pragmatists is the bowling alley phase where vertical marketing dominates and successive market segments are conquered through a common linkage effect.

When the market explodes beyond the bowling alley with the "Tornado" period of exponential growth ensues dragging the firm and its competitors through a phase where vertical marketing transforms to horizontal and the mass market materializes (Moore, 1999). As the tornado churns, it heads towards a critical market transition point called the shakeout, which materializes once the exponential growth is exhausted and a levelling-off stage is reached as now the number of firms in the

market are too great for the volume of business. Figure 2 captures the dual evolution of marketing and strategy during the market lifecycle.

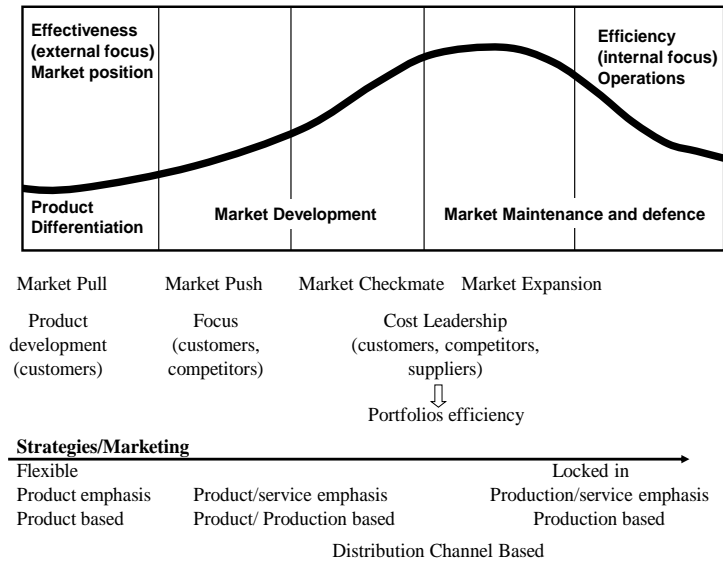


Figure 2. The Evolution of Marketing and Strategy during the Life Cycle

The shakeout period sees many firms that enter it never emerge, and they either exit the market or are swallowed up by their more fit competitors. Usually it's not firms with great technology but rather those with deep financial reserves that emerge intact from this phase. Once past shakeout, with fewer market competitors, the market settles down considerably into a conservative customer-driven "main street" market. This period often turns into an oligopoly mode that can converge to a monopoly situation through M&A activities (Kopyay et al., 2006), especially if the economies of scale and scope are strong (also refer to Figure 6).

Past the conservative stage, the market starts to decline with only the skeptics customer base to exploit and this group in hi-tech tends to be a rather cautious lot with a strong risk aversion to new technology, and adopting the latter only when it becomes inevitable, such as the use of on-line banking. But by the time this group surfaces, a good portion of the market has been mined and hence their presence is not a factor, except perhaps to firms that wish to remain in a declining market.

Firms can still make a living by accumulating the market shares of the firms abandoning the market and servicing legacy systems of the skeptics, or large consumers of technology which cannot afford the costs associated with constant turnover of new technology, or which are not pressured by competitors to remain technologically current.

The Market Dynamics of the Big Bang Model

Although the market lifecycle and Moore's model (Moore, 1999) elucidates the overall market roadmap, there are different ways to examine the life-cycle:

- The lifecycle approach that traces the evolution of both the market and the firms and can be used to map most of the critical firm functions such as finance, innovation HR (Koplyay et al., 2014; O'Grady et al., 2000).
- The second is centered on tracing the effects of strategy choices that creates a force field, again mapable along the lifecycle but more importantly inducing a flux that seems to attract the group of firms towards a market black hole or point of no return (Paquin and Koplyay, 2006).
- And a third technique, the big bang model, which parses the market along the lifecycle into transient and steady states. At the heart of the transient states are the sink holes, of various colors ranging from white holes (which spews new firms into market), to various progressively darkening grey holes which swallow up firms commensurately with the intensity of the greyness, and finally a black hole at the end of market lifecycle; Market Exit, which irreversibly engulfs all the remaining firms. (The principal author of this article was involved in developing these approaches and now hopes to apply their most telling attributes to the understanding of the development of the marketing function within the lifecycle and big bang models)

The common theme emerging from the three models is that the market appears to have a life of its own and the presence of firms in the market creates a dynamic force that subjects the firms to a long term predictable fate as it pushes them along the market lifecycle. Firms can resist and counter the force but, by and large, certain dynamic conditions preordain outcomes that are more attributable to prevailing market conditions than the individual strategies of the firms. For instance, although planning and pre-emptive strategic behavior usually pays off for diligent firms, sometimes planning is not only futile but counterproductive, such as during the firm's transit through the shakeout phase. We shall look at the third approach and it's the general model concepts little bit closer now.

