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The Interboom

Three economic drivers are maturing at the same time. Their convergence will change everything about modern life from what we buy to how we earn a living. The convergence, which we call the Interboom, will reorient business and cause the formation of many new business processes. Consequently the software we use to mediate these business processes will need to change as well. This white paper looks at the drivers and suggests ways that customer relationship management will be called on to help global businesses leverage their changed circumstances.

September 2010

Introduction

CRM has always been a dynamic industry able to adapt and adjust to myriad changes in the business climate. As the software suite that manages many front office operations the situation could not be otherwise.

For instance, when most front office work was conducted within the four walls of a head office, CRM applications relied on client-server technologies. As decision-making diffused throughout the organization, the Internet became important as a transport medium and CRM technologies adapted to run efficiently in browsers across great distances. Today, the adaptability trend continues as a new generation of highly mobile applications and hand held devices takes center stage.

Today much of the front office routine is centered on customer interaction issues and marketing and each of these areas has seen a cascade of new products take the field. In contrast, when selling was the dominant activity, sales force automation solutions dominated. Whenever business needs have dictated, CRM application vendors have adapted to meet new market demands in a never-ending cycle.

Now the demand pattern is changing again. In perhaps the most significant change to date, economic drivers are causing CRM users everywhere to consider how best to address the realities of markets with weakened demand, fewer new product introductions and new constraints on how business is conducted. This Beagle Research white paper examines current economic drivers, their impacts on business and the likely accommodations that CRM vendors will need to embrace.

CRM follows economic drivers

Three major economic drivers are coming together and the convergence will change the business climate and with that change, CRM suites will need to adjust. Business processes are changing as companies add and subtract the core activities designed to make and save money. A new era is emerging. Where the previous era has been focused on establishing and developing new markets, the new era is concerned with maintaining the gains of earlier decades.

In this paper, we will examine the impacts that three specific drivers are now exerting — drivers that we expect will be with us for a long time. They include the end of high technology as a disruptive innovation, changes in customer demographics and inevitable increases in transportation costs.

High technology

High-tech is a long-term trend that started in the early 1970s and has continued to the present day. With the development of the CPU on a chip (Intel 4004 and TI TMS1000) in 1971 computing power became inexpensive enough to embed in myriad applications. Processing power would double every year to eighteen months and costs would halve leading industry observer Gordon Moore to predict the trend would continue indefinitely. This became known as Moore's Law and it held steady for several decades. With the price/processing ratio improving fourfold on a regular basis, engineers and product designers could imagine and develop products that used the higher capacities almost as fast as they became available.

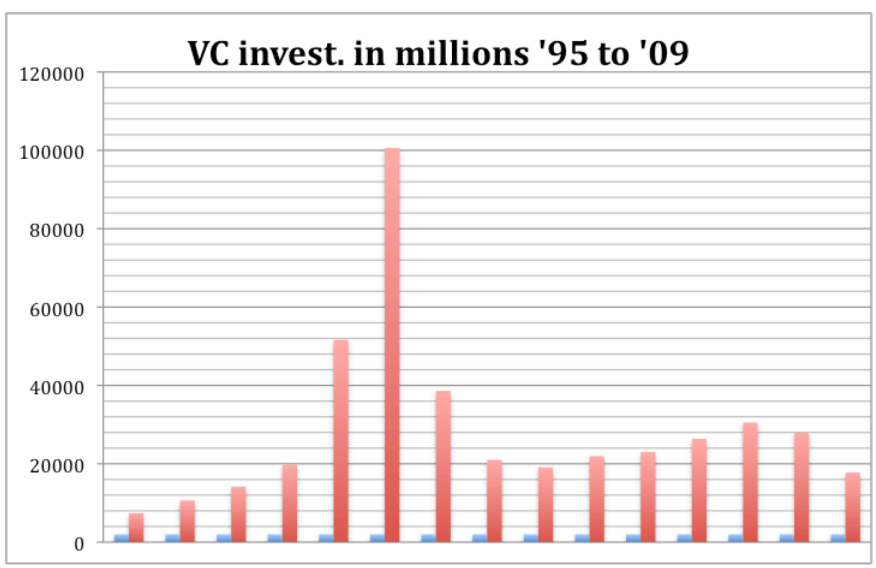
In the span of four decades, computers went from room filling devices to things that today sit comfortably in a pocket, bounce signals off satellites, enable wireless communications almost anywhere and optimize our lives in ways we are barely aware of. For instance, many of the improvements in auto safety and fuel economy are a direct result — computer optimized fuel injection, antilock brakes and computer optimized airbags and passive restraints to name just a few.

