

Starting a New Software Business in an Established Firm

By

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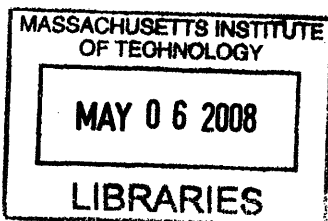
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Submitted to the System Design Management Program on January 1, 2007 in Partial Fulfillment of the Requirements for the Degrees of Master of Science in Engineering and Management

Abstract

The purpose of this research is to provide an academic study to facilitate and improve the establishment and running of Expression Business Unit in Microsoft's Developer Division. This business unit was created in 2005 to help Microsoft expand into the computer-aided designer market. New business creation within the existing business is commonly called corporate entrepreneurship. This thesis will review the literatures in this area and use the Expression business as a case study.

This thesis documents the efforts of a company starting a new business based on the research in business, organization and product. The principle study areas of this project are (1) How to collect market data, conduct market research and competitive strategy analysis for a new business (2) Build a business plan for a corporate venture (3) How to organize an effective corporate venture (4) The similarities and differences between start a start-up company and start a new venture in an established firm.

Most of materials used in this thesis are from the author's personal involvement, internal Microsoft presentations, the author's interviews and meetings with key stakeholders involved in this new Business Unit. This project uses academic research to identify the existing theories and practices on corporate venturing. Through the research, this project also details the problems raised in the planning phase.

In the end, the author will propose improvements to the current business planning. The improvement is built on top of the existing business and product planning framework, with the intents to enhance Expression venture's product and market areas. Also several areas requires further study have been outlined.

Thesis Supervisor

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Acronyms

ApplPlat – Application Platform

CTP – Community Technology Preview

Dev – Development

FP – Front Page

ISV – Independent Software Vendor

IW – Information Worker

MS – Microsoft

MSDN – Microsoft Developer Network

MSFT - Microsoft

OS – Operating System

ROI – Return of Investment

RTM – Release to Manufacture

SEI – Software Engineering Institute

SKU – Stock Keeping Unit

TFS – Team Foundation System

UX – User Experience

VAR – Value Added Resellers

VSS – Volume Shadow copy Service

WPF – Windows Presentation Foundation

1. Introduction

This chapter will start with an overview of the current literatures on corporate entrepreneurship. It will walk through different types of corporate ventures and review what scholars have discovered in this field. Then the discussion will turn to the current Expression business and spell out the challenges and opportunities Microsoft faces.

Literatures in Corporate Entrepreneurship

Established companies have to keep innovating to stay on the edge of technology and remain competitive in the future. Otherwise they may risk to be disrupted by new technologies or new business models. In his famous book "The innovator's dilemma [7]", Christiansen used disruptive technology (later changed to disruptive innovation) to describe these phenomena. New innovations will come up strong and occupy the low end of the market, over time they will move into the current dominant player's segment and take over the market from incumbents.

Peter Drucker argued "There are plenty of books on entrepreneurship in start-up companies but few discussions on corporate entrepreneurs. But in the U.S., most of the new businesses during the last several decades were created and built by existing enterprises, and in large by big or fair-sized ones. [15]" Today, there is no universally agreed definition on corporate entrepreneurship (Gautam & Verma, 1997). Some have viewed it as processes others viewed it as a set of activities. There are many terms refer to different aspects of the corporate entrepreneurs. Ferreira [13] created a list of terms from various literatures: intrapreneurship (Kuratko et al., 1990), internal corporate entrepreneurship (Schollhammer, 1982), corporate ventures (Ellis and Taylor, 1987; MacMillan et al., 1986), venture management (Veciana, 1996), new ventures (Roberts, 1980) and, internal corporate venturing (Burgelman, 1984).

This study will concentrate on diversification, in which both the product and market dimensions of the business area may be new to a company. Roberts and Berry [27] summaries several different mechanisms for a firm to enter new business areas:

Internal Development – It exploits internal resources as a basis for establishing a business new to the company.

Acquisition – The firm gets into a new business area through acquiring another company which is already in the area.

Licensing – Firm gets into a new business area by acquiring the technology through licensing rather than acquiring a company.

Internal Ventures – This one is similar to the internal development, only difference is normally in this case the firm will set up a separate entity within the corporate body.

Joint Ventures or Alliances – The firms join forces with other companies to create a new entry in the market place.

Venture Capital and Nurturing – A firm ventures into new business areas by provide capital or technology to the new company.

Educational Acquisitions – Small acquisitions mainly focusing on get the staffs worked on the new business areas.

The Expression new venture created by Microsoft falls into the internal venture model. Microsoft started Expression on its own by set up a new business unit in Developer division. Although every business is a complex entity that can't simply be classified into one single category. Expression grew its business also by acquiring a company and licensing a technology, but they were minimum compared to the rest of the activities of the business. This paper will not discuss why Microsoft chose the internal venture model to start the venture, but rather focusing on how Microsoft created the Expression venture.

There are quite a few existing literatures on how to start internal ventures. Roberts and Frohman [29] claimed there are 4 steps to promote internal entrepreneurship. These 4 steps were included in their "Internal Entrepreneurship: Strategy for Growth". First is top management communicating that is searching for new ventures to be piloted by internal entrepreneurs, Second it to set up a department charged with the responsibility of searching for, identifying and nurturing new ideas, Third is to establish a review panel to examine new ideas and to select from among them those that should receive further corporate attention. Last is to re-examine the company's compensation scheme to see if it is sufficiently flexible to recognize the risks an entrepreneur undertakes and to reward him accordingly if he succeeds.

Roberts and Frohman's recommendations are very good at soliciting ideas and prepare for starting a corporate venture. This normally happens when either the firm doesn't have ideas about what to work on or they have not made decisions on what venture to start. But when the author joined Microsoft, the Expression venture was already in place and most of the early decisions have been made, it makes more sense to concentrate this research on the processes a firm used to create a venture after the decisions have been made. Later in this chapter the author will give an overview on why Microsoft wanted to start the Expression business by going

through some business reasons, but there won't be any further detailed analysis on the this topic in this paper.

In "Better New Business Development at DuPont –I", several researchers Karol, Loeser and Tait [28] presented a comprehensive framework to help its business leadership and development teams successfully navigate through the new business development (NBD) minefield. This framework – called "Business Initiative Process" (BIP) – brings together an array of best practices for establishing high-performance development teams, creating/managing strategic alliances, structuring leadership decision-making, and organizing detailed project planning. This process divides the development work for specific initiative/project into five distinct but overlapping stages with clear go/no-go decisions between each stage. These 5 stages are: Business Case, Evaluation & Planning, Detailed Development & Preliminary Negotiations, Scale-up & Definitive Agreements, and Implementation & Commercialization.

The DuPont process is an excellent framework at helping starting new ventures in an established firm. However this framework will only be used as reference as it is specific to DuPont and DuPont's business model is very different from Microsoft. To help evaluating and provide suggestions to the current Expression business, the author selected two other generic scholar researches in this area.

First research is Sathe's [15]"Corporate Entrepreneurship: Top Managers and New Business Creation". In this book he proposed a framework of major factors that influence the new business creations in a corporation. The first part is the business environment which consists of external and internal environments. The external environment includes customer, competitor and other industry and competitive forces, as well as the legal regulatory, technological and economic environment. The rest several factors are: Management culture, Corporate executives, Division general manager and Division and its top management team. In chapter 3, the author will use this framework to evaluate the Expression venture and trying to find improvement areas.

Second research is Block and MacMillan's [21] "Corporate Venturing: Creating New Businesses within the Firm". This book proposed a six stage model created by Block and MacMillan to help a firm start a new venture. In this six stage model, there are two steps in building the business part: Developing the business plan; Organizing the venture. This paper will analyze the Expression business based on these two stages in chapter 4.

Above is an overview of literatures in corporate entrepreneurship; next section will introduce the Microsoft Expression venture. This discussion will provide a market summary of the Expression business and reveal concerns and opportunities Microsoft faces.

Defining the business problem

In last couple of years, Microsoft met a challenge in the developer software market. They did not pay enough attention to the non-programmer segment, but this segment has grown the fastest among people who “develop” software. Since the Internet is becoming more and more popular, there is an increasing demand for visually rich content and applications. Those who work in these fields are typically using computers to develop website or web pages. These people are not necessarily computer or software savvy, but they can use software to design web pages and sometimes even write simple code. They don't want to associate themselves with the traditional geek type programmer since they really don't know that much about computers.

This trend is even more alarming among the younger generation. Today's teenagers like computers and Internet, but they don't want to be experts in it. As long as they can have tools to design their blogs, videos etc they will be happy. Like happened in other business segments, the maturation of software industry is leading to user experience as a primary differentiator. Designer tool is a necessary ingredient to realize the potential of Microsoft platforms. New platform capabilities (Windows Vista) will require tooling approach which differs from classic development tools such as Microsoft Visual Studio. When armed with designer tools, Microsoft platforms will enable customers to build rich internet and desktop applications and provide better user experience on their products. User experience is the key to win customer and draws more attention than ever in the software industry. Appendix A “Why UX matters” provides a summary on the importance of user experience. The current trends also include shift towards advertising revenue model and services in applications which have a higher perceived user experience dependency.

It was estimated that in 2005, the number of professional designers is around 6 million in the world. The total revenue for tools and platforms is \$3B [18]. The figure 1 diagram shows the 4 segmentations in the developer and designer tools/platform market. We can tell on the right hand side is the developers who mostly are programmers, on the left hand side is the designers who don't code at all. Microsoft is a weak brand on the left side although not outright negative. The Brand strengthens significantly/consistently across the continuum as user approaches

“Developer”. Microsoft’s Front Page has low usage (~20% show any usage, <10% primary), but highest among all MS offerings; brand study shows negative sentiment also [19].

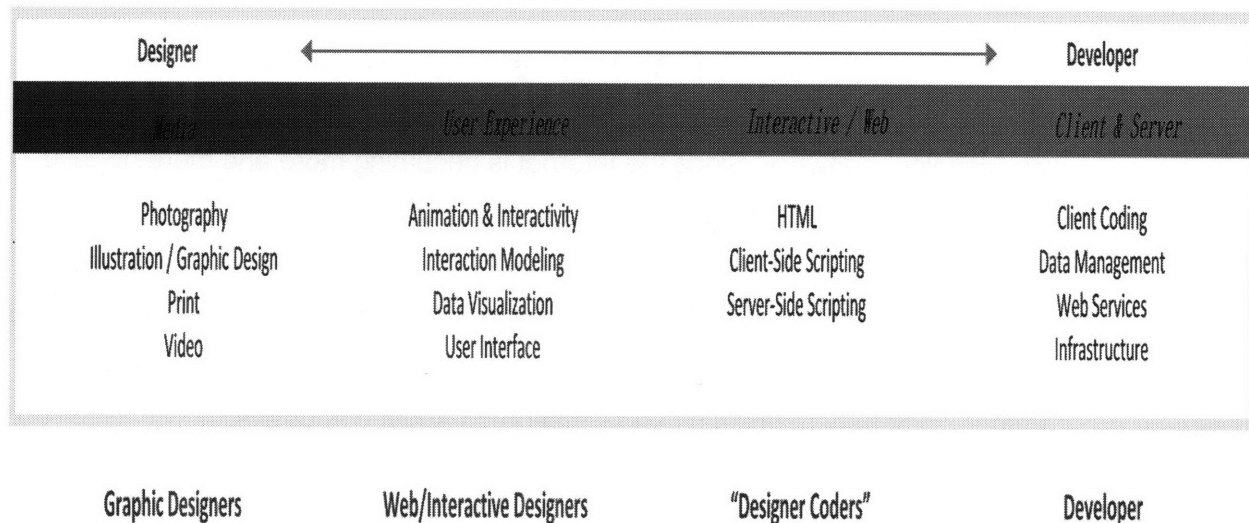


Figure 1 Segments in developer and designer tools/platform market

On the other hand, several other companies have the dominant shares in designer market. They are being viewed as have exceptionally strong brands and they are the principal primary tool choice.

A random sample telephone survey was conducted with 450 US designers and 150 US developers to help researching the market [17]. The results are well expected. Other companies rule the designer world. Design intensive industries are least Microsoft friendly. Designers are not all alike. Designers do development – but don’t look like stereotypical “coders.”

Microsoft’s Concerns and Opportunities

Based on the results of the market research, there are several concerns raised for Microsoft in the designers market (refer to Appendix B2 for detailed survey summary):

1. Current usage of Microsoft designer-related products is nominal, and satisfaction with product features lags that of better known and more widely used products in the market.
2. Designers do not have strong positive perceptions of Microsoft.

3. Macintosh still has a presence in this market, particularly among Specialized Designers.
4. Microsoft's weakness among Specialized Designers is troublesome, given the disproportionate number of designers found in these design-intensive industries, and the potential opinion leader role they could play.

In spite of the challenges Microsoft faces in the designer market, the opportunities are huge. First, the designer market is growing fast. If Microsoft can increase its market share, it will provide a very promising return. Second, it should not be hard for Microsoft to win more market shares since Microsoft has been losing not because it had wrong strategies or made wrong decisions, but because Microsoft has not been paying enough attentions to this market. The current Microsoft FrontPage only provides limited functions so that it only targets a faction of the designer market. A good set of product lines should help Microsoft to change its current market situation dramatically. At last, the new product lines can leverage the existing Microsoft customer bases in platforms and tools segments so that more users will be willing to try out these products.

Based on the challenges and opportunities listed above, Microsoft created the Expression Business Unit in Developer Division. The goal for this business unit is to drive the user experience to new levels with Expression products, advance the Microsoft platform by enabling the most compelling creative capabilities, attract creative professionals to the Microsoft platforms, and respond to the demand for a toolset where designers and developers can directly collaborate.

Microsoft now has two families of tools for software development: Microsoft Expression for designers and Visual Studio for developers. There are 4 product lines in the Expression family [20], Expression Blend, Expression Graphic, Expression Web and Expression Media. For developers, Visual Studio of course, remains as the leading family of tools to develop great software applications. Visual Studio will continue to provide the best development environment and best coding experience that developers love. But a customer with both developers and designers now can use Microsoft Expression and Microsoft Visual Studio for their development and leverage the common platforms of these two products.