The big bang model is a different way of looking at the lifecycle by parsing the cycle into transient and steady states, where the transients produce "sink holes" that progressively swallow more firm mass as the firms transit their zones. We will discuss in the next section the coloring of sink holes in the market, which range from white, to shades of gray, and finally to black. The model is named big bang for the exponential growth phase of the market that follows the bowling alley. The big bang lights up the market and soon new competitors are rushing in to take advantage of the high growth and high margins situation. During the early big bang period, the market is growing too fast for any firm to follow, so some deliberate choices are made to focus on sub-sections of the market through a strategy called the bowling alley, which really is just a linked niche markets approach (Moore,

1999), and then knocking over the pins of the alley to get swept up by the tornado transforms vertical to horizontal marketing and later mass marketing in maturity. A good example of linked niche markets was Entrust in the internet security (encryption) market. By choosing the banks as their central pin, the bowling alley naturally materialized through the banks' ecosystem and the banks' approval became the strongest recommendation for future adoption by other users: "good enough for the banks, good enough for us" was the mantra, assuming of course that the banks did their due diligence of the security features. Examining the "sink-holes" first, the white hole which occurs during early market phase and serves as an entry point of new firms which either see opportunities in start up, bowling alley, or especially the tornado with its high growth and growth-rich margins potential. The effects of the white hole are felt during the entire first half of the market until shakeout occurs. The chasm-related grey hole occurs because some firms cannot make the transition from dazzling technology to more cautious "made to measure" niche based offerings. This is a phase where marketing begins to play a serious role by curtailing the hitherto untrammelled freedoms of product developers in the young firm.

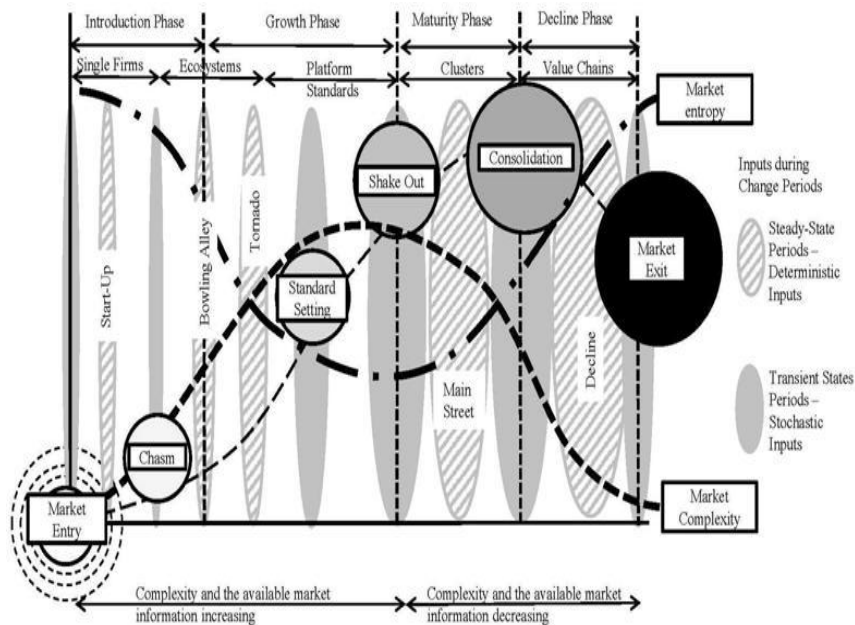


Figure 3. The big bang market model

To cross the chasm, channels need to be built and filled for profit maximizing effect, so the engineering challenge of making the product cutting edge is replaced by the marketing one of how to make the product more appealing to customers who lack the technological sophistication but wish to keep up with advances.

If the firm crossing the chasm manages to capture, for example, a key component of the Toyota value chain through a logistics software offering, then chances are the offering will propagate through the chain to all members of the chain.

An example of this is often seen in software. Once a member of a supply chain introduces new piece of software which improves its capability, all members will adopt. Cooperation within a supply chain requires efficient inter-organizational information systems (Mesjasz-Lech, 2014).

Walmart in the 90s adopted a new piece of software managing Electronic Data Interchange (EDI). In this example Walmart forced its supply chain to co-adopt: either suppliers adopted the format and protocols, or they didn't get the opportunity to supply to Walmart (Premkumar et al., 1997).

