ENTERPRISE APPLICATIONS: OPPORTUNITIES FOR ONTARIO’S SOFTWARE START-UPS

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This paper describes the context of the enterprise application market for Ontario’s software start-ups, with a particular focus on how current technology trends are creating opportunities for entrepreneurs to develop their businesses.

According to IDC¹, the worldwide software market is made up of three primary software submarkets: System Infrastructure; Application Development and Deployment (AD&D); and Functional Software Applications. The latter includes secondary markets like Consumer Applications, Collaborative Applications, Content Applications, ERP Software, SCM Applications, CRM, Operations and Manufacturing Applications and Engineering Applications. Apart from the inclusion of Consumer Applications, the Functional Software taxonomy concerns the Enterprise Application market and is the focus of this report.

The purpose of this paper is not provide a detailed account of the Enterprise Application market – particularly given the enormity and complexity of the market – but rather to focus on those dynamics that are of importance to the small software start-ups in the Enterprise Applications industry and are clients of MaRS. For more comprehensive coverage of the enterprise application market, including trends and market forecasts, we recommend the research provided by the likes of Gartner Inc and IDC, some of which is referenced here.

1. Sizing the Enterprise Applications Market

The current slowdown in the Western economies means that most of the growth over the next couple of years will come from high-growth emerging markets, with developing economies such as India absorbing a larger share of the growth. For instance, Gartner Inc estimates growth in IT spending in Latin America and Asia/Pacific to increase by 4.4% and 2.9% respectively in 2009, while United States, stays flat at 0.1%3.

For 2009, IDC is expecting a growth rate of 3.8% for the worldwide applications market to reach US $140.42B. Note, that IDC’s forecast includes all packaged applications such as consumer applications, which means that the growth rate for Enterprise Applications might be slightly different. Looking specifically at the Enterprise Application market, Gartner Inc forecasts a CAGR rate of 11.7% from 2007 to 20125. Bear in mind that Gartner has not updated this forecast since October 2008 since when some of the assumptions it was based on probably have changed.

However, research firms continue to forecast the largest growth in emerging markets despite the economic slowdown, something Canadian start-ups need to take into considerations when determining both their hiring and go-to-market strategies. Canadian start-ups are in a favorable position with regard to talent available due to a diverse and often well-qualified immigrant population to tap into to support their international growth efforts.

### The Worldwide Applications Market

<table>
<thead>
<tr>
<th>Region</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>CAGR 2007-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td>69,131</td>
<td>72,613</td>
<td>75,341</td>
<td>78,825</td>
<td>83,435</td>
<td>88,884</td>
<td>5.2%</td>
</tr>
<tr>
<td>Europe Middle East Africa</td>
<td>43,438</td>
<td>46,115</td>
<td>47,492</td>
<td>49,617</td>
<td>52,336</td>
<td>55,377</td>
<td>5%</td>
</tr>
<tr>
<td>Asia/Pac</td>
<td>15,299</td>
<td>16,510</td>
<td>17,587</td>
<td>18,839</td>
<td>20,299</td>
<td>22,041</td>
<td>7.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>127,868</td>
<td>135,238</td>
<td>140,420</td>
<td>147,281</td>
<td>156,070</td>
<td>166,301</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

Source: IDC #215528, 2008

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Having grown by 6.8% in 2007, IDC is expecting the growth of the Canadian market for enterprise applications to slow to 2.9% to reach 3.590 billion in 2009. While the slowdown suggests that start-ups cannot expect much general market pull in the short term, it does not mean that there are no opportunities locally for start-ups entering the enterprise application market. When market conditions are tough, many executives will be under pressure to change the way they do business – either to lower the general cost base, or to look for new ways to generate additional revenue. In search of solutions, these executives will often be in a frame of mind to listen to the new ideas start-ups bring to the market.

To capitalize on this more open mindset, start-ups need to define their target market with a high degree of precision and to ensure that they approach prospects with a clear and relevant message. To help start-ups in this process, MaRS offers entrepreneurs access to premium market research from the likes of Gartner Inc and IDC.