Chapter Summary

This chapter provides a prelude to the studies in this paper. By summarizing the existing scholar work in the corporate entrepreneurship, the author picked two frameworks as the basis for this

academic research. The detailed discussions around these two frameworks will be shown in Chapter 3 and Chapter 4. In the end, the author provided the background of the Microsoft Expression business and the challenges and opportunities Microsoft faced in the market place. Next chapter will present a detailed market research and analysis on the Expression business.

2. Market and Structural Analysis

Continued from Chapter 1, this Chapter will dive deeper into the designer tools market by conducting focus group and survey based market analysis. Porter's 5 forces based structural analysis is also used to help understand and build the Expression business market strategy.

In the widely used text *Marketing Management [1]*, Philip Kotler and Kevin Lane Keller define marketing management as "the art and science of choosing target markets and getting, keeping and growing customers through creating, delivering, and communicating superior customer value. Noted marketing expert Regis McKenna expressed a similar viewpoint in his influential 1991 *Harvard Business Review* article "Marketing is Everything." McKenna argued that because marketing management encompasses all factors that influence a company's ability to deliver value to customers; it must be "all-pervasive, part of everyone's job description, from the receptionists to the Board of Directors." John D.C. Little said "We think of marketing as distributed throughout the organization, bring the voice of the customer through appropriately collected information and helping to define and communicate a bundle of benefits in an integrated way with R&D, operations, finance, and sale..."

The broader definition of marketing from these scholars is really different from most of the businesses. In most of the businesses marketing is a separate organization that parallel to R&D, Sales, Operations, etc. Although many of the business decisions will be made based on the market analysis and data, their importance really is defined by the executive views of the world. Microsoft is one of the rare companies that really spend a lot of effort at market analysis and strategies. Even though marketing is a separate organization like many other companies, Microsoft does not solely depend on the marketing organization to provide marketing information. It also uses evangelists, communities and field supports to provide the marketing feedback as well.

As Hammer and Champy[14] argued in "Reengineering the Corporation: A manifesto for business revolution", there are 3 forces driving today's companies future: Customer, Competition and Change. Customer are taking charge now compared with decades ago, sellers no long have the upper hand. The threat of backward integration has given customers more power. The competition also intensifies, not only does more competition exists, but there are many different kinds now. Also, change becomes constant in today's economy. Based on the considerations from these 3 forces above, it is even more justified to conduct market and strategy analysis to truly understand the market and competitors.

Traditionally, marketing analysis was structured into three areas: Customer analysis, Company analysis, and Competitor analysis (so-called "3Cs" analysis)[3]. Qualitative market research such as focus groups and Quantitative marketing research such as statistical surveys are two of the methods being used for market research. Once the company has obtained an adequate understanding of the customer base and its own competitive position in the industry, marketing managers are able to make key strategic decisions and develop a marketing strategy designed to maximize the revenues and profits of the firm. The selected strategy may aim for any of a variety of specific objectives, including optimizing short-term unit margins, revenue growth, market share, long-term profitability, or other goals. The following two sections will discuss the Microsoft qualitative and quantitative marketing research based on the focus group and statistical surveys.

Focused Group Based Market Analysis

In Eric Von Hippel's "*The Sources of Innovation*"[9], he argued that many "Lead User" innovations form the basis for new products and services of value to manufacturers. "Lead Users" are users that:

1. Have needs that *foreshadow general demand* in the marketplace;
2. Expect to *obtain high benefit* from a solution to their needs. (Such users are more likely to innovate – "Necessity is the mother of invention!")

The following diagram in figure 2 illustrates Von Hippel's theory that lead users will be the first users of a product.

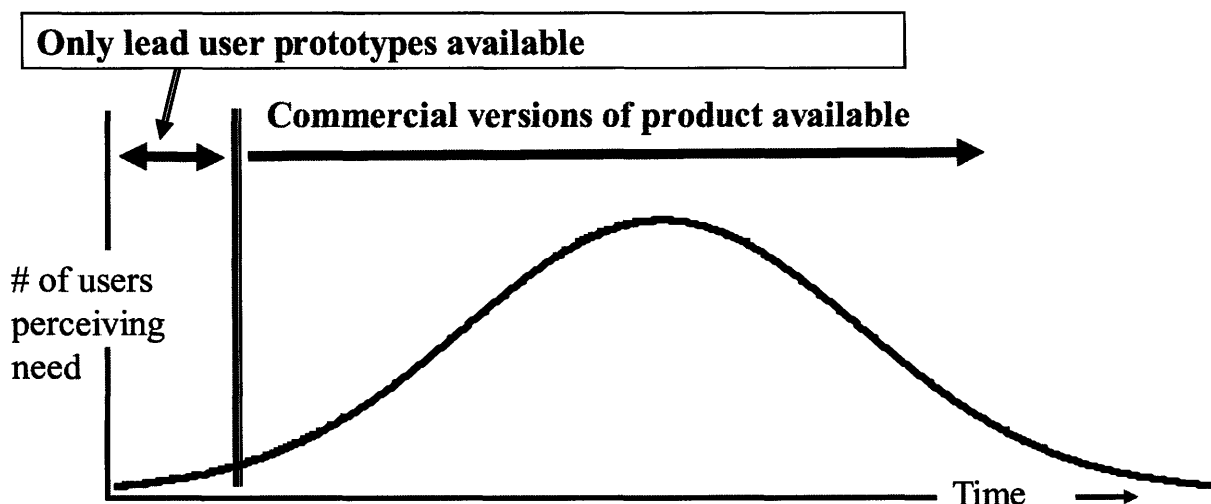


Figure 2 Product innovations and lead users

He further argues that there are two contrasting innovation methods. New methods are based on finding *emerging needs* among lead users. These lead users may also develop *solutions*. Traditional methods are based on finding *needs* among target market Users. Manufacturers then develop solutions

- Need information is usually found at user sites.
- Solution information is usually found at manufacturer sites.

To facilitate the Expression Business Unit's business planning, Microsoft organized several focused groups in different U.S. markets. Appendix B1 provides the summary of this research. By talking to 3 focus groups of 63 people in NY, Chicago and LA, the research revealed that Microsoft is in a worse situation than it thought it was at in the designer market. In the minds of designers, Microsoft is barely a follower. Other leading companies are dominating this market. The more worrisome message is the competitors are driving the platforms in the designer market. The platform in designer tools market, rather than what normally referred Windows or UNIX operating system in general software industry, is a run-time environment for delivering graphics & interactivity in a multi-OS ubiquitous manner.

As people familiar with the software industry all know, Microsoft is a platform company. Microsoft built its strength by providing the most popular operating system on PCs. Before Microsoft becoming the dominant platform company, IBM was the one who controls the platform of computers. But once Microsoft built its operating system layer on top of the PCs, IBM PCs became a commodity. Right now, Microsoft is facing a similar risk if the leading designer market companies are building another layer on top of the operating system and makes the operating system a commodity.

Potential Customer Survey

The focus group based market research is a depth survey that can go deep into the concerns of the lead users. Even though it provides a closer look at the needs of customers, the method alone won't give us the full picture as the focus group based research is time consuming so that it is not feasible or too expensive to get opinions from a large number of customers. On the other hand, the customer survey based research provide a breadth based market information

that won't go as deep as the focus group based research, but since it is very easy to implement, it can cover a broader customer base.

The Microsoft marketing team conducted a random sample telephone survey with 450 US designers and 150 US developers; this survey will continue yearly, which is following the existing developer market research methodology. Appendix B2 details the methodology and research results. Both the designers and developers were chosen with careful consideration so that the various segmentations of designer and developers were covered. The weighted representation simulated the real life designers and developers distributions among different industry segmentations. The results from these surveys send same messages: Other companies rule the designer world; Design intensive industries are least Microsoft friendly; Designers are not all alike; Designers do development – but don't look like stereotypical "coders."

As both the qualitative and quantitative market research showed the same results, it is enough evidence to catch the Microsoft management's attentions in the designer market. Even though Microsoft has a product (Microsoft FrontPage) in this market, it is far from enough to make a meaningful play consider that Microsoft is the number one software company. Fortunately that enough alarms have caused the management to rethink the designer market strategy, the decision to create the Expression business is their move to win the designer market and the broader developer/designer market.

To win the designer market, there has to be a strategy to lead the business. The following section will use the structural analysis to help the Expression business developing effective strategies.

Structural Analysis

Michael Porter has described a category scheme consisting of three general types of strategies that are commonly used by businesses. In his 1980 classic "*Competitive Strategy: Techniques for Analyzing Industries and Competitors [2]*" Porter described these 3 strategies: cost leadership, differentiation, and market segmentation (or focus). Market segmentation is narrow in scope while both cost leadership and differentiation are relatively broad in market scope. Michael Porter's 1980 framework uses concepts developed in Industrial Organization (IO) economics to derive 5 forces that determine the attractiveness of a market.

To truly understand the strength, weakness, threats and opportunities for Expression business, a structural analysis based Porter's 5 forces was conducted to assess the current market and situation and point out the right directions. The 5 forces are: Threat of new entrants, bargaining power of suppliers, bargaining power of buyers, threat of substitute products or services and rivalry among existing firms.

Threat of Entry

New entrants to an industry will normally bid down the prices or inflate the incumbent's costs, reducing profitability. The threat of entry depends on the entry barriers and the retaliation from the incumbents. There are 6 major sources of barriers to entry:

Economies of Scale. In the designer industry, the economy of scale plays an important factor. But the nature of software business is different from the traditional industries. To get into this market, the new comers do not need to have significant investment in the R&D and Marketing areas. Especially with the Internet, marketing can be accomplished with little capital if the new products can draw enough attention. Nevertheless, to be able to occupy a decent market share, new entrants do need to have a large base of users. Since the price per SKU is only several hundred dollars, a company has to rely on massive customers to drive up its revenue and profit. To support this scale of customers, the companies do need to have an infrastructure in place. MS enjoys the joint cost of Expression R&D and marketing with many other business units, thus can offsite the cost to start a new business.

Product Differentiation. In designer market, product differentiation plays an essential role. Whether it is technology or user friendliness or even fashion, designer market's brand name is the key to success. Although MS has a strong loyal base in the developer community, the affinities from the designer community is weak. The existing MS web design tool Front Page only has a small customer based compared with competitors. How to break existing designer's image of MS as an out of fashion company is a big challenge.

Capital Requirements. As discussed in the Economies of Scale section, the start-up requirements of capital is considerable low, but to gain big market share does require capital investment to back it up. Luckily for MS, it does not have to worry about capital since it sits on billions of cash waiting to be spent on new investments.

Switching Costs. The switching cost for designer tools is not really the capital spent on purchase the tools itself, since the price for buying tools is not as high. Of course for a big firm it might be

high because they have to acquire many licenses. The more important switching cost would be the learning curve of designers. Since each tool is different, it may require people a long time to get use to a new tool. Due to this reason, MS has to make the tools very easy to use. An elegant design and clean user interface is a must to win in the designer market.

Access to Distribution Channels. Since Software is different from the traditional business, especially the Software As A Service business model has totally changed the landscape of software business. You don't need a retailer to sell packaged software anymore. People can directly buy and download from online without going through any middle man. MS has both traditional distribution channels and MSDN as the online service distribution place. So MS has big advantages in this area even compare with the existing incumbents.

Cost Disadvantages Independent of Scale. This area normally refers to following factors: Proprietary technology, favorable access to raw materials, favorable location, and government subsidies. For software industry, most of the time these factors will be the access to talents since the raw materials and location is almost irrelevant in competition. MS does have its technology advantage since it owns the most popular operation system: Windows. On top of that, MS also has a brilliant group of software engineers. To win in the designer market, MS does have to recruit designer market talents though.

Other than the above 5 factors, government policy, incumbent retaliation, entry deterring price, properties of entry barriers and experience and scale as entry barriers are also important as to the threat of entrance. Since MS is already in this industry, the influence of these factors may not be as heavy. Actually, MS has advantages in these areas since it is the leading software company in the world. MS can leverage its products on top of its own operating system. But the disadvantage to MS is also the operating system. Since the prevalence of other operating systems, MS's designer products have to be able to work in other operating systems. Since companies develop other operating systems are major MS competitors, they may create entry barrier for MS product to run on their systems.

Intensity of Rivalry among Existing Competitors

To occupy more market share or achieve better profitability in the long run, firms in one industry tend to use price cutting, new advertising schemes, etc to compete against others in the same industry. How fierce these competitions are can decide whether an industry is attractive or not. There are a number of interacting structural factors define the intense of rivalry.

Numerous or Equally Balanced Competitors. Many firms in one industry; or the strengths of firms in one industry are balanced, will create an environment that firms can make bold moves. Since there are no leaders in one industry, the players will try dramatic marketing tactics to gain advantageous over others. Normally such an industry is healthy and hard to get a decent profit margin. Even though there are some players in the designer tools market, the industry is almost dominated by very few companies. The danger of bold competitors is not there.

Slow Industry Growth. When an industry is experiencing slow growth, the competitors have to increase their revenues through acquiring other's territory. This will create a low return industry. Even though designer's industry has been there for a while, it is still under rapid growth as the traditional media companies are gradually shifting their design to more and more computer based tools, also the needs for design has been dramatically increased as the Internet becomes more and more popular, many websites and products requires good design to pull them ahead of the competitions.

High Fixed or Storage Costs. This cost normally occurs in traditional industries where goods have to be moved and assembled. Even packaged software requires storages, the cost for that is minimal compared to the cost of R&D and Marketing.

Lack of Differentiation or Switching Costs. When products become a commodity, the competition is going to be focused on price and services. It would be hard for companies to demand high profit margin in such an environment. Designers market is far from a commodity, the perceived high quality, powerful tools can demand high prices since quality plays a more important role in customer decision making.

Capacity Augmented in Large Increments. This is another traditional industry trait that does not really applicable to the software industry. Even though designer software industry may experience ups and downs, they normally follow the economy rather than an isolated industry only event.

Diverse Competitors. Competitors with different strategies, origins, personalities may act differently and not agreeing on a set of "rules of the game" for the industry. This will create chaos and low return of investment. Designers industry has a few dominate players all from the U.S. west coast, so the diversity issue is not there.

High Strategic Stakes. If there are a number of firms regard their stakes in one industry or market as of high importance to the long term strategies, they will sacrifice the short term ROI to

increase their competitiveness in the industry. For the players in designer industry other than MS, revenues from designer market is their “bread and butter”, they will fight fiercely if they feel their future is endangered. On the other hand, MS wants to invest more in this sector since the designer market is becoming more and more important. Ignoring this sector may eventually cause MS to lose the developer market because these sectors are growing to become one.