Commonality of logistics software use and access is paramount for chain integrity, productivity, and stability. Furthermore, an ancillary marketing requirement becomes one of "what else does the customer need that can move through the channel just established". Build the channel bridge and then maximize traffic flow on the bridge to a customer base that does not care about the advanced technology in the product, as long as it guarantees competitive performance and offers a good price; value based marketing. Firms that fail to activate this marketing strategy sink into the chasm never to return.

During the next grey hole, the standard setting; which is darker and deeper than the chasm, firms congregate around leaders that set the modus operandi for the industry. This could be VHS, Blu Ray or iPhone which compels associated firms to dock with the platform established by a few market leading firms. The platform coalition offers a defensive strategy against future disruptive technology market intrusions but also builds the critical mass for long term branding, which in turns reduces the costs of defending the firms' turf against competing rivals. To attack a brand takes a lot more resources than defending it, and platforms define a unique combination of market share and technology-based defense. If your technology is not compatible with the platform in the long run you don't play and the higher market share guarantees better revenue and profit performance which correlates with higher share price in early markets. These results buttress share price, lead to possibilities of takeover of lagging competitors which becomes important during the consolidation phase of market maturity. Today's marketing advantage translates into tomorrow's strategic conquest.

By the time the tornado hyper-growth is exhausted, the market begins to level off towards maturity, the white hole has spewed more firms into the market than it can accommodate and a serious shakeout begins. Shakeout is a deep, dark, and unforgiving place, where most choices are not made by the firms but by the market. The best chance of survival is given to firms with deep pockets and not ones with superior technologies. The shakeout buffets the market with such hurricane forces that planning and reaction as per plans is impossible and firm use its accumulated reserves or access to such reserves or links to rich parents. Even learning is unavailable as events happen so fast that transfer of knowledge is not possible. This

is a period of strategic and marketing drift, but if it looks like you will reach safe haven then some of your accumulated financial assets (stock price, cash, and lines of credit) can be used to acquire struggling firms with great technology, presaging the big consolidation phase just over the horizon. Most firms don't emerge from shakeout and what's left for maturity configures mostly as a loose oligopoly.

Market maturity heads towards inexorable price taker situation that demands higher market share and better internal cost focussed execution to achieve margins. The firm now concentrates on achieving economies of scale and scope and this demands better market share for scale and tighter relationship with platform members for scope. Hence a period of intense M & A activity ensues that reduces the market competitor universe to an oligopoly, and if the market has steep economies of scale, it can lead to monopoly. The consolidation grey hole decimates the number of firms in the market, not as substantially as in shakeout but more significantly in terms of scale. It's the destroyers that disappear in the shakeout, but it's the battleships and carriers that go under in the consolidation grey hole. So the mass of the firms dragged under by M&A can be much bigger than the total mass of firms in shakeout, although the number of firms lost in shakeout is much higher. Finally, at market exit the remnants of the firms are crunched into oblivion. Throughout these successive sink holes and in between, in the steady states, different marketing considerations dominate.

What about the steady states? There are marketing considerations accompanying each transition point from transient to steady states, and conversely. What distinguishes steady from transient states is the fact that market drivers for transients are stochastic, or unpredictable and so internal dynamics are only partially understood, but nevertheless outcomes for the general firm population are documented; some will perish, some will survive depending how the mechanism of the hole unfolds; the driving force in consolidation being the M&A activity and for standard setting the emergence of the technology platform. In steady state the market driving force is orderly and firms can plan, navigate and achieve results depending on how resources are deployed. We have already alluded to the interface between one transient and steady state, the chasm/bowling alley coupling.

The marketing challenge is to find the right niche(s) and pursue vertical marketing by knocking over linked pins in the bowling alley. A central pin maybe Samsung and the other pins firms dealing directly with Samsung, or Boeing and its value chain. A steady/steady state interface, which happens only once in the lifecycle, at the bowling alley to tornado transition requires a major shift from vertical to horizontal marketing. Whereas in vertical marketing the customer is king in the tornado it's just a pawn in the way during later stages (Moore, 1999 inside tornado). In early tornado steady state the standard setting transient intrudes as soon as some firms have accumulated enough market share to exert pressure on other firms to adopt their technology going forward. The horizontal marketing approach gets modified by the platform discipline of creating compatible and seamless technology interfaces between the standard and its third party suppliers

ecosystem, such as suppliers of iPhone software to Apple. As the platform transient is exhausted, a new interface emerges with a now weakening tornado that leaves behind its explosive growth phase and offers a still growing but fading rate that offers the first glimpse of the coming overcrowding of competitors and the unavoidable shakeout.

The marketing function does another pirouette and goes from aggressive market share capture to the first phase of market share defense and market survival mode as the shakeout represents a very red ocean market (Chan and Mauborgne, 2005) where all competitors try to enter the same lifeboat. A strong, stable and defensible market share in the shakeout is a prerequisite for survival but no guarantee.