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Collaborative</td>
<td>184.8</td>
<td>181.3</td>
<td>199.5</td>
<td>208.8</td>
<td>222.9</td>
<td>235.7</td>
<td>5%</td>
</tr>
<tr>
<td>Content Mgmt</td>
<td>704.5</td>
<td>743.5</td>
<td>785.7</td>
<td>821.1</td>
<td>877.5</td>
<td>932.9</td>
<td>5.8%</td>
</tr>
<tr>
<td>Engineering</td>
<td>205.4</td>
<td>205.4</td>
<td>213.3</td>
<td>218.4</td>
<td>223.9</td>
<td>229.4</td>
<td>2.2%</td>
</tr>
<tr>
<td>Enterprise Resource Mgmt</td>
<td>897.9</td>
<td>979.6</td>
<td>984</td>
<td>1017.5</td>
<td>1064.5</td>
<td>1107.1</td>
<td>4.3%</td>
</tr>
<tr>
<td>Supply Chain Mgmt</td>
<td>217.8</td>
<td>226.5</td>
<td>236.2</td>
<td>245.1</td>
<td>257.4</td>
<td>270.2</td>
<td>4.4%</td>
</tr>
<tr>
<td>Operations &amp; Manufacturing</td>
<td>809.5</td>
<td>833.1</td>
<td>846.4</td>
<td>869.3</td>
<td>895.4</td>
<td>913.3</td>
<td>2.4%</td>
</tr>
<tr>
<td>CRM</td>
<td>283.2</td>
<td>318.6</td>
<td>325.2</td>
<td>346.1</td>
<td>374.2</td>
<td>397.3</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>3303.1</td>
<td>3487.9</td>
<td>3590.2</td>
<td>3726.4</td>
<td>3915.6</td>
<td>4805.8</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

Source: IDC, #CA13EA8, December 2008

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2. Technology Trends and Opportunities for Start-Ups

Looking beyond the slowdown in the world economy, our research shows that there are other deeper changes affecting the enterprise application market in the long run, changes that also create opportunities for many new start-ups.

The technology drivers of change identified by the industry analysts are more evolutionary than disruptive. The most important drivers reflect a maturing IT industry, technology environment and development practices. In this paper we divide these drivers into three broad categories of change within the IT industry itself: Technology Maturity, Internet Computing and Ecosystems.

2.1 Maturing technologies

Many areas of enterprise application are evolving in a very positive direction, including business intelligence, data management and CRM as a few examples. For this paper, we have chosen to focus on the emergence of service-oriented architecture (SOA) along with Web 2.0 and Open Source as evidence of a more mature, customer-driven technology industry. While SOA is a more enterprise-driven change, Web 2.0 first emerged as a consumer-driven technology before starting to make an impact on the enterprise application market. Open Source is continuing to grow, but its primary driver remains the industry itself.

2.1.1 Service Oriented Architecture (SOA)

As the speed of change is accelerating through globalization, improved technology and practices and through interlinked markets and economies, businesses have been looking for ways of becoming more responsive and agile. Frank Schlier, a distinguished analyst with Gartner Inc, says that while organizations operated within long periods of relative stability, these periods have since become shorter and shorter to the point where continuous change is becoming the only stable planning assumption for most businesses.

However, most traditional IT systems have been difficult and expensive to change, something which has hampered many strategic initiatives and attempts to change business processes.

Surveys of business executives have shown that in conjunction with corporate culture, IT is ranked as the most difficult aspect of a business for executives to change. For enterprises, pursuing a service-oriented architecture (SOA) is a way to increase business agility, something which is desirable in light of the aforementioned shortening of business cycles.

There are many definitions of Service-Oriented Architecture, but for the most part they are fairly consistent. IBM for instance, defines SOA as “an IT architectural style that supports the transformation of your business into a set of linked services, or repeatable business tasks, that can be accessed when needed over a network. This may be a local network, it may be the internet, or it may be geographically and technologically diverse, combining services in New York, London, and Hong Kong as though they were all installed on your local desktop. These services can coalesce to accomplish a specific business task, enabling your business to quickly adapt to changing conditions and requirements.”

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8Gartner Says More Than 50 Percent of Users Will Be Dissatisfied With the Slow Rate of IT Change in Their Enterprises by 2013. Press Release, July 2008, Gartner Inc.
9For examples of definitions see: http://searchsoa.techtarget.com/news/article/0,289142,sid26_gci1017004,00.html
10See link: http://www-128.ibm.com/developerworks/webservices/newto/#1
While the trend towards SOA within enterprises is slow-moving, the trend nevertheless remains steady and is supported by many of the other technology developments that will be discussed below. SOA is, in many ways, the antithesis to the monolithic packaged software application. Many of the functions that were previously found within the monolithic application are now being delivered as stand-alone modules or components with standards-based APIs and integrated as a service through a middleware application. The services can reside locally or be delivered by a third party as a web-service. For enterprises, SOA offers flexibility and improved economics through easier maintenance and change implementations.