Based on the above analysis, it is clear that the designer market is an attractive industry from the current competitor point of view. The only concern here is the high strategic stakes of the existing companies. But that is inevitable in many industries as the philosophy of executives has been shifted in recent years. Companies want to be either number one or two in one sector or not at all. MS has enough resource and talent to compete in designer market, but since it is currently an underdog, whether it can occupy more market share is still heavily depend on the strategies and executions.

Using the results from the two above forces, one can draw the conclusion that the designer tools industry is of high entry barriers and low exit barriers for MS. The barriers map from Porter’s 5 forces shows that such an investment enjoys high and stable returns.

Pressure from Substitute Products

Potential substitute products can create big threats to one industry. If the new products are disruptive technologies, the incumbents have to adapt themselves to it otherwise it might lose their market share rapidly. In his book, “*The Innovator’s Dilemma [7]*”, Professor Clayton Christensen of Harvard Business School describes a theory about how large, outstanding firms can fail “by doing everything right.” The Innovator’s Dilemma, according to Christensen, describes companies whose successes and capabilities can actually become obstacles in the face of changing markets and technologies.

Christensen described two types of technologies: sustaining technologies and disruptive technologies. Sustaining technologies are technologies that improve product performance. These are technologies that most large companies are familiar with; technologies that involve improving a product that has an established role in the market. Most large companies are adept at turning sustaining technology challenges into achievements. Christensen claimed that large companies have problems dealing with disruptive technologies. Disruptive technologies are “innovations that result in worse product performance, at least in the near term.” They are generally “cheaper, simpler, smaller, and, frequently, more convenient to use.” Disruptive

technologies occur less frequently, but when they do, they can cause the failure of highly successful companies who are only prepared for sustaining technologies. The following diagram illustrates the relationships between existing and disruptive technologies.

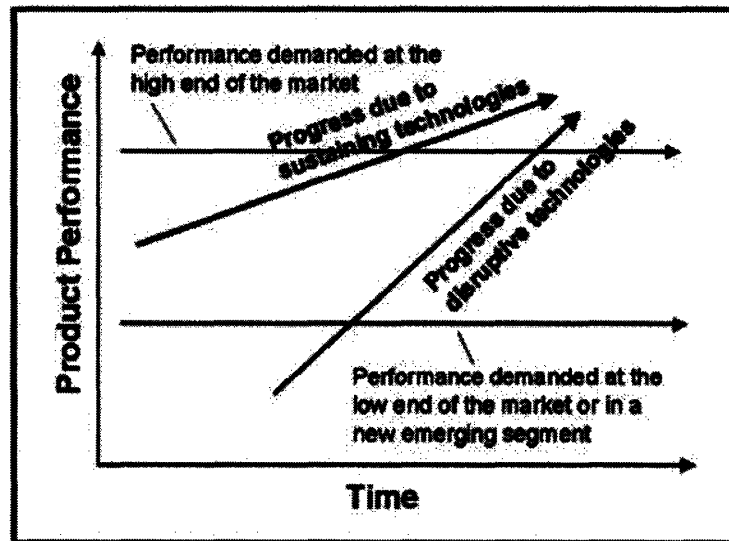


Figure 3 Disruptive vs. Sustaining Technologies

In designer tools market, it is hard to clarify the technology differences. But more appropriate evaluation should be based on business models. Currently the trend of Software as a Service (SaaS) is drawing a lot of attention and market share as well, this business model significantly challenges the traditional package based software model. Adobe's Flash is one successful model in SaaS; it went from zero market shares to over 95% in just under a year period. More and more evidence shows that this business model will be the dominant design in the Internet age, MS has to be able to provide similar options for customer otherwise it will face elimination.

Bargaining Power of Buyers

Powerful buyers can force the industry to lower their prices, provide better quality products and services etc. Players in one industry will struggle to achieve high profit margins if they are facing powerful buyers. The designer market will be analyzed based on the following characteristics of powerful buyers to find out whether it is a buyer's market.

It is concentrated or purchases large volumes relative to seller sales. According to the market research results, most of the designer market customers are small shops. Since they will not likely to make big purchases, their bargaining power is not as high especially compared to the huge volume sales of giant software companies.

The products it purchases from the industry represent a significant fraction of the buyer's costs or purchases. This one is also not true most of the time. Since the designer software is relatively cheap compare to human capital cost and equipment cost, the software cost should not be significant.

The products it purchases from the industry are standard or undifferentiated. This is also not true as most of the designer software companies provide different products. They have very little shared standard tools.

It faces few switching costs. The biggest switching cost for buyers is the learning curve to master one provider's software. Also the cost of training designers and buying software are of consideration as well. In general one can argue that the switching cost is relatively high in this industry.

It earns low profits. This one really depends on companies. Companies in this industry can vary a lot. In general this is not a low profit industry.

Buyers pose a credible threat of backward integration. This is almost not there as most of the buyers don't have the capital and technology for backward integration. It also does not make economic sense either since creating software is not part of their core competence.

The industry's product is unimportant to the quality of the buyer's products or services. Actually it is just the opposite in designer industry. Whether the designer software is friendly or powerful can really make their customer's products standout or mediocre.

The buyer has full information. Since most buyers are small companies, they don't have the capital to invest in researching designer software companies such as MS.

In general, designer tools market has fairly friendly customers. These customers don't have significant power to influence the product providers. That said, their taste and interests do drive the future of the product innovations.

Bargaining Power of Suppliers

Similar to powerful buyers, power suppliers can also squeeze the profitability out of an industry by raising prices or provide less satisfied products or services. Due to software industry's special characteristics, it does not have traditional suppliers most other industries have. One important supplier though, is labor. The percentage of software engineers and marketing professionals cost can be very high in the overall operating cost. Not only that, since software industry is a very creative industry, good engineers are hard to find. Compete for talents can be a big concern for many companies. Google opened a branch in front of MS's headquarter to lure talents away. This shows how ugly the competition for talents can be in this industry. But since MS is already in software industry, this is not a new problem introduced by the designer market.

Overall, MS is in a good position to target the designer market. The legacy Front Page product is still selling to a large base of customers, the new focus will leverage on top of that customer based to provide extra values. This will for sure draw more customers. But MS does not have a strong brand in the designer market and it is an underdog compared to other companies. The key factors to success would be the quality of products and marketing.

Chapter Summary

This chapter documented the Microsoft efforts to understand its current position in the designer tools market. Through the focused group research and statistical survey, it was found that Microsoft is actually in a worse situation than it thought initially. To help understand the threats and market opportunities better, the author conducted Porter's 5 forces study. The results showed that to enter this industry, Microsoft will enjoy high and stable returns. Even though other companies are leading in this industry, Microsoft has the resource and expertise to eventually win.

So far the discussion has been mainly focused on the external environment Microsoft faces in the designer tools industry. Next chapter will analyze the internal environment in Microsoft so that we can get a full picture about the influence factors of Microsoft's Expression business venture.

3. Microsoft Overview

In "Corporate Entrepreneurship: Top Managers and New Business Creation"[15], Sathe proposed a framework of major factors that influence the new business creations in a corporation. The first part is business environment which consists of external and internal environments. The external environment includes customer, competitor and other industry and competitive forces, as well as the legal regulatory, technological and economic environment. This factor has been discussed in chapter 2 already. This chapter will continue to discuss the internal environment and the other several key factors: Management culture, Corporate executives, Division general manager and Division and its top management team.

Internal business environment refers to the condition of the division's existing business (whether it is growing, maturing or declining), the relative amount and stage of development of the division's new initiatives, the availability of resources, and other internal factors such as the fear that new product might cannibalize existing business, or the bias toward product innovation versus process innovation. To understand Microsoft's internal environment, one has to start from the history of Microsoft, also its organizational structures especially the developer division that created the Expression venture.

A Short History of Microsoft and Expression

Microsoft was founded in 1975 by Bill Gates and Paul Allen in Albuquerque, New Mexico. On January 1, 1979, the company moved from Albuquerque to a new home in Bellevue, Washington. Steve Ballmer joined the company on June 11, 1980, and would later succeed Bill Gates as CEO. The company restructured on June 25, 1981, to become an incorporated business in its home state of Washington (with a further change of its name to "Microsoft, Inc."). As part of the restructuring, Bill Gates became president of the company and Chairman of the Board, and Paul Allen became Executive Vice President.

DOS (Disk Operating System) was the operating system that brought the company its real success. On November 20, 1985 Microsoft released its first retail version of Microsoft Windows, originally a graphical extension for its MS-DOS operating system. On August 8, 1989, Microsoft would introduce its most successful office product, Microsoft Office. While Microsoft Word and Microsoft Office were mostly developed internally, Microsoft also continued its trend of rebranding products from other companies, such as SQL Server on January 13, 1988, a relational database management system for companies that was based on technology licensed from Sybase.

By 1993, Windows had become the most widely used GUI operating system in the world. *Fortune Magazine* named Microsoft as the "1993 Most Innovative Company Operating in the U.S." In the mid-90s, Microsoft began to expand its product line into computer networking and the World Wide Web. While Microsoft largely failed to participate in the rise of the Internet in the early 1990s, some of the key technologies in which the company had invested to enter the Internet market started to pay off by the mid-90s. In 2002, Microsoft launched the .NET initiative, along with new versions of some of its development products, such as Microsoft Visual Studio. The initiative has been an entirely new development API for Windows programming, and includes a new programming language, C#. Windows Server 2003 was launched, featuring enhanced administration capabilities, such as new user interfaces to server tools. In 2004, the company released Windows XP Media Center Edition 2005, a version of Windows XP specifically designed for multimedia capabilities, and Windows XP Starter Edition, a version of Windows XP with a smaller feature set designed for entry-level consumers.

The next planned version of Windows, Windows Vista is scheduled for release to consumers in January, 2007. Microsoft announced the new name of the operating system at the *Microsoft Global Business Conference (MGB)* in Atlanta, Georgia on July 21, 2005. Microsoft plans to release a new version of Microsoft Office as well, called Microsoft Office 2007, and is set to be released alongside Vista in January 2007 as of May 2006. In addition to Office, the next version of Visual Studio, the company's development suite, code named *Orcas*, is currently available as a Community Technology Preview (CTP). As of May 2006, an official release date is yet to be set for the development suite.

On September 20, 2005, Microsoft announced a rationalization of its original seven business groups into the three core divisions that exist today: The *Microsoft Platform Products & Services Division*; the *Microsoft Business Division*; and the *Microsoft Entertainment and Devices Division*. The Platform Products and Services Division produces Microsoft's flagship product, the Windows operating system. Platform Products and Services Division has several sub-divisions, one of them is the Developer Division. The flagship product of this division is the Microsoft Visual Studio, which is the company's set of programming tools and compilers. The software product is GUI-oriented and links easily with the Windows APIs, but must be specially configured if used with non-Microsoft libraries. The current version is Visual Studio 2005. The previous version, Visual Studio.Net 2003, was named after the .NET initiative, a Microsoft marketing initiative covering a number of technologies.

Developer division has long been a core business for Microsoft since the early days. Its famous Visual C++ and Visual Basic languages and Visual Studio integrated development environment are household names in the developer community. Since Microsoft is a platform company, it depends on the IT community to maintain its dominance in the Software industry. One key retaining factor is the developer community as most developers are the pioneers in the IT industry. Their views of the software will always lead the adoption in general public.

But why did Microsoft choose to put the designer tools in the developer division rather than create a separate division or put this business under the entertainment division? There are several reasons. First, the current potential target revenue for designer tools market is not big enough to justify its independence. Second, as discussed in the introduction chapter, it is more and more common that the designers are working closely with the developers to build websites. The ability to build an end-to-end solution for both designers and developers is the key to win businesses. Third, Microsoft sees that designer tools as part of the Microsoft platform rather than just an application. Combine it together with the existing developer platform will strengthen Microsoft's position in the overall market.

Expression is just part of the Microsoft strategic push on improving its User Experience. This year it shipped 3 technologies that will set a global trend and will redefine customer and enterprise expectations about User Experience. Windows Vista and Office 2007, both embracing User Experience in an incredible environment that provides the Enterprise everything needed to create the next generation of experience driven applications. Also the Live initiative led by Windows Live, making customer's daily tasks easier and more effective: Search, Communicate, Work, Sell, Buy, Share, Show, Learn... Microsoft is empowering customers with all these great capabilities. And there other great examples of what the company is doing for user experience, XBOX, great example, Media Center, E-Learning.

Microsoft is creating great software and empowering developers and designers to collaborate and create the same kind of great user experiences for their customers. The Microsoft Application Platform has embraced user experience as a key capability to achieve this objective. This User Experience can represent an unique and differentiating capability of the Microsoft Application Platform. Together, with the User Experience and other capabilities, the Microsoft Application Platform simply offers a powerful comprehensive end to end story in the market. The Microsoft App Plat includes a robust Platform and productive Tools that provide full access to

the development of Enterprise applications that get the best of Microsoft Development technologies.