Finally, when the tornado and the shakeout are left behind and market skies clear and first signs of maturity emerge, due to price taking pressures the consolidation transient ensues. From the shakeout transient, the most violent of the sink holes, to market maturity the role of marketing hardly changes except for the fact that due diligence on market share defense is paramount. The market share game is now zero sum and everyone needs the share for the same purpose; executing on economies of scale/scope strategies. As soon as this realization sinks in, the consolidation frenzy begins, and now marketing plays a key role driving the M&A exercise; who to target and why. After the acquisition, realizing the market gain synergies and eliminating the overlaps, often resulting in sales force downsizing.

Market maturity may last a long time, many times longer than the big bang period and during this period a modus vivendi is developed among the few dominant players left in the market. There could be one or two imposing ones which rely on branding to create and hold the marketing high ground against lesser players as was the case with Intel in the semiconductor market. The marketing strategy remains stable, reinforcing and defending the brand which is a lot less costly than attacking it. Branding leads to strong margins through charging a brand premium and through higher market share executing better against the economies of scale leading to lower costs. Higher price and lower costs are excellent competitive advantages in mature markets where innovation based competition has been banished to niche markets and disruptive technologies curtailed, but not eliminated, during the platform transient. A perfect example is IT in government, where often several generations of technology coexist under the same roof. In the Canadian government it is not unusual to see 40 years' worth of technology overlap, and see a mix of modern, leading edge, and legacy systems and infrastructure all co-existing, but expensive to manage, interface, and maintain. But if you are a firm supporting such legacy technology, a decent living can be made, as is demonstrated by the continuing operations of Lucent within the Alcatel-Lucent group. Lucent provides services to legacy systems on almost a monopoly basis and as long as the installed IT base remains relatively large, the profit prospects for Lucent remain strong (IBM was the service provider for Lotus suite within the Canadian government departments till recent years).

Until recently the Unisys mainframe computers used by the Canadian government were one of the steadiest and most-depended on revenue streams in the North American marketplace for the company.

Within our context, customer profiles across the market lifecycle (the market universe), the exponential growth phase (the big bang) and the critical market shakeout (the black hole/accretion of stars prior to burn) constitute the significant external background noise to both strategy and marketing.

The first expansion period is encountered during the bowling alley vertical market phase where the firms which crossed the chasm by finding the right bowling alley search for marketing based positioning strategy to create distance from competitors and reduce direct competitive pressures. In the cyber-security market one bowling alley may be aerospace defense contractors, another financial institutions and government departments sensitive to cyber exposure such as homeland security in US and border services in Canada.

This niche seeking magnifies the marketing distance among competing products by specializing on specific alleys and offering customized features that are value priced. In contrast, the collapse period of consolidation when firms are crunched into bigger entities drives the marketing function towards similar behaviors. In market maturity as we have seen products get commoditized and competition is basically on price but marketing makes one last stand with its mass customization efforts to try to differentiate otherwise similar products and exact a price premium for this customized differentiation. This can last for a while especially if strong branding is achieved, and product differences don't need to be real, they can just be perceived. During early expansion mode of the market real product differential is created by product positioning but during collapse phase the marketing effort is to create perceived or virtual differences, which can be just as real to the consumer. In both cases higher margins can be obtained. During the expansion pulse marketing distance increases, whereas during the collapse pulse marketing positions converge to commodities that can still be enhanced with mass customization features.

The Strategic Landscape

Both the lifecycle and the big bang model have a common ancestry, the unfolding of strategy in the market we need to look at the primary signalling device to marketing, strategy, to understand both and understand how the investment community follows the firm's performance according to the following markers:

- Early firm is valued on top line growth, which correlates with stock price
- Market value added (MVA) is the total price appreciation of the stock and the young firm lives and dies by this measure (Kaczmarek, 2014).
- Mid-market firms are valued by both MVA and economic value added (EVA), that is total profits generated for a given time period
- Late market firms are judged primarily by EVA, now captured by total cash flow measures such as EBITDA

This evolving value scenario impacts marketing. MVA is mostly a marketing responsibility to the extent that total growth, market share and strength define share price especially during the early market development. Later, as EVA becomes important, this result is attained by better production and logistics management such lean Management Heijunka (Przemyslaw et al., 2014), and even though marketing is still there, it does not play a central role.