The move towards SOA is slowly pushing application vendors away from their traditional business model of offering packaged software under license. For vendors with legacy applications this might be a challenge, but a move towards SOA entails benefits as well, as it allows for easier distribution and upgrade of those services and functions that undergo regular changes, i.e. tax calculations, pricing modules or postal code files.

At the same time, the change to SOA in enterprises is gradually opening up the market for specialized web-services\(^\text{11}\) using different business models like process-based or pay-as-you-go approaches. Start-ups with solid business process modeling skills and expertise in networked computing will have a strong hand in this market. Clever start-ups will recognize potential partners by analyzing the ecosystem required to make their software valuable to enterprises.

2.1.2 Maturing Internet Technologies

When Don Tapscott and Andrew Williams from the Toronto-based think tank New Paradigm published their book *Wikinomics*\(^\text{12}\) in December 2006, the Web 2.0 hype was close to its peak – at least measured in investments from VCs. The core of Tapscott and Williams’ message was that the participatory nature of the applications that fall under the Web 2.0 umbrella label – meaning wikis\(^\text{13}\), blogs\(^\text{14}\), RSS\(^\text{15}\) feeds and lately twitter\(^\text{16}\) - is changing both how we work and live.

Certainly it is the case that the rich and dynamic interfaces offered by Web 2.0 have triggered a new generation of web-based applications and delivery models offering both increasingly complex applications along with improved productivity. Equally important, however, is that the spectrum of applications emerging as Web 2.0 technologies is entering a market that is ready and equipped to take advantage of the capabilities that Web 2.0 offers. Users have both the intentions and the experience required and the infrastructure necessary to benefit from these technologies (i.e. large market segments with broadband connections and media enabled computers).

\(^{11}\) TechWeb.com provides a clear definition of web-services.


\(^{13}\) TechTerms.com provides a definition of a wiki here: http://www.techterms.com/definition/wiki

\(^{14}\) TechTerms.com provides a definition for a blog here: http://www.techterms.com/definition/blog

\(^{15}\) TechTerms.com provides a definition for a RSS feed here: http://www.techterms.com/definition/rss

\(^{16}\) Techweb.com provides a definition of twitter here: http://www.techweb.com/encyclopedia/defineterm,jhtml?term=twitter&x=11&y=9
Currently, Web 2.0 technologies are making an impact on the enterprise application market in a couple of different ways. To begin, Web 2.0 technologies are enabling the development of more sophisticated web-applications which can be delivered as a service in a hosted environment. Furthermore, enterprises are starting to use technologies like wikis and blogs to foster the sharing of information and stimulate collaboration across previously divided organizational boundaries, both externally and internally. Using IT to promote information sharing and collaboration are relatively new ideas for many organizations, which means that there is still much business to be had for start-ups with good technology.

The key is to understand that the success of applications dealing with social issues like information sharing and collaboration depends on targeting the right type of organizations. The basis for collaborative technologies is not just to exchange information or work on tasks together, as the emergence of a market for these technologies is tightly linked with the need for (expensive) knowledge workers to interact in an efficient manner whether it is internally, with suppliers/customers/partners or across geographies and time zones. Furthermore, these collaborative relationships are only effective if there is a high level of trust present between the collaborating parties, otherwise the right level of information exchange will not take place.

For start-ups looking to enter this market space, it is important to carefully analyze potential customers with the above factors in mind to maximize their chances of success.

2.1.3 Open Source Software is Gaining Momentum

The trend indicates a slow but steady growth in the Open Source environment. According to The 451 Group, the value of acquisitions in the Open Source space in 2008 almost doubled compared to 2007 M&A volumes, from US $ 858.6 to US $ 1.57bn. The release of the open source internet browser Firefox 3.0 by Mozilla in June 2008 is seen as a landmark event for open source applications with more than 8 million people downloading the new version of the software within the first 24 hours after its release. The Firefox browser has steadily been gaining market share and per February 2009 had 21.8% of the overall browser market.

In a Forrester Research report on enterprise interest for Open Source Software, two-thirds of the 1,017 respondents at North American and European enterprises expressed some interest in Open Source deployment. However, the obstacles in terms of market acceptance that Open Source solutions still have to overcome in the end-user market include the availability of customer support and the security of the solution, something which according to Forrester Research means that most Open Source deployment remains tactical in nature.