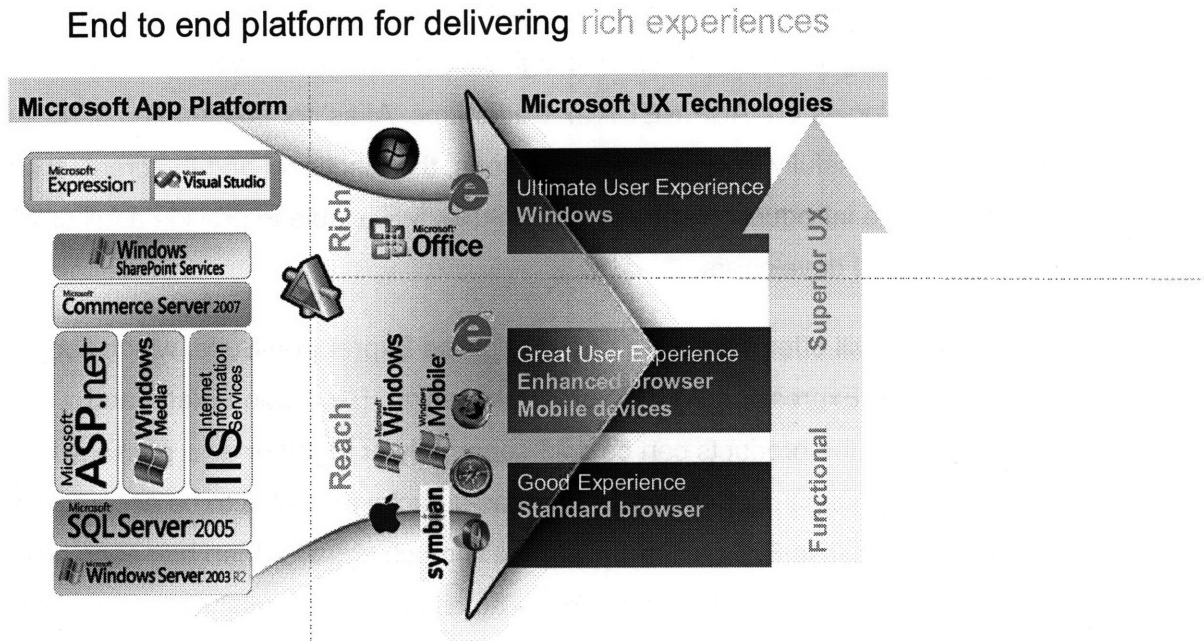


Figure 4 End to end platform for delivering rich experiences

This graphic [18] shows the complete representation of Microsoft end to end AppPlat. As mentioned before the AppPlat is comprehensive, from the robust and popular Server stack that has had a tremendous momentum this year, to the Web technologies that sit on top like ASP.NET 2.0, Windows Media content and IIS, from the Commerce Server to the Sharepoint Windows services greatly accepted by the Enterprise and of course our two families of products to develop great software for windows and the web: Visual Studio for developers and Microsoft Expression for designers. With these technologies customers can develop a full range of applications that cover the complete spectrum between richness and reach, applications that can full fill functional needs and deliver superior UX.

Traditionally when developers and designers work together to create desktop or web applications, the original creative vision of the designer is lost due to today's technologies which interfere with the process of development. For Windows Desktop applications the big challenge is the conversion or translation between static mockups that designers create and the actual implementation carried out by the developer. In the case of web application development the big

challenge is 'hard to transfer' mockups and the use of non standards based technology. Microsoft is addressing these historical limitations, first by introducing XAML that allows designers and developers to speak the same language in the process of creating Windows applications and rich interactive content for the Web and Mobile, and second, by adhering MS tools and platform to industry wide adopted technologies as well as by innovating with user experience driven technologies like ASP.NET Ajax Codename 'Atlas' for the creation of richer web experiences that successfully incorporate both visions, the functional and the creative and interactive. Finally, with the introduction of Expression Suite, MS is able to provide a full set of tools for both designers and developers.

The Expression Business will offer a software package called Expression Suite, which consists of 4 different product lines: Expression Web, Expression Design, Expression Blend and Expression Media. Each of the products can be sold separately or together as a package. Current intention is to encourage customers buy them as a package, that is to be accomplished through the pricing strategy. The Expression Suite price is much cheaper than buy each product separately. Expression suite v 1.0 will target the following customers: Graphic Designers, Web Designers, UX / Interaction Designers

Based on this introduction, we have learned more about Microsoft and the big environment the Expression business is in. This section articulates the importance of Expression and why this one is so important to the success of Microsoft. Next section will get into the detailed discussions of the Microsoft's internal business environment.

Microsoft Internal Business Environment

There are several factors in the internal business environment influence the new business creation, argued by Sathe. This section will use these factors to analyze the Expression business so that we can better understand the situation that the Expression business is in.

First factor is whether the existing business is a drag and a distraction that hurts new business creation. Looking at the businesses inside the Developer Division, there is no direct conflict of interests on the designer tools business. The designer tools go well with the existing developer tools business. There are several user experience based projects actually can help the Expression business. Outside of Developer Division, there isn't any division that works on the similar things. The only products need to be noted here is the existing FrontPage business. Since the Expression will be built on top of the FrontPage, this team actually will be moved to the Expression. The concern there is not really a problem.

Second factor is whether the new business creation is hindered when the existing business is growing. When the existing businesses are growing, there is a tendency that people would focus on them and under-emphasize the new business. In this case, other businesses in Developer Division are actually growing, so there has to be a balance at the resource allocation. Since the forecasted revenue for Expression won't be a significant factor in Developer Division until several years down the road, people could pay less attention on this business. Actually this concern has been brought up by some of the Expression managers in business reviews meetings. To boost employee's morals, the division executive team has made efforts to attend several Expression team all hands meeting to assure their importance in the division.

Third factor is the new business is sought when the existing business is maturing or threatened. Even though Developer Division has some mature businesses, the existing developer business is actually growing rather than declining. So this factor is not applicable to the Expression business.

Fourth factor is the dilemma of focusing on today while attending to tomorrow. Since people only have limited time, they have to make priority calls from time to time. The importance of existing business to contribute to the division bottom line does take away a lot of attentions from this Expression business. As Microsoft is pretty weak on the designer market, the first investment is actually not heavy so this business is not the top 1 priority in the division. But the division has tried to keep it growing by only hiring the very seasoned people to this team. So far the efforts seems have been paid off. These experienced managers and engineers were able to make a lot of progress even though they know that they are not a viable business by itself yet.

Other than the above 4 dominant factors, there are still several other factors could make impacts on the new business creation.

First one is the fear whether the new business will cannibalize the existing business. Since Expression is targeting the designer tools market which is new to Microsoft, this concern is not exist. Second is whether the new products can increase the sales of existing products. This is definitely a positive impact since that is one of the reasons to put the Expression business in the Developer Division in the first place. Because the designers and developers are working closely in today's industry segments, it makes sense to tie the designer tools and developer tools market together, so that a comprehensive solution can be provided to customers. With the option of designer tools, the customers would be more willing to buy the developers tools so

they can have their employee work on the same platform. This will dramatically reduce their development cost and time; also help the communications between designers and developers.

Third factor is the possibility that the new business could be dampened if several new products have been recently launched. Inside the developer division, there has not been any new product releases other than the updated versions of the existing products. But Microsoft just released the new operating system Vista and new Office products. Though this will actually help the Expression business as one of the major selling points on the new products is the increased user experience. Expression planned its releases closely tied with these releases to provide an end to end framework on user experience.

Fourth factor is the insufficient resources hinder new business creation. This has not been a severe issue for Expression but there are problems do need considerations. Since Microsoft is hiring aggressively, even the physical office space is getting very crowded. Expression sometimes has to put as many as 4 people in a tiny office to accommodate the growth. This very likely will affect the team morals. Enough attentions have been raised to the executive team so that eventually 15 more new offices have been allocated to the team.

The last factor is both product innovation and process innovation spur new business creation. Microsoft has always been a pioneer in the software industry. It has a culture that encourages innovation on products and processes. That is why numerous businesses have been created over the years. This factor definitely will benefit the growth of Expression business.

Overall, the internal environment is very encouraging for the new Expression business. The only major concern is this business is still too small comparing to the existing businesses. But with the careful planning from the executive team and the seasoned manager in the Expression business, this should not affect the outcome of a successful business.

After understanding the business factors, we will get into the management culture factors.

The Management Culture

Management culture is defined as the beliefs that the corporate executives and the division managers share in common. Whether there is big monetary gain in the future is not as important as people feel that they are working on something important. There are two categories of influences from the management culture that could decide the fate of a new business. The first one is the shared beliefs about rewards, risks, opportunities, and rule-bending. The second one

is the shared beliefs concerning about the control and learning. The following sections will go into each category and analyze the factors in each of them.

Shared beliefs about rewards risks, opportunities, and rule-bending

There are several major factors in this category. The first one is that big financial incentives hurt new business creation. Many believe that to make things happen, there has to be hefty financial rewards. Unfortunately this is not the case, especially in the high tech industry where the technologies experiences fast changes, where only the passionate individuals can have the energy and resolve to build successful new businesses. Big financial incentives for corporate entrepreneurs create perceptions of inequity and resentment that harm new business creation. The developer division treats the Expression business as a normal business unit as other business units. The senior management team of Expression enjoys the same kind of compensation structure as others in the rest of the division. This treatment actually brings the Expression team closer to the division rather than divide it. So far it has been a positive experience.

The second factor is reducing the perception of personal risk enhances new business creation. This is a very interesting argument that I totally agree based on my years of experience in the high tech industry. Managers are not afraid of risk because even when they are failed, they can always learn from their failures and be better the next time. It is only when personal interest is involved that people will rethink whether to take the new opportunities. For example, if they are getting paid less than before, they will have to judge whether the new business is worth their sacrifices. In the case of the Expression, the division executive management has been advocating the importance of this business so that the management team should not worry about their job securities. Also since they are going to be working in a growing industry, they actually will have better job opportunities even it does not work out in Microsoft. All of these do help to make the Expression management team feeling comfortable on their personal interest level.

Third factor is the opportunity taboos constrain new business creation. There are unwritten rules in companies on what kind of opportunities they should try to avoid. Normally they are due to the past failures in this area or the unpopularity among the employees. Expression is actually on the other end of the horizon. The whole user experience has been a big initiative in Microsoft recently, so the Expression has the support from top management to the engineers since engineers like to work on new things.

Fourth factor is the right to pursue one's business convictions promotes new business creation. Since the whole user experience and designer industry initiative is a top down approach in Microsoft, this business really has the business convictions from the management teams. The newly hired general manager for Expression is actually a veteran in the designer tools industry for many years. He has the passion and conviction to make Microsoft a successful designer tools company. He also brings a strong team with solid industry experience to help. They also have the strong convictions since they are seasoned designer industry experts.

The last factor is that the new business creation is facilitated by permitting rule-bending and limiting proscribed behavior. Due to the limited information, there has not been effective evaluation on this factor.

In summary, the Expression management does have the shared beliefs about financial incentives, risks and opportunities. Currently they have the support from the corporate executives and that has built the solid foundation for this business.

Shared beliefs about control and learning

The shared beliefs about control and learning are another major force that influences the new venture creations, according to Sathe. He argued that contrary to the popular belief that control is the antithesis of entrepreneurship, actually appropriate control is essential to the success of new ventures.

Among all the factors in the shared beliefs about control learning, the first is that controls to test business conviction help new business creation. Research has found that companies with successful new venture track records share the belief that the purpose of control is to test the business convictions of those who are in the new venture. Expression business is under the controls from the Developer division. The division controls the budget, resource allocation and even the strategies. The Expression management team has to be able to articulate their strategies and investment methodologies to get resources allocated to them. This actually increased the scrutiny on the business and keeps it from running wild.

The second factor is limiting aggregate investment without second-guessing the division helps new business creation. This has been discussed in last paragraph already; the Developer Division actually controls the budget and resource so that the risks can be limited.

The third factor is a balanced view of the impact of budget cuts and program delays facilitates new business creation. Only seasoned managers see things from the company point of view

rather than its own territory. The Expression business has hired very experienced managers that know how the businesses work in big corporations. Budget cuts and program delays are part of the reality they had to deal with. So they had to put extra buffers when they started the planning to anticipate the uncertainties. They do work very well with the division management team to make sure that the division as a whole can be successful even though sometimes they can't have the resources they wanted.

The fourth factor is that a shared belief in learning from failure helps new business creation. This works well for Expression also since the management team has extensive start-up experiences. They understand that not all new businesses can succeed; in fact most of the businesses will end up in failure. That is not a personal thing. The Expression management team actually has talked about that the failures can happen at anytime due to the market shift or wrong decisions. They have enough trust in the division management team to help them find out the best ways to utilize the investments.

The last factor is the shared belief about culture change. Since the Expression team is relatively new, there have not been any management changes so far. It is still too early to tell whether all the management teams share the same beliefs about culture change.

Overall, the Expression management shares the beliefs about control and learning among themselves. They also align themselves pretty well with the division management team. This is definitely a major plus for the business's healthy growth.

Chapter Summary

By introducing the products and organizations from past to present, this chapter provided the background for Expression business's creation and why that is important for Microsoft. Using Sathe's corporate entrepreneurship framework, this chapter also analyzed the Expression external and internal business environments, discussed the management culture; proved that Expression is a sound business based on this framework. Sathe's framework also has several other influence forces to start a new business: Corporate executives, Division general manager, and Division and its top management team. Due to the limited information and time, this research has not been able to cover these areas. They will be part of the future plan of this research.

4. Build the business

This paper has discussed the Expression market opportunities, Business environment and Management influences so far. All these steps have laid the groundwork for starting the venture. Now it is time to get into how the business is created. In economics, business is the social science of managing people to organize and maintain collective productivity toward accomplishing particular creative and productive goals, usually to generate revenue. Based on the six stage models created by Block and MacMillan [21], this chapter will focus on the efforts of the expression management completes the business plan and organizes and launches the venture. The Developer division senior management team involvement will not be the emphasis in this discussion.

In the six stage model, there are two steps in building the business part: Developing the business plan; Organizing the venture. This chapter will follow the same order. In the end, a separate discussion based on Cusumano [4]'s start-up recommendations will reveal what a corporate venture has in common with the start-ups, and what their differences are.

Developing the Business Plan

A business plan is a summary of how a business or entrepreneur intends to organize an entrepreneurial endeavor and implement activities necessary and sufficient for the venture to succeed (Wikipedia). Block and MacMillan argued that there are 12 elements are essential for a corporate venture business plan. Based on the internal Microsoft Expression "Run the Business" presentations and "Strategy Plans", this section will discuss the 12 elements in details.

1. Description of the proposed business-precisely what it will do, including its unique characteristics and clear objectives.

This element is covered in the Expression mission statement: *Win the hearts and minds of designers so that the best user experiences in the world are built with our tools and delivered on Microsoft platforms. Drive the user experience to new levels with our products. Advance the Microsoft platform by enabling the most compelling creative capabilities. Attract Creative Professionals to the Microsoft platforms. Respond to the demand for a toolset where designers and developers can directly collaborate [16]*

Its unique characteristics are this business is all about user experience, this business is the only one that works on the designer tools in Microsoft.

2. Strategic relationship between the new business and the parent firm.

The strategic part of this element is also covered by the mission statement discussed above. The expression business is all about enabling the designers to create the best user experience on Microsoft platforms. The organizational relationship was introduced in last chapter when discussed the relationships of the Expression with Microsoft Corporation and Developer division.

3. Target markets – including their description and size, market trends, why customers will buy, and the specific accounts to be targeted initially.

This marketing element is covered in the second chapter when the designer market and its size were introduced. Following the trend that the designers and developers are working side by side on web development works, the Expression products lines can bring the total experience to customers by working with the developer products inside the Developer division.