Strategy defines the firm's DNA, in that the coding instructions from strategy are used by the various functions to gauge their own plans and modes of operation. This in particular is true of marketing, which tends to track strategy closely and is often at the core of the strategic choice, because it is so focused on the market. We must never fail to observe, however, that in the early stages of a firm's life the marketing shapes strategy, and later stages strategy constrains marketing. They are both referential to each other as functions. When they get out of alignment, usually near a transient a tipping point is reached, and the black hole looms large.

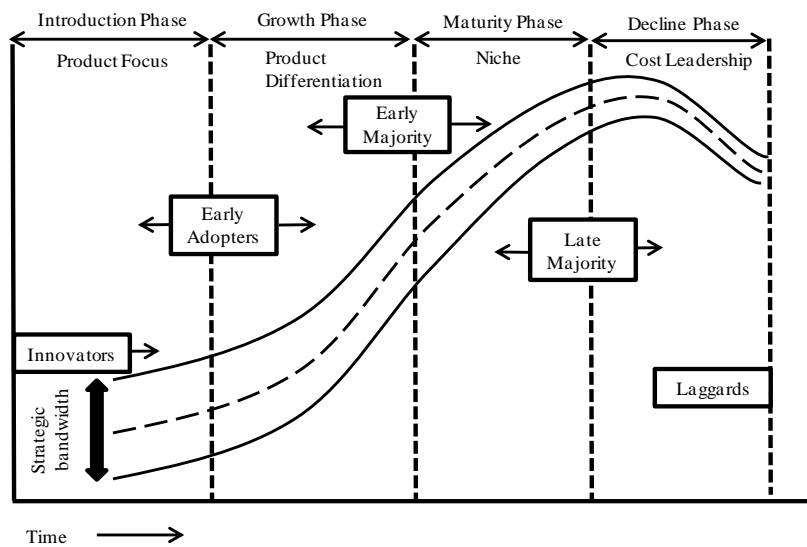


Figure 4. The Flow of Strategic Choices in the Market Life Cycle

In above model the customer profiles evolve from innovators to enthusiast/visionaries, early majority to pragmatists, late majority to conservatives and laggards to skeptics, and the marketing function has to evolve along with the market realities and opportunities. As the firm starts out, the strategy is product development which is an innovation function. Leading technologies, blue sky big thinking and bold innovation, bordering on bleeding edge, are the guiding principles. As earlier argued, this is done to catch the attention of the early market. The next phase is product differentiation right into the bowling alley and channel exploitation a purely marketing function. Distribution channels are investments

and so are focusing on specific customer groups within the pragmatist segment. So both finance and, soon thereafter, production begin to assume roles, and constraints are levied on marketing in the same fashion that marketing circumscribed product development once the chasm appeared. Finance needs returns on investments so a priority is assigned to maximum utilization of channels, and marketing loses some freedoms to add pins to the bowling alley. Furthermore - and this fact is almost always overlooked - given that the pragmatists are driven by the price/quality/reliability factors, production considerations enter the scene to guarantee better prices, increased quality and reliability, production starts to signal its needs for better designed products that are cheaper to manufacture, have fewer moving parts for increased reliability, and incorporate tested components for quality.

Production's increasing role usually is confirmed by a technique called concurrent engineering, where product development, marketing and production jointly develop the next generation products. With production's role on the rise, marketing is losing some powers and product development is fading.

Once this task is accomplished, the key is to follow the market growth the best way possible in order to build market share right into the tornado. Transition for vertical marketing inside the bowling alley to horizontal marketing aiming for mass markets is the hallmarks of tornado take off.

Share price for start-up companies correlates well with top line growth, specifically market share growth, and premium is paid for firms that manage to build market strength; that is market share that dominates the competition's share. This is money in the bank as firms with good market strength can eventually practice branding, and within hi-tech, create technology standards either alone or in coalition with other companies. Standards-setting is often sold under the appealing rubric of benefiting the customer base by developing stable technology platforms, when in fact it just carves the market status quo into stone by conferring an enormous advantage to those competitors who build the platform. The bottom line is that standards setting banishes breakthrough innovation from the market and allows only those advances that fit the platform on the edges.

Under this scenario, product developers have a brief resurrection of influence at the expense of marketing. Production also benefits because standards encourage uniformity of production methods and processes which aid in the goals of this function to meet the pragmatists' needs. Some examples can be cited:

1. The duopoly Intel/Microsoft (Wintel) that controls operating systems for PCs, Windows, and
2. The battle back in the eighties for supremacy of the video tape. Sony had the superior technology in Beta but lacked the coalition partners to impose the standard, and VHS prevailed because it had a stronger backing in the industry. Sony learned from this mistake and prevailed in the more recent DVD standards battle with Blu-Ray.