Start-ups that are using open source as their main way of developing enterprise software must take the findings from the Forrester survey to heart; the survey confirms that open source software is subject to the same thorough evaluation from customers as are proprietary applications. This means that start-ups must pursue excellence in areas like documentation and QA, customer support and professional services if they want to win customers for their open source software.

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17A definition of Open Source Software can be found here: http://www.opensource.org/docs/definition.php
18Wired Magazine, April 2008
19See Mozilla blog-post: http://blog.mozilla.com/blog/2008/07/02/were-official/
20Browser market shares are tracket here: http://marketshare.hitslink.com/report.aspx?qpid=1
21Enterprises view Open Source as a Key tactic for Strategic Software Initiatives, (see Page 2, Figure 1: Two Thirds of Enterprises Have some degree of Interest in Open Source). December 2007, Forrester Research.
2.2 Internet-based Computing

Network-based computing includes software applications and services like web-services and Software as a Service (SaaS), with Cloud Computing emerging as a potential next stage in the evolution of network-based computing for enterprises.

Although not the only use of web services, the steady growth of SOA as mentioned above forms the demand for new web services. With regards to SaaS, research firms predict strong growth of SaaS as a delivery and business model. According to IDC Canada, SaaS offerings are particularly attractive to SMBs because of the low cost and speed of implementation. A Forrester Research survey of software decision-makers in North America and Europe reveals strong interest in beginning to use SaaS-based applications:

When asked “How interested are you in adopting Software-as-a-service?” 12% of 1,158 North American and European software decision makers responded that they are currently using SaaS. A combined 40% reported that they were either interested or piloting. (Source Forrester Research).

In particular, SaaS seems to be a popular method of deployment in the area of CRM and sales force automation. According to Gartner, SaaS applications accounted for 15% of total CRM software revenue in 2007. The increase is not just a result of sales of new SaaS based CRM licenses according to this statement from Gartner:

Growth in SaaS resulted from gains by SaaS pure plays, traditional on-premises vendors offering on-demand solutions and vendors transitioning their installed base from on-premise to on-demand.

Seen as an evolution of SaaS, Cloud Computing is currently emerging as a service offering that further leverages internet hosting capabilities. At the moment, Cloud Computing is mostly regarded as IT infrastructure available on-demand, something which offers a cost-effective way for start-ups and SMBs flexible access to computing capabilities without having to tie up free capital. However, Gartner sees Cloud Computing still as an evolving concept, with many years yet to mature. Nevertheless, with Amazon.com spin-off Amazon Web Services (AWS) as a prominent provider of Cloud Computing services, Gartner expects Cloud Computing to become as influential as e-business.

The commonalities between the various network-based computing models – web-services, SaaS and Cloud Computing – are that they: require little or no implementation work on the customer side (as compared to traditional application implementation); are generally independent of operating systems; and are offered on a subscription or pay-as-you-go basis. All of this adds up to low adoption barriers for new customers and explain their attractiveness on a conceptual level.

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23 The definition of SaaS is provided by Gartner analyst Jim Holincheck in his blog at this link: http://blogerp.typepad.com/about.html. Gartner defines SaaS as an application that meets the following three requirements:
   - The application is owned, delivered, and managed remotely by one or more providers
   - The application is based on single set of common code and data definitions which are consumed in a one-to-many model by all contracted customers at any time.
   - The application is licensed on pay-per-use or subscription basis


For software start-ups, network-based computing proves attractive as a low cost distribution and operating model. However, the notion put forward by many analyst companies that network-based computing's potentially direct distribution model eliminates the need to work with channel partners is not entirely correct. For instance, Salesforce.com - poster child for the growth of the SaaS business model - works with a growing number of partners that make their living by configuring the databases, customizing the system and conducting training sessions for new users.

Locally, MaRS based start-ups have experienced a strong push from enterprise customers for the integration of their collaboration tool with adjacent admin and content management systems, despite its software being a self-contained solution with both security and content management providing out-of-the-box functionality. These examples demonstrate that many complex applications whether delivered as a hosted application over a network or implemented locally still face similar demands for integration, training and support as packaged software.

For most enterprise application start-ups, this requirement to augment your solution with services means that channel partners must be part of the market approach from a very early stage for most start-ups.