A SWOT analysis was conducted by the author to further confirm Expression's target market and risks. SWOT (Strength, Weakness, Opportunity and Threat) SWOT has a long history as a tool of strategic and marketing analysis. It is the first stage of planning and helps marketers to focus on key issues. In SWOT, strengths and weaknesses are the internal factors, opportunities and threats are the external factors.

Strengths:

- Software industry expertise
- Platform prevalence
- Capital available for investment
- Developer ecosystem

Weaknesses:

- Weak MS brand name in designer industry
- Small market share
- Designer industry experience
- Legal target due to dominance in software industry

Opportunities:

Entry barriers to designer industry is low for MS

Has potential to build a strong ecosystem for both developers and designers

New focus could bring in rapid revenues in next few years

Threats:

Lose designer market could potential threat the developer market

Competing companies have market dominance

Opening source creates a vast ecosystem that is not MS friendly

The SWOT results show that MS is in a very critical situation. On one hand, it has huge opportunities to get into a new market and expand its current developer ecosystem; on the other hand, it could lose the designer market and even cannibalize its existing developer market share. Fortunately MS realized these opportunities and risks.

4. Present and anticipated competition – including the identity of specific competitors and their characteristics, competitive advantages, and market share.

This has also been covered in chapter 2. The specific competitor names will not be mentioned here due to confidential information concerns. But it is clear that the competitors are driving the designer tools market, and they are the market leader in both size and loyalty. The Porter structural analysis reveals the competitive advantages of each player in the market; Microsoft should anticipate the leader's defensive moves in the future.

The Expression strategy statement reveals its competing strategies: *Engage designers with a credible first wave of products. Compete on a feature basis with core suite of web, graphics and interaction design tools. Win with a comprehensive suite enabling an end-to-end designer to developer experience [16]*

5. Go/no-go assumptions and the basis for them.

The Go/No-Go assumptions will cover the market, product, technology, economic, competition, organization and environment. They will be used to justify whether it is the right decision to get into the business at all. Up until now, we have discussed most of the assumptions other than the

organization. The organization will be covered in next section. From the discussion results, we can tell that these assumptions support the decision to get into the designer tools business.

6. Definition of failure

This is an important area of the business plan. Because resources are limited, they have to be used in the areas that can generate most returns for the company. One can't let a bad business continues without putting a stop. Currently there is no definition of failure for the Expression business; this is something that should be covered in the future study.

7. Action plans and objectives, which defined milestones designed to test the go/no-go assumptions in each functional area.

The following excerpt from the Expression "Run the Business" [16] reveals the action plans and objectives. "The Expression Business will win by: *Allow designers to unlock significant customer value in Microsoft's next platform wave. Advance state-of-the-art capabilities by competing head-to-head with market leaders. Enable designers to work seamlessly with Visual Studio developers*"

There are also tactics a business practices on daily basis to facilitate the strategies. Expression business has the following tactics [16]: Monetize additional activities and roles in application development. Increase the number of people touched by our development tools strategy. Be able to speak about the broader business value of end to end IT. Insulate against commoditization to our core developer business. Integrate friction free flow of data. Build a rich 3rd party ecosystem.

If executed right, these sets of strategies and tactics will produce the following results/objectives: Creates significant new customer value; Changes the rules of a competitive, entrenched market; Plays to MS strengths of ease of use, mass market developer tools; Integration creates reasonable amount of longer term differentiation.

8. Necessary resources – money, physical, and human – and how they will be acquired.

Even through this one is not covered by the current Expression business plans, they are covered by various other internal Microsoft plans such as financial, cost and budgeting plans. Due to the confidential reasons, the details will not be discussed here. But the money, physical and human is an integrated part of the whole business planning process.

9. Principal risks and how they will be managed

The primary risk areas are financial, marketing, technological and management. Currently this is also not covered; it is the same as the definition of failure. This should be part of the future study.

10. Sensitivity analysis – an assessment of how certain contingencies might affect the venture.

The next financial discussion will talk about some of the financial assumptions, but it really lacks the sensitivity analysis. Again, this is another area that has not been well covered. This should be reserved for future study.

11. Financial projections and objectives, together with the assumptions on which they are based, including profit and loss and cash break-even points.

For any for-profit corporation, the bottom line is to generate revenue and profit. Like any new businesses, Expression plans to invest first then hope to generate positive cash flow down the road. The graph below describes Expression's revenue projection. Please note that Microsoft's fiscal year starts from July.

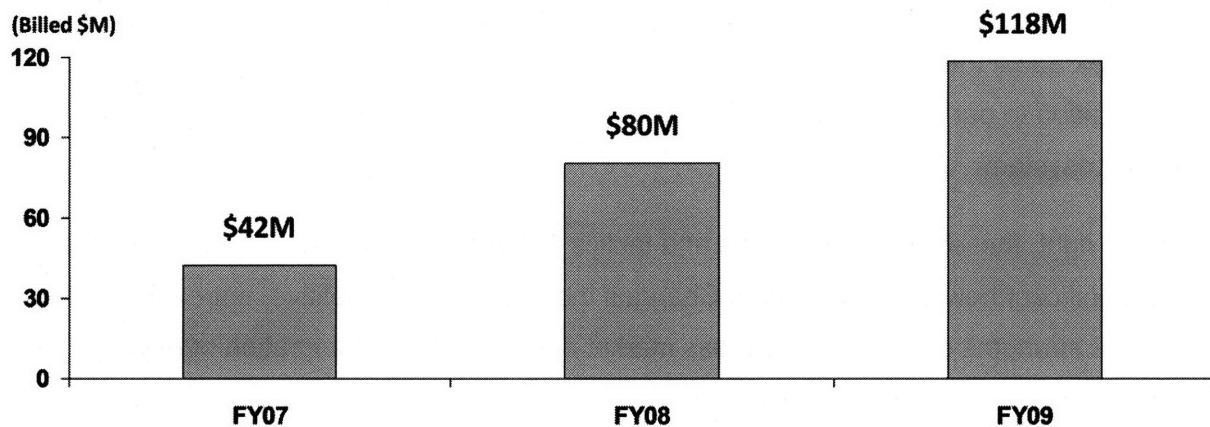


Figure 5 Expression revenue projection

How does expression hit revenue forecasts in FY07? A list of revenue recognition strategies were put in place to help archiving the financial goals [16]:

Upgrade FrontPage 2003 Installed Base

- 26M committed licenses sold between FY03-FY06
- Roughly 1.7M non-academic licenses during same time frame
- Existing customers are likely most favorable to MS
- Haven't purchased a MS web authoring tool in up to 3 years

Cross-sell Existing VS Customers

- Expression Web is a natural fit for existing VS customers who want a web development tool

Capture Designer Market Share

- Begin multi-year entry of Expression in pro designer market
- Approximately 750k designers are addressable in FY07

Maintain Existing FrontPage Run-Rate Business

- FrontPage users typically migrate to other products if they are unsatisfied
- Keeping selling FP2003

The following assumptions are made when make the financial projections:

- Launch Suite Version 1 in Q3 FY07
- Initially the Suite will only include Expression Web and Expression Design
- Maintain non-academic Front Page run rate business
- Win designers upgrading tools
- Win designers buying new tools

Out of all the assumptions, one key element to success is to deliver quality products on time. Delivering products on time has been a Microsoft nightmare recent years especially with the seemed forever postponed Windows Vista. It can cause the potential customer to stay away when a company can't keep up its promises.

12. Description of the venture's management and the compensation methods that will be used.

Chapter 3 has introduced where Expression is located in Microsoft; that summarized the senior management team for Expression at the Corporate and Division level. Next section on organization will get into the Expression organization management itself. Due to the confidential reasons, the management compensation structure will not be part of this discussion. But that is in place to measure the business success.

Overall, the Expression has most of the business plan elements covered. However, there are several areas that related to risk management has been largely ignored. They are the definition of failure, Principle risks and sensitivity analysis. To provide a full picture of the business, they should have been covered. These areas will be good topics for future study.

Organizing the Venture

Based the 6 stage corporate venture model, this section will discuss the venture organization. Before applying the methodologies from the model, it is beneficial to introduce the current Expression organization structure, product groups and culture to help the study.

Expression Organization Structure

Every business requires people, human capital is even more important in IT industry as highly skilled workers are the most important factor at producing winning software. Most IT businesses have the following functions regardless of their sizes: Finance, Human Resource, Marketing and Sales, R&D, Administration, Management, etc.

Expression Business Unit was created in 2005. At first, there was only a development team with no clear business goals but only product development plans. At end of 2005, several key managers including the General Manager were hired to formally found the Business Unit. Due to the nature of this Business Unit, most of the senior managers come from outside of Microsoft. Because they have far more experience in professional designers market. By the end of 2006, Expression Business Unit has half of the people transferred from other parts of Microsoft and half come from outside.

The Expression Business Unit is managed by a General Manager (GM) who has the overall P/L responsibilities of this business unit. Currently there are about 90 employees working on 4 different product lines: Expression Web, Expression Design, Expression Blend and Expression Media. Each product line has a PUM (Product Unit Manager) who has the overall responsibility

of the product unit. Every product unit can have multiple products or just one product. Each product unit has 3 key functional areas: Development, Test and Program Management. Their detailed functions will be described more later on. There are also software architects at each level of the business based on needs. The GM himself will normally have a GPM (Group Program Manager) to manage the program management team and an administration team. An organization chart of the Expression Business Unit is as follows:

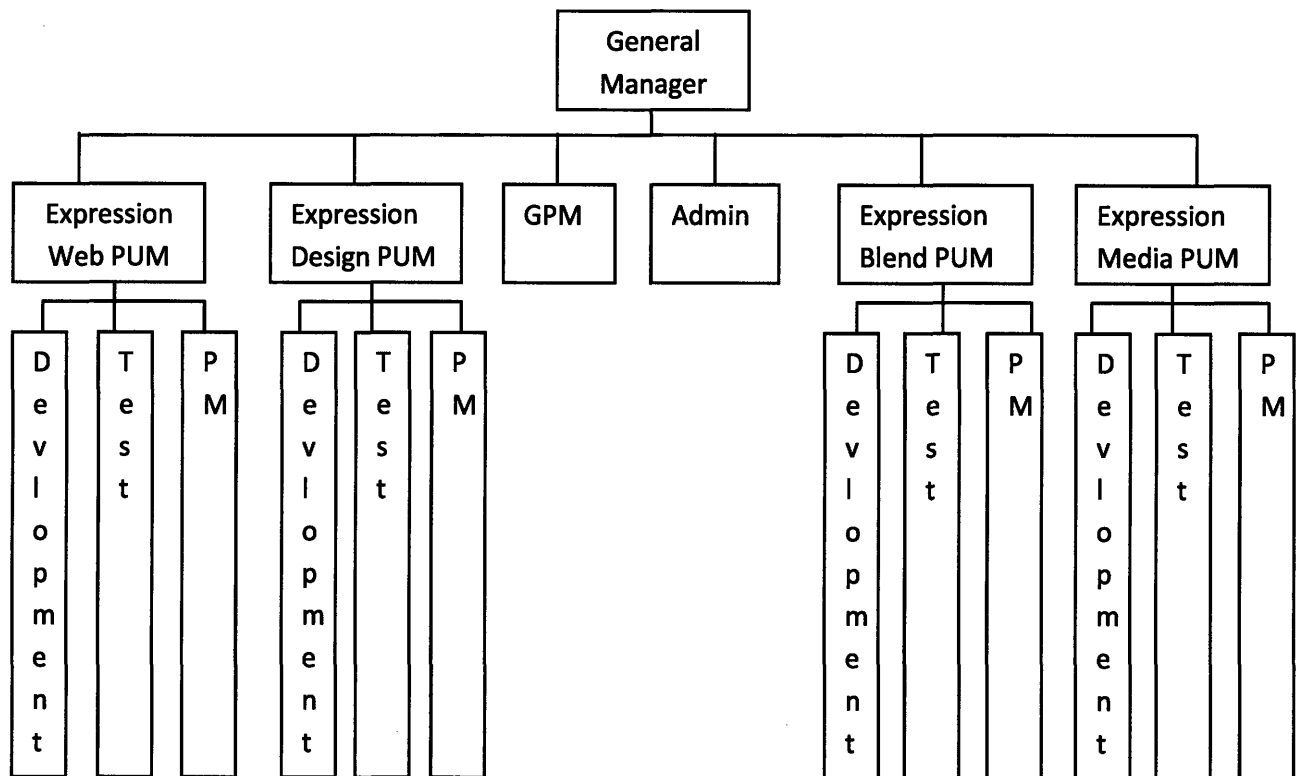


Figure 6 Expression Org Chart

Since most of the senior managers are from California where most of the designer companies are located at, Expression Business Unit inherits some of the culture from there. Employees in this business unit are working like a start-up company. It is clear that they form a closed circle among themselves. That is also due to they have a charismatic General Manager who is very easy going and down to earth. People in this Business Unit give him a lot of respect for his

leadership. Here is one example of his charisma: to make more room for new comers, he gave up his corner office and moved to a small office with no window views. Even though his team has over 40% office doubling sometimes even tripling, there were rarely complaints. But there were consistent complaints from other teams with only 15% doubling ratio.

Even though there was couple of small acquisitions in the process of building the Expression Business Unit, the teams were able to integrate together very well. One reason is due to this Business Unit is a brand new one, but the more important reason is the way the management team treat and communicate with the team members. In spite of a team of 90 people, the General Manager insist to have a weekly meeting with everyone together to introduce new employees and update business progresses. People in this team expressed that they feel much respected. In return they honor their team members and manager with hard work and team works.

In Microsoft, there is a yearly survey of employee's views on the management, company and teams. Although Expression Business Unit is the youngest one in Developer Division, although half of the people have not been working in Microsoft before, they scored highest in the survey on satisfactions at management and teams. Even more surprising is Expression Business Unit is ranked number one at employee charity donation among Developer Division. That is not a small feat to achieve given that Microsoft employees has a long history of donation and per employee donation amount is ranked number one among all U.S. corporations.

From the above it is clear that Expression Business Unit has a strong team environment with high motivations. It would be great to keep this. But to grow the business, there are things can't be done the same way as before. It is not feasible to have a Business Unit wide meeting every week because it would not be served as an efficient communication vehicle anymore as the number of people growing in the organization. The General Manager has to dedicate more tasks to his directs rather than doing all of them by himself. Also, it is clear a measurement system has to be in place to help the business to grow.