But like any trend, high technology is finite. The available niches for computer optimization are largely taken and new niche development is slowing. At the same time engineers are bumping up against physical constraints for how many transistors they can fit onto a wafer of silicon.

Technology will always be important to the world economy but the market's growth rate has permanently slowed and this decline will eventually merge with that of the economy at large. Technology's ability to influence economic growth is therefore also in decline.

To bolster this case, you need only look at the recent history of venture capital investing (Figure 1). In 2009, admittedly a down economic year, venture investing reached a low point not seen since the late 1990s. Venture funds invested $17.7 billion but raised only $15.2 billion according to the National Venture Capital Association (NVCA) and PriceWaterhouseCoopers. A slow market for initial public offerings and mergers and acquisitions has tied up much of the capital needed to regenerate the investment cycle. The combination of scarce funding and reduced innovation levels combines to put the brakes on technology as an economic driver.

Figure 1 Venture investments 1995 to 2009.



Source: National Venture Capital Association and PriceWaterhouseCoopers.

Demographics

The demographics story is a mixed bag. Populations in much of the developed world are aging and their demographic profiles suggest reduced consumer spending. As they age beyond their mid-50's people have fewer things to spend money on — for instance, these people's children are raised and largely independent and there are fewer needs for new appliances and other big-ticket items; also many people in this age bracket begin to seriously save for retirement. Professor John Quelch[1] of Harvard Business School refers to these people as "middle-aged simplifiers."

The middle-aged simplifier has an interesting profile. She (middle-aged simplifiers are led by women) may wish to sell the big house in the suburbs and move closer to a city to take advantage of its many cultural offerings. This same person or couple would rather try new restaurants than remodel their kitchen and she wants to travel more.

The picture of the middle-aged simplifier is not one of a conventional consumer acquiring more things — which directly drive demand chains — but of someone seeking new experiences. As the population continues to age, look for people to increasingly redeploy their spending from goods to experiences. The challenge for most businesses in this new paradigm will be to understand their customers' new directions and demands and to anticipate them with products and services.

Quelch's idea folds neatly into a related one, the "spending wave" theory, which says that as populations age they spend less. In particular, if the ratio of older to younger people is high enough the reduced spending can trigger a recession and stock market decline. Spending wave advocates point to such a population situation and subsequent decade-long recession that plagued Japan in the 1990s as proof of their ideas. The spending wave tipping point in the West is on track to appear in 2011-2012, they say.

At the same time, populations in emerging countries such as the BRIC group (Brazil, Russia, India and China) are growing and striving for a middle class life style. Brookings Institution estimates that the planet will gain one billion people between 2008 and 2020 but that the middle class will grow even more — by 1.8 billion in the same time — with 600 million people added to the roles in China alone. At present rates of consumption in the West, and with increasingly limited resources, it is challenging to see how so many people can smoothly enter the middle class in such a short time.

The challenge for vendors in this period will be to better understand customer attitudes, needs and ambitions in many cases understanding these views from different ethnic and cultural perspectives if they are to be successful.

Transportation and energy

Much has already been said and written about global warming but a more immediate threat to civilization supersedes it — Peak Oil. Ironically, Peak Oil

1 Quelch, Harvard Business Review blog post http://blogs.hbr.org/quelch/2008/10/how_recession_will_accelerate.html

is the other side of the climate change debate; it suggests that the amount of fossil fuels is finite and that our ability to extract greater quantities is at an end. Peak Oil is the result of a set of calculations by oil industry engineers and scientists that suggests that the rate of increase for petroleum production may now or will soon reach its zenith. Furthermore, our ability to find new sources of petroleum deposits in the earth's surface has been declining since 1964.