2.3 Ecosystems

In the years since the dot-com bust, a heavy consolidation has taken place in the Enterprise Application market with the result that four players have emerged to dominate the space: IBM, Oracle, SAP and Microsoft. These companies are surrounded by an eco-system of partners, ISVs, VARs, and service providers that function by offering complementary services, software, and hardware.

For start-ups, these ecosystems represent two things. One, they are a market place for buying and selling complementary technology and services. Two, they are large collaborative environments built around a common platform that aid learning and go-to-market initiatives for start-ups. While most start-ups gravitate towards a particular vendor’s ecosystem for obvious reasons (technology platform, process expertise etc.), leveraging the ecosystem to its fullest potential is a separate skill all start-ups must come to master as part of their strategy. This can be done by actively recruit people or advisors with experience in managing partnerships and developing business within the relevant ecosystem.
3. New Business Models Emerging

The broad trends described above are starting to create changes both in the way enterprise applications are created and delivered as well as how the software is paid for. With SOA, Web 2.0, OSS, and network-based computing all coming of age at the same time, we are experiencing an emerging fragmentation of enterprise applications. Increasingly, enterprises are buying modules instead of packages – open source or not – delivered either over the net or locally. The traditional model of selling software licenses for monolithic applications coupled with annual fees for maintenance and support is now under pressure because of these alternative business and delivery models. At the moment, the most obvious of these new business models is the emergence of SaaS which is usually delivered as a subscription, but also can be encountered on a pay-as-you-go basis.

For software start-ups, finding the right business model is critical and can sometimes be the difference between success and failure. That said, start-ups have the advantage over more established software companies in responding to demands for new business models. By contrast, mature software companies that have long established commercial relationships with customers and partners may potentially risk revenue losses when attempting to cajole them into new forms of agreements. As Ontario’s start-ups are free from such constraints, they should be able to meet customer demands for new business models quicker than traditional players, turning this flexibility into a competitive advantage. Below we discuss the merits of some of the emerging business models for today’s start-ups companies.

3.1 Subscriptions and on-demand

Subscriptions and pay-as-you-go have become very popular business models for SaaS-type offerings. These business models are cost-effective ways for enterprise customers to add certain capabilities to their organization without high upfront investments. Low initial cost is in principle appealing to companies of all sizes, but it is particularly attractive for start-ups facing more or less existential spending choices when investing their pre-revenue capital. It is also appealing for business customers in larger organizations since subscription and on-demand payment fit more easily into operating budgets with little room for upfront investments. An added benefit with SaaS-type solutions is that they can be typically be accessed with a standard browser, thus reducing the complexity around implementing the solution. This last point means that decisions to buy a SaaS-type solution can often be made without the sometimes bureaucratic interference of internal IT staff, thereby sidestepping decision hurdles like internal IT governance policies, technology reviews and cross-functional decision processes – factors that all pose substantial risk of delay to a software sale.

However, there are two main challenges for start-ups launching subscription and on-demand solutions:

1) Financing: Compared with a traditional software licensing model, an on-demand business model is shifting a significant portion of the financial risk to the start-up. With upfront investments in R&D combined with less initial revenue from each customer, this business model could potentially increase the need for capital before a venture will reach the break-even mark.

2) Customer retention: Repeat business is the key to success for any subscription-based business. In cases where customers pay nothing upfront and avoid the pain of having to go through an expensive implementation process, the switching cost from the customer perspective is low. To balance this fact, however, vendors must place considerable effort on making their solution easy to adopt and on driving the use of the solution once a customer signs up for their service.
3.2 “Free”
In Wired magazine,\textsuperscript{29} editor Chris Anderson explored how many business models are based upon giving something away for free. Labeled ‘Freemium’, one such business model aims at offering various tiers of functionality, content, and service where only the basic version is free, requiring users to pay to upgrade to advanced services. An example of this business model is provided by FreshBooks (www.freshbooks.com) – a Toronto based web-application for freelance consultants. Users of FreshBooks can use the system for free up until a certain volume is reached, after which they must pay a tiered subscription fee for accessing additional volume.

Another such free model is based on advertising revenue where the functionality and content is free so long as the user accepts being exposed to advertising. Google Apps is an example of this model, where the user can pay $50 per year to be spared Google’s targeted advertisements. Cross-subsidies provide the ‘legacy’ business model in the ‘free’ space, meaning that you give something away if it drives demand for other products or in order to capture an audience which can somehow be monetized further down the line. Mobile operators offering subsidized mobile phones in return for a contractual commitment has been the dominant - and fairly successful - business model for creating a mass market for mobile phones over the last 15 years.

