STRATEGIC ANALYSIS OF ONE45 SOFTWARE INC.

by

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ABSTRACT

One45 software inc. is a software company based in Vancouver, Canada, that serves the medical education administration (MEA) market. The firm is the *de facto* standard MEA software vendor in Canada and is poised for a new stage of growth: achieving significant traction in the US. This paper determines the feasibility of this goal and the best route forward by conducting a strategic analysis.

US MEA represents an attractive, if time-sensitive, business opportunity. The main industry key success factors concern product quality and customer service, two areas in which one45 outperforms its US competitors. In addition, barriers to entry are low. However, the firm has a deficiency in US marketing and sales experience. Therefore, it is the recommendation of the paper that one45 implement a US-based Sales and Marketing Department, headed by an individual with experience in US MEA, with the goal of rapidly capturing significant US market share.

Keywords: strategic analysis; strategy; software industry; Canada; United States

Subject Terms: Strategic Planning -- Case studies

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1 AN INTRODUCTION TO ONE45 SOFTWARE INC.

One45 software inc. develops and implements administration software tools for medical education programs (medical schools and residency programs). Today, the firm's flagship software modules (UMEAdmin and GMEAdmin) are the *de facto* standard medical education administration (MEA) tools in Canada. Now that one45 has captured the majority market share in Canada, the firm is poised for a new stage of growth.

Discussion among the firm's leadership has determined US-market entry as a potentially lucrative business opportunity and the next logical stage of growth. To date, the firm has had a modicum of success in selling its products in the US without altering its selling strategy. US-entry, however, has not been a corporate focus. The purpose of this paper is to determine whether one45's current strategy in Canada is well-suited to achieving significant traction in the American market or if the company should focus its efforts differently to achieve success south of the border.

To answer this question, we will first describe the company's operations in detail. This chapter provides an overview of one45's products and services, current marketing and sales strategy, buying cycle, product development/implementation and pricing strategy. It also includes a brief description of the Canadian and American MEA markets. The next chapter will determine the attractiveness of the US MEA market by looking at competitive rivalry, entry barriers and industry key success factors. From there, we will develop a number of potential entry strategies that one45 might pursue, and then we will test these strategies against the capabilities of the organization to determine which strategy the firm is best suited to pursue. This paper will

conclude with a short chapter describing how the company might implement the "winning strategy."

1.1 A Small Firm Focused on a Small Niche

One45 Software Inc. was founded in 2001 in Vancouver, British Columbia, by a team of developers with unique expertise in medical education, interface design and customer support. The firm began with a single goal: to develop tools that would free medical school and residency program administrators from the "pain" of data management so they could shift the balance of their efforts towards improving teaching and learning at their institutions. One45 currently employs a team of 16 programmers and support personnel and is led by its three co-founders.

One45's corporate strategy in Canada is currently one of focus – on product differentiation, vertical system integration, "social proof," word-of-mouth and relationship marketing, and a commitment to customer support. The following sections will discuss these topics in more detail.

1.2 Products and Services – Customizable, Flexible, Contextual

One45's product-line is based on the fact that undergraduate and postgraduate programs at universities across Canada and the US all face similar data management challenges. Each have their own idiosyncrasies, of course, but their basic requirements (evaluation, scheduling, communication, etc.) remain the same. One45's products leverage these similarities to allow administrative information to be shared up and down the institutional hierarchy safely, efficiently, effortlessly and in real-time. By repurposing data throughout the system, the company's tools free administrators from the burden of collecting, collating and disseminating huge amounts of data. Developed from the bottom-up and consistently focused on end-user satisfaction, one45's product-line is one of the few fully integrated software solutions for the MEA market that is

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scalable across entire departments, programs and institutions. The firm's modules are the most customizable, flexible and contextual solutions currently available, and its products are the only ones to be differentiated between the undergraduate and postgraduate contexts.

1.2.1   UMEAdmin (Undergraduate Medical Education Administration)

UMEAdmin is a customizable, scalable package of electronic administrative tools that is specifically designed for undergraduate medical education programs. Its main features include automated modules for Scheduling (course-based, rotation/practicum-based, activity-based and scheduling lotteries), Evaluation (learner assessment, faculty evaluation, course and program component evaluations, 360 evaluations, surveys), Procedure and Patient Logs (activity tracking, capturing accreditation requirements) and Reporting (collecting and disseminating report data to facilitate decision-making). UMEAdmin also captures curriculum information relevant to assessment and accreditation requirements automatically and transmits this data to the Association of American Medical Colleges database (CurrMITT).