Unable to increase production, we will all need to reduce consumption and find alternatives to everything that depends on energy and transportation. As a business matter, the cost of business travel and transportation of finished goods and raw materials will increase to levels that will impede business unless other methods are found to both reduce and substitute for some of the transportation demand.

The 2008 run-up in the cost of liquid fuels to more than four dollars per gallon is emblematic of the rate of increase and the extent we may face in the near future as rapidly industrializing countries in the emerging world compete for a greater share of resources.

Consider one fact: China will add 600 million people to its middle class in the next decade. Currently there are four cars per one thousand people in China. In the U.S. there are 750 cars per thousand people[2] . The increase in middle class population in China alone will add the equivalent of two times the U.S population and if the Chinese middle class life style includes cars and driving as it does in America it will add between 250 million and 500 million cars[3] to the roads . All of these cars will compete for the same petroleum resources available — and in decline — today.

Finding alternatives to business travel, which cost $234 billion in the U.S. during 2009[4] , is one way that business will look to keep its top line expenses from ballooning. It will require greater investment in Web-based conferences, video communications and similar applications.

The freight side of the equation is in a similarly precarious situation but the solutions are different. On land, rail transportation will take on increasing importance. Already, notable investors are taking positions in railroads including Warren Buffet whose Berkshire Hathaway (NYSE: BRK) bought Burlington Northern Santa Fe (NYSE: BNI) for nearly $26 billion in late 2009 and Bill Gates whose largest investment holding is not in high technology but in Canadian National Railway Company (NYSE: CNI) where he owns nearly thirty-five million shares.

Passenger rail service in the U.S. is notably behind other developed areas of the world. For example, a passenger rail trip from Chicago to New York — about

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2 NETO Financial Group: http://www.netofinancial.com/2008/08/10/the-50-trillion-investment/

3 According to the US Bureau of Transit Statistics for 2006 there were 250,844,644 registered passenger vehicles in the US. Out of these roughly 251 million vehicles, 135,399,945 were classified as automobiles, while 99,124,775 were classified as "Other 2 axle, 4 tire vehicles," presumably SUVs and pick-up trucks.

4 U.S. Business Travel Association estimate.

800 miles — takes twenty hours; in comparison, Tokyo to Fukuoka, a similar distance in Japan, takes just five hours.

The Chinese government recently announced plans to build trains that would travel by magnetic levitation through low-pressure tunnels at more than six hundred miles per hour.

While alternatives to land transport abound, ocean cargo faces greater challenges. Table 1 shows the steady rise in the cost of moving a standard forty-foot ocean-going shipping container from Shanghai to New York relative to the cost of fuel. At some point the cost of transport out-competes the advantage of producing goods in low cost labor markets and vendors may need to consider producing closer to their customers.

To summarize the U.S. transportation infrastructure, except for rail freight, is heavily dependent on auto and air travel, which will feel the brunt of any major price increases in liquid fuel prices. Absent alternative transportation modes, we can expect that technology will be called on to substitute for increasingly expensive and unreliable air and road travel.

Table 1 Cost of moving a standard forty-foot ocean-going shipping container from Shanghai to New York relative to the cost of fuel.

Year	Gas price per gallon	Shipping container
2000	$1.50	$3,300
2005	$2.50	$5,100
2008	$3.50	$8,350
???	$5.00	$10,000
???	$8.00	$15,000

Source: Beagle Research Group, LLC September 2010

New economic realities in context

To recap in context, three long-term major economic trends are nearing their end-points and this confluence will significantly affect the way business is done globally. Consider the following scenarios.