3. The ITIL standards adoption around the world as the gold standard in IT service management and service support – the Canadian marketplace in service has wholeheartedly adopted it to the extent that governments in the provincial and federal zone, now regularly require certification in ITIL as a discriminator for firms bidding on contracts.

Throughout the market evolution margins are coming down, unless the firm happens to find a lucrative niche (Apple) that can be defended by great innovation. Volumes are increasing up to shakeout, although at a much slower pace once the inflection point is reached towards the end of the tornado. (The inflection point is the transition point where exponential growth transforms into an asymptotic leveling off, in other words the second derivative of the curve goes from an increasing to decreasing phase while remaining positive). The market growth rates prior to the inflection point are increasing exponentially and hence are characteristic of the big bang, and after this point they level off. And this is what causes the overcrowding of the competitors that the shakeout solves through brute force approach. During the tornado, until the inflection point is reached, the market looks very much like a blue ocean with limitless horizons, and there are few competitor pressures due to sufficient market space for all to grow into. Beyond the inflection point the market ocean color slowly transforms from blue to red (Chan and Mauborgne, 2005).

Past shakeout the color changes gradually back to light blue again, but without the prospects of relatively untrammelled growth of the past, unless M&A is used to buy market share. But such acquisitions consume financial resources and only those companies with superior share price or financial cash reserves can play the game. The perfect example is the recent catastrophe experience by Valent the big pharma firm, its M&A strategy coupled to monopolistic pricing of acquired drugs, unleashed both a public and regulatory reaction that will savage the stock. And yet this game must be played as the market strategy has narrowed to one of cost leadership, where the firm is a price taker and must execute superior strategy focused on economies of scale and scope to win deciding battles. The reason for this is the following: if the price is given for all competitors then the only way to generate margins is to reduce costs, and this can only be done by leveraging superior market shares into better economies of scale and scope while also doing some mass customization to differentiate product offerings slightly from competitors.

Therefore, it's on main-street that all the building of market share can pay off. Furthermore, if the firm has built strong market strength then the branding game can begin. The primary advantage of branding is that the firm occupies the market heights and dictates the strategies of its non-branded competitors, which must adjust to branded company's defensive strategy by going on the attack with offensive strategies. And a brand holding its own can therefore generate higher margins than its direct competitors, which are forced into an offensive mode, the situation for example with Intel and its competitors in the chip market. Intel

almost always posts higher margins and profits than the competition, and because of these higher margins it is more immune to market volume fluctuations than the competition, say AMD or Via Technologies, which must compensate for lower margins with higher volumes. But this leads to an impasse as in late markets all the growth has been exhausted and the customer recruiting costs become prohibitive as every competitor needs the market share for the same reason: to lower costs (Sanchez et al., 2011).

Niche markets have higher margins which are maintained in hi-tech through intense innovation or intense expertise, and if successfully defended from incursions by the mass market players, the opportunity exists to eventually expand back into the main market, as was done by Apple with its line-up of “i” products (iPad, iPhone, etc.). A well planned move to niche market can make the mass market refuge into a localized monopoly player with all the perks and privileges.

Once you retreat to a niche market you may lose the core competencies to re-emerge as a mass market player; your culture is innovation focused and not cost oriented, as required in the mass market. Other things being equal, the niche market player relies more on marketing skills than the mass market one to maintain the already attractive margins.

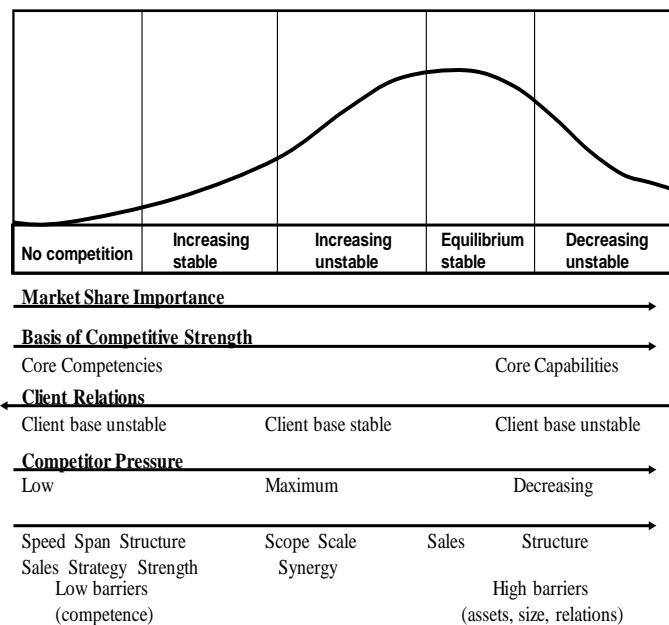


Figure 5. The opportunity and constraints experienced by marketing as a result of the firm’s competitive landscape during the market lifecycle

The mass market player, on the other hand, will rely more on the production and logistics functions to bring down costs and open margins. So a retreat to niche markets is affirmation of marketing's relatively important role, but not as important as the role of innovation, as practiced by the product developers.