In Microsoft, even though every Business Unit has Profit and Loss responsibilities, finance and marketing are not part of their functions. Normally the finance, sales and marketing are part of the divisional functions to better control and reduce redundant costs. Expression Business is of no exception in this case. The Developer Division provided full support for Expression Business's finance, sales and marketing support. Most of the resources in Expression Business are part of the R&D organization other than management and administration.

At the divisional level, there is one financial analyst dedicated to the expression team. However, most of the resources are coming from the marketing side. There is a corporate marketing group led by a director of product management as well as several teams of product managers for Expression Studio and individual products and business. Also reporting to the director is a team of product managers for Client Platform technologies and a team of product managers for field and customer content development. There are also 4 product managers work in this team from different international locations in UK, Germany, Japan and EMEA.

One thing worth to note is the DPE organization in Microsoft. DPE stands for Developer and Platform Evangelism, it is a corporate level division that is responsible for driving broad platform adoption and cultivating a vibrant ecosystem of customers, partners and developers loyal to, excited about and satisfied with Microsoft. DPE primarily focuses on early adoption of Microsoft' emerging platform technologies, building momentum until adoption reaches critical mass. There are 19 User Experience Evangelists (UXEs) that will be joining regions and countries worldwide. These UXEs will possess great knowledge and expertise on user experience real world projects and will identify and work to win strategic local accounts. UXEs will also collaborate closely with development engineers to assemble strong end to end solution teams that can successfully address our Application Platform objective... providing end to end technological solutions to MS Enterprise customers.

Product Groups

As introduced earlier, there are 4 product groups in the Expression business unit. Each product group works on one product line. The details for each group are given below.

Expression Web

Expression Web is a State-of-the-art designer product to create standards-based web sites. This product has a set of professional design tools that is powerful and easy to use. Even though Expression Web product is built on top of the legacy Microsoft FrontPage product, it has added much more functionalities on top of the latest FrontPage release. By using Expression Web, designers can generate modern CSS page layouts using powerful design surface tools and direct manipulation of positioning, sizing, setting margins and padding. They can also develop dynamic Web sites and applications by taking full advantage of the power of popular Microsoft ASP.NET 2.0

This team was built on top of the existing MS Front Page team, so it falls into the internal acquisition/Alliance when start a new venture. The current technology concern is the need to build out team as they transition code base from Microsoft Office division where the old Front Page located at to Designer Tools.

Expression Design

Expression Design is an integrated vector/bitmap graphics program to create complex artistic content for web and interactive applications. Expression Design has a set of graphic design tools for professional designers. Using Expression Design, designers can design superior user interfaces within a hybrid graphics environment for the new generation of Windows Vista software applications and for the Web platform. They can also create or edit graphic design content whether it is vector or bitmap based and export to popular formats or bring artwork into other software tools such as Microsoft Office.

Expression Design was built from ground up by a small design team even before the Expression business unit was created. The current concern is the team is too small to meet scope and schedule of the complex feature requirements.

Expression Blend

Expression Blend is a tool to enable designers to create visually rich and interactive UX. Expression Blend also incorporate rich media including vectors, bitmaps, video & audio, 3D content, text, controls, layout & skinning and create compelling user interfaces that take the best from Windows Presentation Foundation.

This team was created at the same time as the Expression business unit. So it has the full picture in mind when the team was built. Due to this reason, the team committed too many features. The current concern for the team is the need to reduce scope of work and optimize feature set for designers.

Expression Media

Expression Media is built from the acquired company "Iview". This case follows the acquisition model of corporate venture. Out of Iview, the SmartFlow product is for Pro Photographers, the rest is for Expression Media which works on both Windows and MAC. The existing SmartFlow users will be continuously supported under Microsoft's brand name. Expression Media will have a big focus on Macs, because large share of graphics/print publishing is done on Macs. Print is

not relevant, but Macintosh Illustrator and Photoshop are super important sources of graphics for web and interactive projects. The intent is to get Expression brand in front of Mac-based designers and photographers.

iView was a small 8 people company located at London, U.K.. After this acquisition, the team will be moved from UK to Redmond. There are 5 iView people will join Expression, the rest business people chose not to continue this venture. Microsoft picked an internal seasoned manager to manage this team. Current challenge is to integrate this team with the new hires.

Analysis based on Organizing the Venture

This section will use the models and principles described by Block and Macmillan [21] to evaluate the Expression business and search for improvements. Block and MacMillan argued that there are two key decisions in venture organization – Decisions on focal activity, and Decisions on linkage. The crucial variable that shapes these two organizing decisions involves the degree to which the venture's product, market, and technology are related to the parent organization's product, market and technology. The different combinations of product, market and technology relatedness give rise to seven distinct types of ventures, each with its own unique pattern of learning challenges, opportunities for capturing know-how, and potential for the venture to intrude into various aspects of the parent firm's ongoing operations.

The seven major venture types are: Product augmentation, Product Development, Technology innovation, Market augmentation, Vertical integration, Technology commercialization, and Blue-sky. We will analyze the 3 areas of relatedness and other 3 categories described above to find out which venture type the Expression falls into.

Product relatedness

Out of the 4 product lines in Expression, only the Expression Web is based on the existing products, all other 3 are the new areas which Microsoft has not been experiencing before. Even though Expression has to work closely with other parts of the Developer division on product collaborations, the products they are working on are still in the new territory. So overall Expression has low product relatedness to the Developer division. This can also be revealed from the learning challenges for Expression.

As described earlier from the Expression product section, currently only the Expression Web schedule is on time. Expression Blend and Expression Design are both behind schedule and Expression Media still does not have a concrete release plan yet. This definitely brings

operations turbulence. The organization has to learn new processes and systems to deliver the products as the designer tools are new to the Developer division. There will be several trial runs for each of the products in plan since they need the feedback to adjust their product plans. The newness could also contribute to the debugging problems as people don't have experience in this area. Even they have hired experienced people from the industry, but these people don't have Microsoft development experience yet. There is also a lack of product, supply and service standards as the designer tools are new to the division and Microsoft. This could cause delays at the development stage and chaos at the field deployment and support stage. The selling effort is greater than the rest of mature products in Microsoft since designer market is a new area that Microsoft was not in before. The same goes with the switching cost disadvantages. As described in chapter two, other companies are leading this industry. It would take much more efforts to convince potential customers to use Microsoft designer tools. And even when they start to use them, there could be high customer returns since they might not like the interface or they were too used to the competitor's products.

Market Relatedness

Chapter two has detailed the designer market and the challenges Microsoft faces. Basically Microsoft is almost not present in this market. Due to this reason, we will have to classify the market relatedness as low. Although this one is not very low since Microsoft does have strong connections with the enterprise designers through the developer connections. This conclusion can also be verified from the learning challenges Expression faces in market.

The first learning challenge is the selling uncertainty. Microsoft has intimate knowledge about the developers, but far less knowledge about the designers, especially these working in small companies. Due to this reason, there is a great selling uncertainty in this area. The only designer customers Microsoft can relate to is in the Enterprise. Microsoft has relatively strong connections there to sell them the whole developer and designer solution. That can be verified from the recent revenues generated from these sales. New customer and channels is another area Microsoft has to develop. Almost all of the Expression customers will be new to Microsoft. The lack of relationship area is a balanced one depends on where the customers located at. As discussed earlier, Microsoft has strong connections with enterprise customers, minimum connections with small company designers. On the lack of customer and channel tolerance and empathy factor, Microsoft actually is not in a bad situation since its Windows and Office are household name products. Although it can play at Microsoft's disadvantage since there is a

large group of anti-Microsoft customers out there. The poor understanding of industry protocols is not a factor as Microsoft has hired the best management and development team in the designer market. New sales force can be a big concern. No matter they are facing the small company customers or enterprise customers. It takes training and experience to get the existing sales force up to speed on the designer tools. Lack of experience in servicing the market has also been mentioned in the previous product relatedness. This is an obvious shortage that requires both training and time to solve.

Technology relatedness

Even though designer tools are a relatively new area for Microsoft, it does have strong connections with the existing Microsoft products. First, these tools are software products that will work on Windows platforms. And Microsoft not only owns the Windows, it also is the leading software development company with thousands of talented software engineers. Second, designer tools are closely tied with the developer tools which Microsoft is also the leading provider. Based on the above considerations, we think the technology relatedness is high for Expression. The following discussion will be around how Expression captures know-how from the existing technology.

On the know-how list, first is the understanding of product design and redesign. Even though Microsoft has little experience on designer tools, it is still the number one software company in the world and designer tools are software. So definitely Microsoft has a very strong product design and redesign practice. As described by Cusumano and Selby [31] as Synch-and-Stabilize product development process. Expression can share the existing processes and software systems design. The next know-know area is the knowledge of reliable equipment suppliers. This actually can be worked out very smoothly since all Expression work on is software and the major equipment investment are software and computers. Good relations with equipment suppliers are also without a question since Expression does not have its special equipment requirements that out of the Microsoft scope.

Based on the above product, market and technology relatedness analysis, the result is clear-Expression business is a technology commercialization venture. This type of ventures has low product and market relatedness and high technology relatedness. The learning challenges are mainly from the marketing and operation areas and the exploitable know-how is mainly from the development areas. The intrusion on firm's ongoing activities is almost not there as most of intrusion happens on the know-how conflicts in sales and operation areas. But the expression

know-how is only from the development area and that is almost an isolated entity that does not share resources with other businesses.

There are 4 principles proposed by Block and MacMillan on organizing a corporate venture. They are built on top of the venture model discussion. These 4 principles are: Organize to maximize learning, Organize to maximize the capture of know-how, Organize to minimize or manage intrusions, and Use the simplest possible coordinating mechanisms to meet the venture's linkage needs.

Since the intrusion is a non-factor, the Expression organization has to focus on the learning challenges in the product and market areas, and try to increase the learning in these areas and minimize the risks: operations turbulence, new processes and systems, trial runs and reject rates, debugging problems, lack of product and supply standards, lack of service standards, greater selling effort, switching cost disadvantages, high customer returns, selling uncertain, new customers and channels, lack of relationship, lack of customer and channel tolerance and empathy, poor understanding of industry protocols, new sales force, lack of experience in serving the product. Also, Expression has to focus on exploit the know-how in following areas: understanding of product design and redesign, understanding of process and system design, knowledge of reliable equipment suppliers, good relations with equipment suppliers, and knowledge of industry standards for equipment.

Corporate Venture vs. Start-up

In Cusumano's "The Business of Software", he argued that there are 8 elements that are necessary for the success of a software start-up. Since this paper is about software corporate venture which is a start-up within an established firm, it will be helpful to compare these two types of business by using these 8 elements to analyze the Expression corporate venture.

Element 1: A strong management team

This element is not only necessary for a start-up company, it is also very important for a corporate venture. Although there is an interesting difference here because the corporate venture management team is not only the venture managers that hands-on work on the venture, but also the corporate executives control the strategy and resource allocation. The function of corporate executives here is similar to a start-up board of directors who controls the capital and resource allocation; but they are not the same since the corporate executives have much tighter control of the venture than the board of directors in start-ups.

A solid management team in a corporate venture is very important at executing the strategies and achieving business objectives. But they don't have the same authority as the start-up management team has on their businesses. There are much more politics involved in the corporate venture since they have to deal with corporate marketing, sales, human resource and many other different functions that they don't have control of. So even it requires the strong management skills to run a corporate venture, their skill sets can be very different from the start-up management teams. Start-up management team requires more of entrepreneurial experience than the abilities to adapt to corporate culture.

Element 2: An attractive market

This is another common element that the corporate venture shares with the start-up companies. Attractive market is almost a must to have for any successful business. There is a subtle difference between an attractive market for a corporate venture and an attractive market for a start-up company though. Start-ups normally have different strategies at attacking the market. They normally need a niche market to start from. They would not plan to be the market leader most of the time unless it is a green field. On the other hand, corporate ventures are more interested in a big market so that they can become the leader in the future.

Element 3: A compelling new product, service, or hybrid solution

This one is also a share element for these two types of businesses. Although due to the different natures, there could be differences between a corporate venture and a start-up. The new product, service or hybrid solution to the corporate venture could be something that is compliment to its current offerings. So it might not bring profit by this business alone. But a startup does not have existing portfolios, most of the time their products or services have to be standalone, although sometimes start-up will work on alliances with other companies to build a whole solution similar to an established firm. The alliance is a much loose coupling than a corporate venture's offering with the rest of the corporate offerings.

Element 4: Strong evidence of customer interest

Out of all the elements, this is probably the only element that does not have any difference between a corporate venture and a start-up. Customer interest is mandatory for a business's success.

Element 5: A plan to overcome the "credibility gap"

Although corporate ventures may need to overcome the credibility gap, it is in a much better position than a start-up. Even though a corporate venture is working on a totally different field, its current corporate reputation will still carry a long way at helping sales and marketing efforts. But a start-up has almost nothing other than the past track record of the entrepreneurs and their products. It is much harder for a start-up to overcome the credibility gap than a corporate venture.

Element 6: A business model showing early growth and profit potential

This is another common area that is necessary for both corporate ventures and start-ups. A solid business model is a good proof whether the management team has the experience and knowledge to run the business in a long run and bring profit back to the investors. It is a must for any business to look at the ROI for next several years to justify the business's value. Similar to the compelling product/service discussed above though, a corporate venture may look at things differently from a start-up. A corporate venture may not making money alone but it can make money by working with others in the corporate. The start-up is more a loner that has to be able to survive on its own.

Element 7: Flexibility in strategy and product offerings.

Flexibility in both strategy and product or service increases the chances that a start-up will find the right formula. This is much more important for a start-up than for a corporate venture. Normally a corporate venture is pretty fixed on its strategy and product offerings by the decisions from top down. A corporate venture's failure will not affect the corporate bottom line. The corporate would rather see the existing strategies successful to fulfill its expectations, than having this new business working on other products. But for a start-up, they have to be very flexible to ready to shift directions as there are so many uncertainties and opportunities out there. A start-up with flexibility will not miss important opportunities in the future. Even though flexibility is not as important to a corporate venture, it is also something nice to have. With good flexibilities a venture will be able to gain competitive advantage in the market place.

Element 8: The potential for a large payoff to investors

Normally this is called "exit strategy" for a start-up. This is very different for a corporate venture. Most of the time a corporate venture will only contribute to the corporate profit, there are very few times they will spin out from the corporate and becomes a separate company. But for a start-up, there are only 3 ways to go: Dismiss, Being bought out, or Go public.