3.3 Open Source Business Model
In the Open Source world, source code is freely available, but businesses are being created on the back of the source code by offering commercial licenses, professional services, training, certification, partner programs, references and use-cases for money. Instead of investing heavily in developing source code, businesses in this space spend their time managing and cultivating the community of contributors to the code. This might give OSS vendors a low-cost solution to offer the market, but for enterprise customers cost is not the only concern they have. Indeed, according to a Forrester Research survey, access to timely support and information security are just as important when selecting vendors:

Among the firms that indicated that they are either planning to pilot or are currently piloting open source software other than Linux, 79% expressed concerns about the availability of service and support for the software. (Source Forrester Research ).\textsuperscript{30}

In other words, while Open Source can give start-ups a cost advantage on the upstream side of the business, OSS vendors still have to sell to and support their customers which will add cost to the business.

3.4 Process based pricing
Forrester Research is predicting that we will see a trend towards process-based pricing, probably modeled after BPM vendor’s pricing models. Process-based pricing will compete against subscription-based models, and follows a move towards what Forrester calls Dynamic Business Applications, which in short are applications with a process-focus rather than the functional- or modular-focus we see in most enterprise applications today:

IT’s primary goal during the next five years should be to invent a new generation of enterprise software that adapts to the business and its work and evolve with it. Forrester calls this new generation Dynamic Business Applications, emphasizing close alignment with business processes and work (design for people) and adaptability to business change (build for change). (Source: Forrester Research )\textsuperscript{31}

Process based pricing would be relevant for many web services type applications and potentially for Cloud Computing as well. The advantage of process-based pricing is that it is aligned with the value creation on the customer side, and thus easier for customers to understand and appreciate the value of the solution.

\textsuperscript{30}Enterprises view Open Source as a Key tactic for Strategic Software Initiatives. December 2007, Boston: Forrester Research.
\textsuperscript{31}The Future of Enterprise Applications, (See page 15, endnote 7). December 2007, Boston: Forrester Research.
3.5 Responses from the Industry

In response to pressures from the emerging business models, many vendors have implemented changes to their current software licensing models. In one recent RFP process we were involved in, leading vendors in the enterprise content management market all offered a number of ways to license their software include traditional user- or site-based models, hosted offerings or pay-as-you-go models. IDC suggests that emerging SaaS vendors are one of the drivers behind this change:

On-demand application specialists will force license-only suppliers to rethink their product delivery and licensing strategies and change their delivery to include on-demand and offer new licensing options (Source: IDC).  

Although some of these changes will be motivated by the desire for established vendors to create and launch solutions in the SMB market, start-ups should understand that established vendors will continue to amend current business models to protect key customer relationships.

The bottom line is that enterprise customers desire a business model which is aligned with their business needs, meaning that the onus is on start-ups to understand how their customers make and spend money and how this in turn affects their business needs.

4. Conclusions

Entrepreneurs that are in the process of launching a software company need to understand the current context in which they are operating. In a dynamic marketplace, many of your planning assumptions will be changing on a daily basis.

The purpose of this paper was to show some of the key trends that are affecting the enterprise software market and offer some advice to entrepreneurs who are entering this market. Whilst the individual technology trends highlighted in this paper are not necessarily disruptive on their own, they each offer specific opportunities entrepreneurs must look to exploit.

More importantly however, is the fact that the cumulative effect of these trends will lead to substantial changes for the enterprise software industry. What we have seen in this paper is that the packaged software business model is clearly under threat from changes both on the customer side and from innovations driven by the industry itself.

There are two main lessons that new entrepreneurs can take from the above market review. The first is to keep an open mind with regards to what business model will work for your start-up, since you will have to tweak the business model and maybe even operate several alternative business models in tandem as you go along.

The second lesson pertains to your investors: Make sure you have savvy investors, meaning that they understand that your business model will most likely change as your venture develops. It is important that start-ups have investors who can recognize when these changes are necessary and work with the venture to make that change happen as quickly as possible, because speed and agility are competitive advantages that small companies have - and must exploit.

5. Final Remarks

The trends mentioned above are just some of those highlighted by the research providers that work with MaRS. At MaRS, we engage on a daily basis with entrepreneurs to familiarize them with a wide array of research and its impact on their markets, their business and their technological needs. We firmly believe that by using research, entrepreneurs can make better decisions quicker – something which is a competitive advantage in and of itself.
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