One strong defensive capability in the niche market is patented intellectual property (IP) that automatically excludes competition from entering. In the U.S., courts tend to favor IP over free competition, hence adding weight to the defensibility argument once the niche market is established and ringed by IP (Supple et al, 2005). Marketing and strategy are, most of the time, so closely related that they can be considered to be the same variable or at least very strongly correlated.

Risk taking, as the market develops (Koplyay et al, 2015), is progressively washed out of the firm and more cautious, deliberate, well-rehearsed and long term plans supplement the early risk prone, spontaneous and creative approaches (and much of marketing is the result of creative ideas). As risk aversion mounts at the top, marketing falls in line and its plans start to align with the cautious approach of the other functions, and hence scope for independent marketing thought or action is progressively diminished. But a new, hitherto unknown marketing activity may arise in maturity: selling the firm's values and initiatives to its stakeholder community.

As the firm grows, its stakeholder maps get a lot more complex with most of the stakeholders outside the firm (especially when facing economic downturns), and this has to be properly managed internally and externally to achieve long term goals (Sanchez et al., 2011; Olszewska and Piwoni-Krzeszowska, 2014); here marketing gets a reprieve with a new role such social marketing (Bajdor and Brzeziński, 2013) to indulge in selling the reputation of the firm (goodwill) to the public at large, and the stakeholders to obtain a critical mass of support for the pending action. Some recent examples are: 1) under a disaster scenario, BP and the gulf spill; 2) the oil sands consortium promoting the keystone pipeline to provide Canadian oil for U.S. refineries; and 3) in the past, the redemption marketing effort by Intel, after the introduction of a faulty chip, to regain market confidence: much of the success of this campaign was due to Intel's position as the leading and crushingly dominant brand in its market.

The Tyranny of the Cost Curves

Costs such the optimization of the global cost of the product's life cycle (Man et al., 2011) are the mirror images of margins and are always key to formulation of both strategy and marketing policies. Two particular costs play key roles in hi-tech: customer retention and customer acquisition costs.

The key factor to remember about costs is the relative levels of retention and acquisition costs that determine marketing approaches and not the combined effect of the two, and that the transition from offensive to defensive marketing is rather sudden (the crossover point between the two curves). We should note that the total

cost curve is not the direct sum of the acquisition and retention cost curves, but rather some weighted average depending upon what the relative importance of the two are, and of course available budgets .

On the other hand, the acquisition costs at this phase are low as the market is expanding very fast under the big bang and there are always new customers to be found that competitors have not yet claimed. In late markets, the process reverses and customers can be retained with devices that are relatively cheap but carry switching costs; that is creating a cost for the customer to defect to a competitor. The only viable strategy remaining for the late mass market is cost leadership which is crafted on the back of superior market share. Hence every customer counts and your loss is someone else's gain, which is to be prevented at "all costs" in this zero sum game.

By the time maturity is reached, marketing plays entirely a service role to manufacturing when the firm has substantial production assets to manage (a non-outsourced scenario).

When the market enters maturity and market share and strength rule, the lead is recaptured by strategy as the firm strives to gain both share and strength through M&A. Of course marketing plays an important consultative role in supporting strategy related to issues as to which competitor to buy, or merge with, to enhance market share, but this is no longer a lead role. If the market share is significant and translates into substantial strength, then branding is possible and marketing regains some influence -and helps shape the dominant defensive strategies that will protect the market heights from lesser competitors. Brand management becomes the core of the firm's defensive strategy and leads to superior margins and profits that result eventually in higher stock price which can, in turn, further drive the M&A machine. Brand management requires initial investments in the early market lifecycle in building dominant market share, but once achieved it is less costly to defend the brand than to attack it (Yannopoulos, 2011).