From the above discussion it is clear that a start-up and a corporate venture share many common elements for success. Although there are many subtle differences on how they treat each areas and what is the definition for success for each elements. In my opinion, the two biggest differences between a corporate venture and a start-up are at the beginning and the end of the business. In the beginning, the start-up normally has to prove its business case to get capital from investors. But a corporate venture normally takes a top down approach, i.e. corporate allocates resource to start a new business. At the end, the start-up investors want to cash out, but corporate wants the venture to continue making money for them.

Chapter Summary

Using the 6 stage models from Block and MacMillan's "Corporate Venturing: Creating New Business within the Firm", this chapter analyzed the Expression business from two areas: Business plan and organization. The current Expression "Run the Business" has most of the business plan elements covered, although it is short on the risk management side. The organization analysis comes to the conclusion that Expression is a technology commercialization venture, which has high relatedness on technology, but low relatedness on product and market with Microsoft. The challenges and improvement areas have also been identified through this exercise. In the end, a comparison of corporate venture and start-up has been discussed based on Cusumano's 8 elements start-up must have. This revealed the differences and similarities between a corporate venture and a start-up company.

5. Conclusion

Started from the literatures in Corporate Entrepreneurship, this paper listed the reasons and macro environment why Microsoft wanted to create the Expression venture. Chapter went into detailed market data analysis and strategy structural analysis to evaluate Microsoft's position in designer market. The conclusion justified Microsoft's motive to create the Expression business, also proved that Microsoft will enjoy high and stable returns in this industry if Microsoft can make up its weakness in the product and marketing side.

Chapter 3 evaluated Expression venture from the internal business environment and management culture, also drew a positive conclusion that create Expression was the right move for Microsoft. But there are several more influence factors on the business have not been covered due to time limitation and confidential reasons. It would be best to look at the business from these angles to get a holistic view.

Chapter 4 further assessed the Expression business from its business plans and organization. This analysis found that the venture is a technology commercialization venture in the Block and MacMillan's model framework. This type of ventures normally requires more work on the product and market side. This result double confirmed the study from the market analysis in chapter 2. The business plan analysis also found that although most of the business plan elements have been covered, there is serious lack of information on the risk management side. To improvement future planning and especially cover the product and market weakness, this chapter will identify one area needs more improvement – business planning area, and propose a framework to move forward. At the end, further studies on the Expression venture are also discussed.

Proposed Planning Framework

BY the end of 2006, several Expression products have either been released or close to release. With the releases and closing to the holidays, people started the celebrations. It is no easy task to deliver these products on time; the teams have done a fantastic job to get the products out of the doors. But it is also time to reflect on what could have been done better to improve the planning and orchestration of these products in the future releases or even what could have been done better to start new businesses.

As discussed in the previous several chapters, Expression business has not followed a concrete framework when rolling out the products. But rather it was an ad-hoc management. Many of

these are due to the lack of experience at Product and Market expertise in the designer and tools industry. This is an area that really needs more work to have a better control of the business direction. Although some say too many rules and procedures could damage the company's creativity. "Traditional companies achieved their revenue and profit performance by imposing rules, procedures, and control checks throughout their organizations. Today, business places much less emphasis on rules and formal coordination of work. Rather, the focus is on exploring creating, and delivering value to customers." [30] Argued by Kotler, Jain and Maesincee. But without a framework, it is hard to manage the business and the outcome will vary a lot.

In the past, Expression focused a lot on great features. There was not enough up front end-to-end strategic thinking and more often than not people ended up trying to make the strategies fit the features. As part of the planning process, it is critical to start with business objectives and strategies. Here is a list of pain points during the expression planning. First is the Business Leadership involvement: In the part the planning didn't involve PU leadership sufficiently in initiatives generation or elaboration, the initiatives weren't cleanly aligned with key business segmentation/initiatives, and MOA wasn't strategy driven or strategy cognizant. Second is the Product Leadership involvement, there was a lack of clear technology and product roadmaps. Third is the Time to Value, currently Expression hasn't really balanced the portfolio yet – don't know if the lead investments were right or not.

The goal of the new planning is: *"Provide insight into the most important things to ensure we align resources more effectively"*. A better planning will bring the following benefits to Expression Business:

- Respond Rapidly/Agile to customers and Business needs
- Optimizing for the business and customer
- Empowering local decision that optimize the strategy
- Better risk management controls

The diagram below is the proposed end to end planning framework to achieve the above goals. The whole planning process will start from Business Objectives, going through Multi Release Strategy, Initiatives, Value Propositions, Experiences and Features, to finally become product releases.

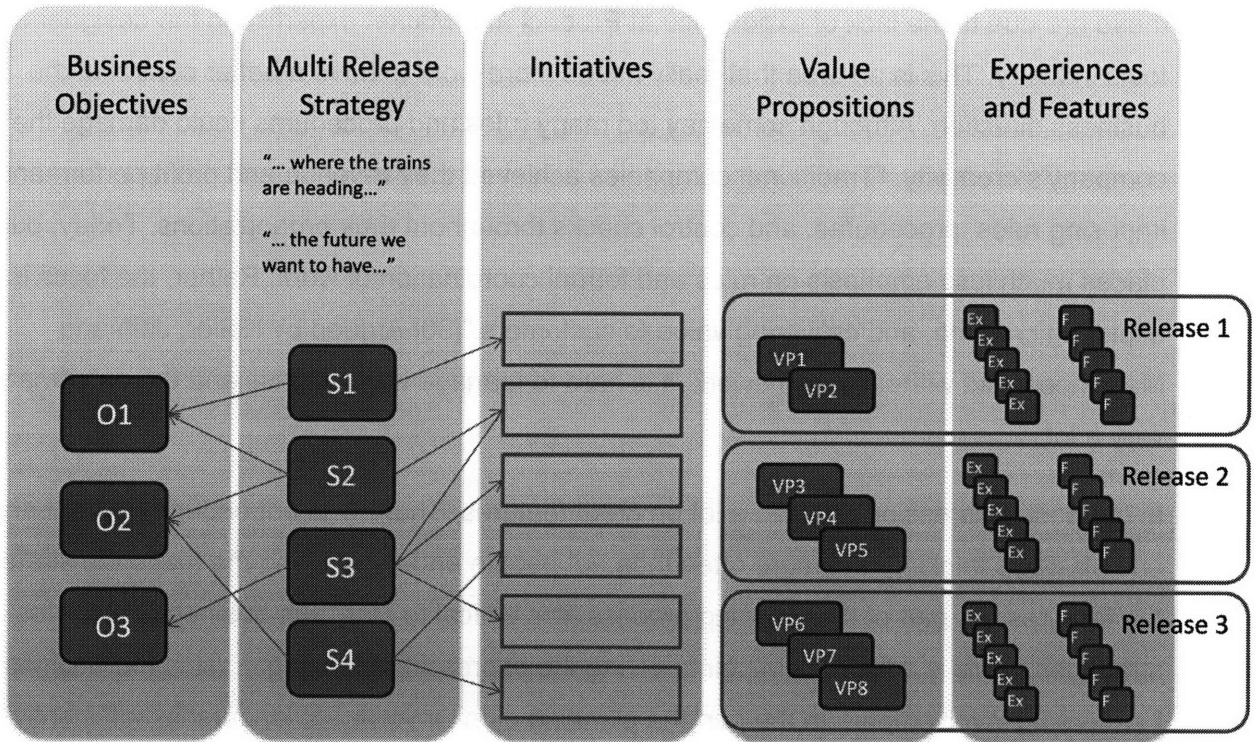


Figure 7 End to end planning framework

The business objectives should be based on customer, business & technology inputs. As the result, the business can maximize the market bang for the R&D investment by assuming the right customer, the right experiences & the right technology at the right time. The content can't base decisions on just one feedback channel. We must establish mechanisms/channels and processes to acquire the feedback. The customer feedback will include third party market research, deployment programs (download numbers from Microsoft websites), field interactions, community feedback from Microsoft product Wiki. The business feedback will come from the financial results, Microsoft strategy, business model, and competitive strategy. The Technology feedback will come from technology trends, engineering excellence practices, IP strategy, and standards.

Once the business objectives are in place, people should work on strategies to achieve these objectives. These strategies should be a 3 to 5 year plan and outline the moves Expression should take. There are should be 3 stages of strategic planning to achieve the strategies: Strategy Development, Customer, Market & Technology Investigations, and Envisioning & Scoping. Strategy Development will take the following as inputs: Current state of business & market, Broad MS strategy, Competitive position, Previous market & customer research, and Product support data. By collecting and coalesce the existing market data, conducting competitive reviews, a draft of Market Opportunity Analysis (MOA) and Strategy Document should be produced for next stage. At the Customer, Market and Technology Investigations stage, the inputs are the documents produced from the Strategy Development stage. By building the right business models, conducting quantitative and qualitative market analysis, and investigating the technology trends, the following documents should be produced as results: Technology roadmap, customer segmentation model and prioritization, and competitive analysis. All of these artifacts will feed into the last stage of strategy planning - Envisioning & Scoping. This stage will go through the prototyping, conduct customer validation, and study the resource planning. At the end, the team should reach an agreement on the strategy visions for next several years.

Based on the strategy visions generated from the last stage, the business and management team should work on the resource alignment, budgeting, and product line plans. This is the initiative stage on the framework. The initiatives are equivalent to the product lines. This stage will create the Product Line roadmaps, Product line release cadence, SKU and Pricing strategy, Key scenarios and excitors, Engineering strategy, and Resource and Budget plans.

Next stage is the value proposition stage, also the stage that defines the detailed product plans. Each product should be able to communicate tangible customer value; also there should be clear measurement against the delivery of these values. This is also the stage to get motivate the teams to start work on these new initiatives. Adapted from Geoffrey A. Moore's "Crossing the Chasm [6]", the following framework can be used to validate the product differentiators especially from customer point of view:

For	<i>(target customer personas in identified segment only)</i>
Who are dissatisfied with	<i>(the current ...alternatives)</i>
Our solution is a	<i>(new product category)</i>
That provides	<i>(key problem-solving capability)</i>
Unlike	<i>(the product alternative)</i>
We have assembled	<i>(key scenarios and QoS for your solution)</i>

Figure 8 Cross the Chasm framework

The final step of the product planning lifecycle is the release plan. The following list explains the key elements of release portfolio prioritization: Weighted ranking generates a sorted list from highest merit/value to lowest. Focus on facilitating investment decisions: Process builds consensus amongst stakeholders, Key Performance Indicators chosen for evaluating merit, Initiatives defined in units that can take a go/no-go decision. And Tiered Methodology with different stakeholders at each level: Provides a tool for decision-making at the Divisional, Business Unit, Product Unit, Feature Team levels, Allows increasing granularity as you move down the organization.

To achieve the agility goal, the last stage should also include getting customer feedback in real time. There should be a business scorecard reviews monthly to analyze the finance, market and technology feedback. Based on these results, key decision makers can revisit the business objectives and strategies to make the necessary adjustments.

This framework is still under work as it is far from mature. So far the author and his team are trying to get other teams to buy into the processes proposed in this framework. The senior management team shows strong interests as the goals for this framework serves the new divisional initiatives.

Future Study

By now, we have used the Microsoft Expression venture as a case study and went through different aspects of a corporate venture.

There are several areas requires further study to provide a better understanding of the key elements of a corporate venture.

First, is to continue evaluate the Expression venture based on Block and MacMillan's six stage model. As we have studied the business plan and organization, the logical next step is to study how to monitor and control the venture. The following are the key points to consider:

- The design of the venture itself-including the management team's composition, incentives, and compensation; organizational positioning; the choice of format and entry strategy; and the selection of milestones to trigger financing
- Modified application of corporate policies and procedures
- The design and use of a feedback system to test major assumptions
- The use of modified budget control methods

Second, the Expression has most of the business plan elements covered. However, there are several areas that related to risk management has been largely ignored. They are the definition of failure, Principle risks and sensitivity analysis. To provide a full picture of the business, they should have been covered. These areas will be good topics for future study.

Third, is to finish Sathe's framework on corporate entrepreneurship. As described at chapter 3's chapter summary, Sathe's framework also has several other influence forces to start a new business: Corporate executives, Division general manager, and Division and its top management team. Due to the limited information and time, this research has not been able to

cover these areas. It would be a great learning experience to study Expression venture from these different management levels.

Fourth, the proposed framework at this chapter has not been put to use yet. Only when the framework is put to use can the theories be verified. Whether this framework is too broad to implement, or whether the steps are too time consuming to follow, are all part of the questions need to be answered when the framework is used.

Last, as discussed at the introduction chapter, this literature only covered the internal venture model in corporate entrepreneurship. There are still several models to start a new business in an establish firm: Internal Development, Acquisition, Licensing, Joint Ventures or Alliances, Venture Capital and Nurturing, and Educational Acquisitions. Why Microsoft chose to start the Expression venture in this model but not in other models, what are the pros and cons on each of these options? Those are all great to learn to fully understand how a firm starts a new business.

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Appendix A: Why UX matters?

“Questions about whether design is necessary or affordable are quite beside the point: design is inevitable. The alternative to good design is bad design, not no design at all.” -- Douglas Martin, book designer

A good way to explain User Experience is by paying attention to daily life objects. User Experience is not only about creating pretty objects, it's about providing a functional solution as well. For example, to open a can you could certainly do with a knife, but a can opener will achieve the same function in a more efficient, secure and reliable manner... Do you know of any Enterprise apps that look like the knife? I'm sure you do. Now, here we have a surround sound system but this system goes beyond providing only the functional solution to a problem, it's giving us something additional, a plus, it's giving us the shape, the design, the style, the color, the usability. All these are great values needed for an object to provide us a successful visual and interactive user experience. So as you can see user experiences is about achieving a healthy balance between functional, visual and interactive appeal. Another example, when we go to Starbucks we are willing to pay five dollars for a cup of coffee. How did we ever get to pay that much for coffee... well we do thanks to the experience that Starbucks is able to provide, great place if you want to sit down, read a book while drinking your coffee in a cool environment or also a flexible environment with a practical and convenient solution in case you want to drink your coffee on the way back to the office. So these are all examples that show us the value of user experience which is monetized by companies, all possible when function, visuals and interaction work together in an end to end story.