1. The end of the technology bubble means fewer new product categories entering the market and more reliance on product line extension, customer intimacy, value engineering and marketing outreach to existing customers.
2. The middle-aged simplifier will be a harder customer to reach because this person will be more interested in spending money on experiences than spending on products.
3. The smaller generation following the baby boom will not be able to maintain the high spending levels seen in the last several decades.
4. People entering their productive years will need all of the usual products necessary to set up households, but education debt and loan payments plus high priced housing will limit their spending ability thus depressing demand.

5. Customers in other parts of the world will be plentiful but they will demand goods and services tailored to their own geographic and cultural requirements. Also, there will be many more competitors for their business, including their own domestic producers.
6. Escalating transportation costs threaten the fabric of globalization and the cost of moving goods may cause closer regional ties to develop even to the point of rearranging domestic production and consumption. For example, in an average day it can be reasonably expected that high-speed rail (ave. 160 miles per hour) can deliver passengers and freight to the middle of the North American continent from the coasts. This fact could reinvigorate the middle of the U.S. including its so-called rust belt as vendors seek to manage their production and transportation costs. The middle of the country could, in future decades, enjoy the same kind of boom seen on the West Coast during the later decades of the twentieth century.

CRM's role

In the midst of significant change, the CRM industry will again be called on to adapt as business processes change to meet the new economic realities. It is inconceivable that these adjustments — which require more intimate relationships with customers and better understanding of their needs, attitudes and behaviors — could be accomplished without major input from social CRM technologies.

Additionally, many other new application categories that have been developed over the last decade are ideally suited for this new marketplace. Many of the newer application categories that may be considered outside of CRM proper will quickly be assimilated into an expanded CRM suite. A short discussion of likely candidates follows a more in-depth discussion of social media.

Social media

Though an increasingly common part of many CRM suites, social media is not a singular designation but an umbrella term for tools that leverage the large population of users or followers for almost any topic on the Internet. Social media include outbound messaging tools such as blogs (Word Press, TypePad, etc.), micro blogs (e.g. Twitter), social sites (Facebook, YouTube, MySpace and others) and wikis (content sites contributed to and maintained by users) all fall into the realm of outbound social media. Inbound social media include private communities (Communispace, Lithium, Radian6) and other community groupings in which vendors ask the public to contribute opinions and ideas.

So far, social media has had an uneven reception in general CRM circles with notable successes and some failures. Social media's promise of connecting people and eliciting ideas that companies can use to develop and refine product ideas, marketing messages and avoid or prevent problems in the marketplace has been only partly realized.

Many users of social media still regard the technologies as little more than adjuncts to broadcast marketing tools without regard to the fact that followers can opt out of a relationship any time they choose. Others fail to understand the differences between media and sometimes seek to address audiences that simply are not there and still others over-sample the same group.

At this point there are numerous signs that many in the vendor community are over using outbound social media and underutilizing inbound forms. By reducing their reliance on social media as broadcast communication tools and attempting to focus on customer needs through data gathering and analytics, many vendors will improve their success with outbound social media. This will require a more balanced approach to inbound and outbound communication with customers.

Communities

Communities are often lumped together with outbound social media but they serve a different purpose than outbound messaging. Communities are organized to capture data from customers about their needs, attitudes and ambitions, to name a few areas.

Success with communities comes with internalizing the three tenets of *The Wisdom of Crowds* by James Surowiecki and other sources: diversity, independence and decentralization.

- Diversity — capturing a wide range of ideas, not simply those you agree with.
- Independence — giving equal weight to all participants, not letting some people “vote” as often as they wish.
- Decentralization — preventing a few people from unduly influencing the opinions of the many to produce a skewed result.

When communities have been used in conjunction with outbound social media, vendors have shown a remarkable ability to correlate product needs and marketing messaging to deliver the right products at the right time to their markets. In a future where customers will be harder to read and the cost of making wrong product or marketing decisions will escalate, organizations will increasingly rely on social media and communities to navigate tricky markets. For these reasons, social media and communities will be increasingly important in the front office.