The Effects of the Type of Customer Base

There are substantial differences between B2B and B2C marketing (including the relative size of suppliers vs. customers b2C and B2c), and these differences can influence the type and importance of the role assumed by marketing. Business marketing tends to be shorter, often direct; sales volume per contract much higher; sales cycles longer and fewer in occurrence; post sales servicing an important source of revenue; and the decision to buy by the client quite complex, lengthy and done in parallel within the purchasing firm among the various functions. Needs of engineering must be satisfied then finance and accounting have their say; subsequently marketing offers advice and logistics/production offers their take on the pros and cons of buying a specific product or service. The important factors for us to note: when customers are few and average sale per customer becomes more important to the supplier, then the long term prospects of the supplying firm cannot be any better than that of its key customers. Hence this represents a lock-in and

tandem progression of good fortunes - or not. So the B2C scenario represents the development of serious co-dependence and one of the emerging roles for marketing on supplier premises must be the divining of key customers' long term market prospects. This means that business intelligence feeds the marketing function as much as it does strategy, and often marketing may supplant strategy in stagnant mature markets as the firm supplier finds itself in the grips of a developing value chain that imposes its own strategic discipline on it. If the circumstances are more like B2c and no customer dictates its supplier's future, then the marketing role is not as pronounced. Conversely, if it's a b2C situation and the supplying firm is facing a monopsony constraint (consultants serving government IT as an example) then both strategy and marketing are faced with survival options. If one single contract is terminated, the customer of the supplying firm may fail.

Conclusions

The various indicators of hi-tech firm development all seem to point in the same direction as far as the changing roles of marketing are concerned during the market lifecycle. The different arguments which have sundry starting points all lead to consistent conclusions about what, how and when marketing is performing certain activities and why. The model appears to have both explanatory and predictive capacities that can triangulate the future and past (because the arguments are symmetric in time) of marketing during market development. The model even accounts for the exceptional circumstances in mostly mature markets that guide the rise and fall of marketing, depending whether business or consumer marketing is involved and the relative size of customers compared to the supplier.

In the early phases of a firm's growth, we see that marketing and strategy have a mutual and interdependent relationship where each provides key input to the other's function. The relationship changes through the black hole, and bowling alley, until the functions are distinct, and loosely coupled at maturity. Furthermore, the internal combination of factors such as the relative lengths of product development cycles and product shelf life can also be highlighted within the model. Further research can confirm whether the same ideas can be applied to other market sectors and to what extent the conclusions reached in this paper are transferable to more general market conditions.

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STRATEGICZNA FUNKCJA MARKETINGU W DYNAMICZNIE ROZWIJAJĄCYCH SIĘ RYNKACH

Streszczenie: Marketing odgrywa ogromną rolę w świecie biznesu. Znajduje się na czele interakcji firma-rynek, reprezentuje najlepiej skompensowaną działalność w organizacji. Marketing zakłada rolę lidera w firmie i nadaje ton planów strategicznych. Podejście i strategię widziane w marketingu poprzez cały cykl życia rynku są pod wpływem czynników i graczy, co znacznie zmniejsza jego rolę i ogranicza wpływ.

Niniejszy artykuł analizuje rozwój, wraz z cyklem życia rynku, roli marketingu i sfer wpływów i proponuje dwa prognostyczne mechanizmy, które pozwalają na oszacowanie "punktów krytycznych" dla różnych cech, które określają profil marketingowy wzdłuż cyklu życia. Prezentujemy model dynamiki rynku big bang i badamy zachowanie funkcji marketingowej w zależności od tego, w którym miejscu firma się znajduje w odniesieniu do stanów przejściowych i stałych oraz w jaki sposób rynek pulsuje określając priorytety marketingowe. Artykuł ponadto identyfikuje czynniki ograniczające funkcje i swobody wzdłuż cyklu życia w zaawansowanej technologii, aby rozwinąć jasny obraz różnych ról, jakie odgrywa marketing jako wpływów firmy wzdłuż cyklu życia od inkubacji do dojrzałości rynku.

Słowa kluczowe: ewolucja funkcji marketingu, punkty krytyczne marketingu, model cyklu życia, model Big Bang, dynamika rynku

戰略性營銷功能的有活力的市場

摘要：市場營銷在商業世界一個美艷的作用。它是在企業市場互動的最前沿，它代表了一個組織最好的補償活動。市場假定在公司領導作用，並設置的戰略計劃的基調。在整個市場週期出現在市場營銷的方法和戰略因素和球員，這顯著縮減其作用和外接它的影響被影響。

本文探討的演變，以及市場生命週期，營銷的作用和影響範圍，並提出了兩種預測機制，使對“臨界點”的定義以及生命週期的營銷輪廓的不同特點估計。我們引入市場動態的大爆炸模型，並檢查營銷功能的行為取決於所在的企業是相對於沉孔，瞬態和穩定狀態，以及如何市場脈動定義的營銷重點。文章進一步指出外接營銷的功能和自由以及高科技生命週期，開發出各種角色扮演營銷沿整個生命週期，從孵化到市場的成熟企業收益的清晰畫面的因素。

關鍵詞：市場營銷功能的演變，市場臨界點，生命週期模型，大爆炸模型，市場動態