Now, User Experience can also drive increased business value to Enterprise applications. We can see great User Experiences in consumer applications every day. Experiences that help companies like Nike attract and retain customers, experiences that add brand value and that provide memorable experiences to people. Well, Enterprise applications these days have started to head that way too; we get to see more and more examples every day. Take a look at the recent release of SAP; you can see a much richer experience with an enterprise application that uses rich text and interactive visual controls. Another example here, BizObjects, also, pushing the traditional limits of Enterprise apps to make this a much richer experience that enhances productivity and comprehension when working with large amounts of data which is a super typical scenario for Enterprise applications.

Great User Experiences can drive Enterprise applications to an increased business value. Customers will see a direct benefit by helping the users of these applications achieve swift and successful results which can boost productivity by cutting down the time traditionally invested in long, tedious or simply not optimized tasks. Also, by using innovative User Interface controls like the ones we saw on the previous examples and incorporating rich content like vectors, bitmaps, high readable text, 3D or video, the ability to retain and comprehend information will be enhanced helping people achieve their full potential in their daily jobs. It's a virtuous circle, the more ease and richness you give to Enterprise application users the better ROI you obtain. The following Innovation in the online mapping service category clearly shows the power of User Interface.

Google Maps	Mappy/map.search.ch	Yahoo Maps	Local.live.com
Greater interactivity, less-latency, satellite photos, visualizations of data, web-service APIs for "mash-up" style integration by ISVs	In-context data previews (see sample results of query before submitting data), focus on European data-sets not available in Google/Yahoo (greater EMEA customer relevancy)	Richer user interface with even greater visualization and control for interactive manipulation.	Perspective photography (filmed from helicopters flying over the terrain), scroll-wheel support for zooming, interactive "car-drive-by" views from street surface, etc.

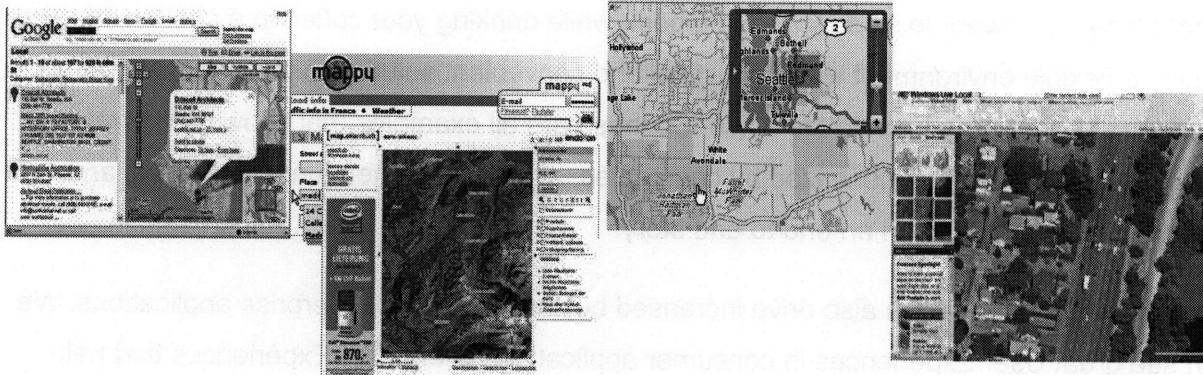


Figure 9 Online mapping service

If UX is so important, why hasn't UX been a central consideration in software? There are two major reasons to explain this:

1. UX is not recognized as a top-level requirement

- Developers/applications are usually not graded on UX
- Trade off of time/cost/features deprecates UX investment
- Application UX design is an emerging discipline: craft, best practices, and technologies still evolving

2. ROI metrics are emerging

- Consumer facing scenarios have some momentum, such as E-learning, advertising, marketing and e-commerce
- However, traditional enterprise applications have not yet gained wide attention
- Development complexity is a central challenge
- Great UX takes incremental investment; “functional” is perceived (often incorrectly) as sufficient
- Platform capabilities and development tooling have not delivered productivity/performance to the UX development process

Expression SKUs & Audiences are classified into two categories, strategic customers and tactical customers. The detailed description is described below:

Strategic Customer - Pro Designers

- Microsoft brand neutral/negative
- Design Agencies (70% of market)
- Retail channel
- Small 2-5 person shops
- No connection to Microsoft
- Corporate (30% of market)
- Global agencies
- Corp. marketing and dev groups

Tactical Customer - Microsoft Pro Dev & IW

- Existing Microsoft customers
- Microsoft brand neutral/positive
- High efficacy in reaching customer
- Evangelism, events, campaigns, EPG
- Typical customer
- FrontPage Migration
- Design for MS Platforms
- Integration of Des & Dev Team

There are two types of customers in the designer market. First is the small design shops, they make up 70% of the market. Normally they are 2 to 5 people shops and have no connections to Microsoft. To win these customers would be a long shot. Second is the global agencies, they have corporate marketing and development groups.

Appendix B: Microsoft market research

Appendix B1: Focus group based market research

Purpose:

Explore perceptions and aspirations amongst Developer, Design FP user communities in order to inform:

- Campaign strategy
- Media
- Creative development
- Implications for website design
- Packaging design

Methodology:

3 Focus groups in each of three U.S. markets:

- NY, Chicago, LA
- 9 groups total
- 63 total respondents

To help growing the Business, Microsoft also combined the recruiting efforts with these events. Although this practice is under criticism as people who really want to work for Microsoft may not give honest answers.

There were 3 different categories of respondents out of 63 respondents:

- Microsoft FrontPage users (3 Groups, 10+ hours/month FrontPage usage)
- Web Developers (3 Groups)
- Pro Designers (3 Groups)

There was a broad mix of industries and company sizes, respondents came from the following industries:

- Advertising
- Financial Services
- Entertainment
- Public

Discussion was outlined in several sections as illustrated in the following process:

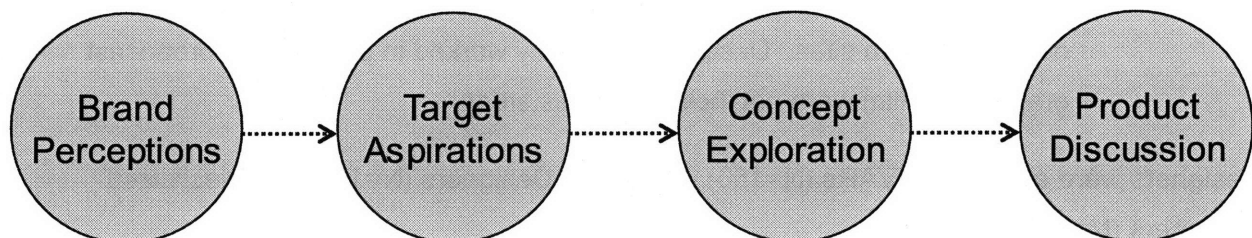


Figure 10 Market survey discussion process

Brand Perceptions:

- Top-of-mind thoughts:
- Brand attribute exploration

Target Aspirations: Day in the life, Inspiration, In the zone, Core desire, Creativity?, Productivity?, Quality experiences?, Collaboration exploration

Concept Exploration: Expression expectations, Perceived differences, 4 Expression Blend concepts, 4 Expression Web concepts, Productivity, Creativity, Quality

Product Discussion: Why will MS succeed?, Why will MS fail? , What's good (really)?

Although it was expected that MS was not performing well in the Designer market segmentations, the result was still shocking. Most of the meeting generated the same results: other companies are driving the platform choices of the designer market. They are the absolute leaders in the hearts, minds & wallets of pro designers. Their platform is a run-time environment for delivering graphics & interactivity in a multi-OS ubiquitous manner.

Appendix B2: Telephone survey based market research

A random sample telephone survey was conducted with 450 US designers and 150 US developers; this survey will continue yearly as the Designer Tracker, which is following the existing Developer research methodology. All respondents had to meet the following criteria:

- Employed full-time, part-time or self employed
- Develop or design websites/create graphic elements and layouts or code websites or create web-based applications or sites, or visual content and/or designs for web sites. Designers who only worked in print, video, broadcast graphics, or film were not included in this study.

Designers were either ISVs/VARs (N=150), Corporate Designers (N=150), or Specialized Designers (N=150).

- Groupings were defined by Standard Industry Classifications (SIC codes), with Corporate Designers working in organizations with 250+ employees.
 - Specialized Designer included the following industries: advertising, commercial photography; commercial art and graphic design; printing and publishing; photographic studios, communication services, and motion picture and video production.
- Designers were identified by rotating among the following departments: IT, Graphics, Marketing, Communications, Web Development, and Video Production.

Developers were either ISVs (N=30), VARs (N=60), or Corporate Designers (N=60). These data were then weighted to reflect the Professional Developer population according to the existing developer analysis methodology

- Groupings were defined by SIC classifications, with Corporate Designers working in organizations with 250+ employees.
- Screening for developers and the sample mix exactly mirrored the developer research methodology.

The results from these surveys send same messages: Other companies rule the designer world; Design intensive industries are least Microsoft friendly; Designers are not all alike; Designers do development – but don't look like stereotypical "coders."

The results were also break down to more granularities.

Key Findings-Tools and Vendors:

- Company M is the most often cited manufacturer of developer tools followed by Company A and Microsoft.
- Company A is the most often used cited manufacturer of design tools followed by company M, with Microsoft a distant third.
- Overall satisfaction with Microsoft is not as strong as with other leading companies.

- Satisfaction with other leading companies on specific features exceeds satisfaction with Microsoft on all features; and on a number of features equals or exceeds importance associated with the feature.
 - A substantial number of designers did not feel comfortable providing satisfaction ratings on Microsoft.
- Products from other companies dominate product satisfaction with specific features/functionality, in some cases exceeding the importance associated with features.

Key Findings-Designer Roles:

- Designers play multiple roles, with respondents engaging in an average of 6.5 roles. However three of roles: creating web pages/web sites using HTML/web authoring tools; designing web apps/sites; and creating web graphics/visual elements were performed by ~nine out of ten of the designers.
- While designers engaged in multiple roles, nine out ten self classified themselves as primarily being either Web Designers (35%), Graphic Designers who primarily worked with mediums other than the web (23%), or as web application developers/code writers (web coders - 33%). The remaining 9% could not identify themselves as primarily focusing on one of these roles (generalist designers).
- More than half of all designers (56%) named a web application development task as their primary or secondary responsibility.
 - Similarly, 58% also say they developed a web application in the past 6 months that required a web browser on the client and programming logic or a database connection on the server.

Key Findings by Industry Segment:

- Discernible differences emerged between the three industry segments examined: Design intensive industries (“Specialized Designers” in firms such as Publishing, Ad Agencies, Media/ Multimedia, Graphic Design, Photography), VAR/ISVs, and Corporate Designers. Specialized Designers and Corporate Designers are the most distinct with VAR/ISVs spanning the middle ground between these two groups.

- Specialized Designers are in smaller organization and are on smaller teams. They spend more time creating graphics and UI elements and less time coding/writing apps. They use and target Windows OS's, but there is a sizable group who use and target Macintosh OS's and the Apple browser, Safari. This group is also the least satisfied with Microsoft and unlikely to use Front Page.
- VAR/ISV Designers are similar to Specialized Designers in terms of product usage and satisfaction with manufacturers, but work in larger teams. They also have more developers on the teams, even while saying they spend a larger proportion of their time on web design.
- Corporate Designers are in the largest organizations and along with VAR/ISVs most apt to use and target Windows OS's. Microsoft satisfaction is still low among these designers, but is stronger than among VAR/ISVs and Specialized Designers. They are more apt to be females and to have non management positions.

Key Findings Designers vs Pro Devs:

- The Developer research Replication Sample (N=150) emerged as more web-engaged than respondents found in the ongoing Microsoft Developer research.
 - This means that observed differences between the main Designer Sample (N=450) and the Developer Replication Sample (N=150) may be understated versus what would be found versus comparing Designers to the typical Microsoft Developer research respondent.
- Though the Developer research Replication Sample was more web-engaged – we still see significant differences in activities, tools and technology usage by Designers versus Developers in this research.

Activities

- Developers in the Replication Sample were more focused on web application coding and web graphical/design tasks, while the Designers skew away from pure coding and are more heavily engaged with non-web graphics.

Tools

- Designers are significantly more likely to name other companies products as development tools they have used in the last 6 months – with usage of other leading companies tools especially striking for Designers (35%) versus Developers (10%).
- Developers are significantly more likely to use Microsoft tools than Designers. They are also twice as likely to use Visual Studio (16% vs. 8%) and are also significantly more likely to name Visual Studio as their primary tool (12% vs. 5% for Designers).
- Other leading company tools dominate among both Developers and Designers when respondents are asked about Design tools. However Developers are significantly more likely to name Microsoft products as design tools than Designers, and less likely to name Adobe products.

Technologies

- Respondents use an array of web technologies, with JavaScript the most ubiquitous (used by almost 9 in 10 respondents), while CSS and Dynamic HTML are used by approximate 7 in 10.
 - Technology usage among the Replication Sample respondents is very consistent with the most recent Developer research wave.
- Developers show higher usage of many of the technologies than designers, including ASP, VB Script, ASP.NET, XML and XHTML, along with XSL + XSLT.

Key Findings-Concerns for Microsoft:

5. Current usage of MS designer-related products is nominal, and satisfaction with product features lags that of better known and more widely used products from other companies.
 - Front Page is known by nine out ten, but only used by two out of ten designers. Primary usage is 8% for those who mention it as a development product, 4% for those who mentioned it as a designer product. Most of this usage is among Corporate Designers (31%). Usage among VAR/ISV Designers drops to 17% and 13% among Specialized Designers.

- ~1 out of every two designers asked felt they could not rate Front Page features. While sample sizes are small, Front Page is rated better on all attributes by VAR/ISV's and Corporate Designers than by Specialized Designers.
 - Front Page's greatest strength is in its ease of learning. It is used mostly for HTML related tasks
- Visual Studio is only used by 9% of designers, with 5% considering it their primary product.
- ~ 3 out of every five designers felt they could not rate Visual Studio features.
6. Designers do not have strong positive perceptions of Microsoft.
7. Macintosh still has a presence in this market, particularly among Specialized Designers.
- 24% of Specialized Designers target the Mac OS; 27% target the Apple browser, Safari, and 41% use Macs.
8. Microsoft's weakness among Specialized Designers is troublesome, given the disproportionate number of designers found in these design-intensive industries, and the potential opinion leader role they could play.
- In contrast to Microsoft's relative strength among traditional VAR/ISV developers in the Dev Tracker, respondents from this more specialized audience in the Designer Tracker hold lesser opinions of MS.