Many organizations have attempted to run communities on the cheap by running uncontrolled surveys and other data gathering schemes on their Web properties. This approach gives some of the benefits of communities but it is highly suspect often because it violates one or more of the tenets listed above. To be effective communities must maintain control and an understanding of who the participants are and limit their voting to one vote per person. Also, membership is not participation so a small sample from a large population of members does not necessarily mean that a sample is valid. At the end of the day, the old IT maxim, GIGO (garbage in, garbage out) applies and vendors who apply social media while ignoring this simple truth risk their budgets and their credibility.

Analytics

While analytics have become increasingly important in front office suites over the last decade, in many cases the technology is often still hard to use and its benefits elusive, especially in small and medium businesses. A new generation of vendors determined to make the technology more accessible has begun delivering analytic solutions as SaaS applications.

As the name implies, analytics can reduce mountains of data to meaningful information that vendors can act upon. Communities and other social media generate huge amounts of customer data that, if handled properly, can provide insights into customer behavior and inform business processes from sales and marketing to product development.

Some companies have been very successful with applying analytics to their front office — as well as their back office — business processes. When combined with data available from the field and from customer communities, vendors will rely on analytics to supply the insights they need to address markets where they may have never physically been.

Web meetings and conferences

Web meetings first came out of the recession following the dotcom boom and bust. Prior to products like WebEx, most meetings were face-to-face and took up enormous amounts of time and expense. Web meetings significantly reduced travel and associated expenses and made people more productive. It is now time to think bigger about hosting whole conferences on-line.

According to the U.S. Business Travel Association in the U.S. alone business travel amounted to more than $234 billion dollars in 2009. As the cost of fuels rise, the cost of business travel will only increase forcing businesses to seek alternatives. While some air transportation may be replaced by rail, bus or car travel, the time involved in most cases will not justify the investment of people's time. Moreover and sadly, alternatives such as high-speed rail service do not exist yet in continental North America and it will be years before the necessary infrastructure is built.

Fortunately, new technologies that leverage the Internet to host meetings of hundreds or thousands of people already exist and early reports indicate that they are acceptable substitutes. We are already seeing examples of companies scaling down or canceling internal events to save on transportation costs. It seems logical that this trend will accelerate as the cost of liquid fuels increase.

Web-based conferences save both vendors and their customers significantly on the costs of travel and potentially enable vendors to hold more, not fewer, conferences that can only help expand customer relationships.

New uses for video and audio technologies

Many vendor organizations have begun experimenting with video technologies to deliver content to customers in lieu of face-to-face meetings, but few have mastered the new medium. Many pioneers in vendor video communications use as their starting point the half-hour television news show without realizing that their customers' attention spans are much shorter. YouTube and other social video sharing sites are deluged by over produced and overly long corporate videos. Instead, a vendor video should use as its template the three-minute infomercial, which more closely matches a busy customer's attention budget.

For content, and to contain costs, the three-minute video should look more like a Ken Burns documentary with few on screen people, simple narration and an assortment of images to advance an idea. Desktop applications from Microsoft and Apple including PowerPoint, Keynote and iMovie already exist to support this work and practitioners using them and the approaches mentioned above have developed useful, high-quality communication devices that eliminate much travel[5].

Live video and audio technologies are also available for embedding into CRM applications such as call and contact center applications. While video is certainly not needed in most service and support situations, its availability has enabled many vendors to improve service levels and build customer rapport. As travel becomes more expensive, alternatives such as embedded video, audio and packaged video content will become more important as ways to substitute virtual presence for physical presence.

Portals

Finally, portal technology, which has been available for many years, may now be entering its golden age. Portals have been shown to be good choices for content distribution, drip marketing and for developing one-to-one relationships with customers at low cost. Portals fit well in a scheme where vendors need to develop trusted relationships with their customers while sharing information between the parties. In a travel constrained world a portal can connect customer and vendor for all of the major activities they need to jointly participate in — giving and getting information, marketing and selling. Offering well-produced video and live video feeds through the portal makes great sense.

Furthermore, the business era described in this paper suggests greater emphasis on working with and selling to an installed customer population rather than selling to net new customers. Fewer new product categories and more product line extension and value engineering are hallmarks of a zero sum situation in which vendors work hard to keep customers because finding net new customers becomes a significant challenge. Under these circumstances offering portals to customers can be a low cost approach to maintaining the base and its revenue stream. For these reasons we think portal technology will be increasingly in demand.

Analysis

Multiple economic drivers are concurrently decelerating and their overlap will cause us to think differently about how we do business and the tools we do business with. The front office software suite dominated by CRM will be augmented by multiple additional applications, most of which have existed for some time though their fit in the suite has been tentative in some cases.

Social media has the strongest case for inclusion in the CRM suite and the market is already in the adoption process. However, the old reasons for including social media lack relevance to the future market and the technologies have been tagged with the lackluster designation of somehow helping to accelerate business processes, often sales and marketing. Our reading of

5 See www.mondaydots.com for an example.

the economic drivers suggests that social media and other technologies — including various forms of video and Web conferences — will be important for reasons that include maintaining relationships (and their revenue streams) in a zero sum market place and better understanding demand patterns in the global market.

Social media and communities will be vital to organizations seeking to design and build relevant products while developing marketing messages and sales campaigns for people too remote to contact directly. Other technologies that support web conferences and new forms of video will begin to replace live gatherings and printed content. Distributing new forms of content will best be done through portals. All of these technologies substantially exist already and the challenge for most businesses will be in their orderly adoption.

As always the businesses that understand the most appropriate uses of these technologies and who get to market first will be the big winners. This is no time to hang back expecting others to be the early adopters who figure things out.

Our recommendations for successfully dealing with this confluence of decelerating economic drivers:

1. Learn about and adopt social media as business tools and integrate them into your front office business practices. Pay special attention to mastering both inbound and outbound technologies and their uses.
2. Read several books on the subject such as The Wisdom of Crowds, Crowd Sourcing and other titles dealing with Web 2.0 concepts in business.
3. Begin developing facility with in-house development of short video clips to supplement your content library. Don't be afraid to experiment and ask your customers — through communities — what works best for them.
4. Investigate and begin working with Web-centric tools for hosting small meetings on-line as well as hosting larger conferences. For larger conferences start with in-house events such as sales kick-offs before engaging customers.
5. Begin developing some of your content as short videos and make it available through portals for optimal results. Video development can be as simple as using iMovie to animate a slide presentation but pay attention to visual values — the days of text-heavy slides are over.
6. Identify and learn how to embed analytics tools in your business. Analytics packages are available on-line for front- and back-office operations as are numerous books that discuss best practices. Encourage all managers to become familiar with developing analytics reports. Knowing how to use an analytics package today is as important as understanding the rudiments of spreadsheets a generation ago.
7. Set achievable milestones for all the above activities and ensure that the responsibility is spread among departments and staff levels.
8. Just as you set performance goals for revenue attainment and cost controls, set specific goals for travel cost reduction. Do not accept the argument that high travel costs are essential to high revenue attainment or its opposite —

that without travel revenue generation will suffer.

9. Engage qualified consultants in specific areas and don't be afraid to innovate.

Conclusion

When faced with potentially bad news like the information presented in the first part of this paper, many people are tempted to do nothing. Surely, they think, the situation is not as bad as it seems and prudence requires us to confirm our findings before rushing to make significant changes, they would argue. But waiting is what ultimately causes a stampede for the exits when the forecasts are confirmed. By that point there is less time to act rationally and when faced with a crisis many will grasp at anything that looks like a solution, regardless of the cost or the likelihood of a positive outcome.

For all those reasons, it is important to take the findings and recommendations of this paper seriously. Changing the fundamentals of our advanced, energy consuming civilization will not be quick or easy and for those reasons we should start making prudent changes wherever possible. Fortunately, free market mechanisms will trigger action. For example, as fuel prices escalate, we can expect many of the alternatives suggested here to begin to be implemented out of necessity.

But the most successful businesses don't wait for such market signals, by the time they are obvious the first mover advantage is already lost. The companies that prosper in the new paradigm will be those that heed the earliest warnings already embodied in the vast body of research now available.