Students and faculty members interact with the system through a personalized *eDossier*. The *eDossier* is the heart of UMEAdmin, a virtual data-centre where all personal information (schedules, evaluations, procedure logs, contact info, etc.) is stored, updated and available to be shared. The *eDossier* is the primary means of communication between administrators, faculty members and students.

1.2.2   GMEAdmin (Graduate Medical Education Administration)

GMEAdmin is based on the same platform as UMEAdmin and is specifically designed for postgraduate medical education programs. In addition to the core modules of Scheduling, Evaluation, Procedure/Patient Logs and Reporting, GMEAdmin also includes tools that track Duty Hours (resident work hours) and that collect accreditation information corresponding to the core competencies as prescribed by CanMEDS 2005 and the ACGME Outcomes Project, the

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main medical education licensing bodies in, respectively, Canada and the US (see Appendix A for more details). GMEAdmin is also centred around the *eDossier*.

1.2.3 Change Management and Customer Support

One45 puts significant emphasis on the "change management" process. The company provides complete set-up, consultation and training support throughout implementation and encourages ongoing dialogue with its clients (see Section 1.7). These services are all included in the products' base costs. As a result, one45 is the MEA industry leader in customer support.

1.2.4 Strategic Alliances

One45 maintains a number of strategic alliances within the software and healthcare education communities that make its product line more attractive to clients, more competitive with other vendors and increasingly flexible as new developments in technology arise.

We have partnered with T-Res, a Vancouver-based company that compiles medical student and resident trainee procedure logs through the use of hand-held devices in Canadian medical schools. By integrating our web-based procedure logs with T-Res's hand-held version, the two companies can share data and avoid competing with each other. This is also a distinct competitive advantage because wireless technologies are becoming increasingly popular in the healthcare setting.

One45's products are also fully integrated with the Association of American Medical Colleges' Curriculum Management and Information Tool (CurrMIT). The firm's tools automatically gather and export curriculum data in XML format directly to CurrMIT on a weekly basis, a task that must be done on a yearly basis for licensing requirements and that used to be very time-intensive and expensive for medical schools. This is a strong competitive advantage since no other vendor provides CurrMIT connectivity.

1.3 The Canadian MEA Market in Brief

So far, one45 has focused its UMEAdmin and GMEAdmin software on the undergraduate and postgraduate MEA markets in Canada. There are 17 medical schools in Canada with 9,782 undergraduate students and 10,547 graduates (i.e., residents). Based on a subscription price of $60 per learner per year, the total size of the Canadian market for UMEAdmin and GMEAdmin is $1.2 million a year.

Although one45 is the market leader in Canada, the firm made no headway in penetrating the medical education market in Quebec. Because Quebec's medical schools operate differently from the rest of Canada (e.g., different licensing bodies, etc.), one45 considers these schools as a separate market altogether, one that is worth $390,000 a year in potential revenue and is still worth pursuing since significant effort would not be required to expand the firm's products into these schools. So far, Quebec schools have repeatedly inquired into one45's products but have yet to decide whether to use an outside vendor or develop a province-wide system of their own. The firm continues to pay close attention to this market and is confident its products will be selected should they decide to go with an outside vendor.

Some schools have developed "home-grown" technologies to meet their administrative needs (see section 2.6.2,). One45 also considers some of these schools to be potential future clients.

Excluding Quebec, one45 has captured 94 percent of the available market for UMEAdmin and 95 percent of the available market for GMEAdmin (see Appendix B for a detailed description of the Canadian market).

1.4 The US MEA Market in Brief

The US undergraduate medical education market consists of 128 medical schools with a total of 68,343 medical students. For UMEAdmin, the potential yearly revenue from this market is $4.1 million. There are 8,188 residency programs and 104,520 resident trainees in the US. For GMEAdmin, the potential yearly revenue for one45 in the US is $6.3 million (see Appendix C for a breakdown of US MEA market).

One45 has already had a modicum of success in selling its UME and GME products in the US using the same selling strategy employed in Canada. Current US Medical Education clients include:

- The Medical College of Georgia: all UME and GME
- South Dakota (UME)
- University of Texas at Houston: UME years 3 and 4
- Temple University (Philadelphia): UME years 3 and 4
- University of Miami: UME year 3
- Stanford University: GME (Internal Medicine)

In addition, one45 is in discussion with Emory University and Loma Linda University.

1.5 Sales and Marketing – Proving Value Through Word of Mouth

Now let's look at one45's current sales and marketing strategy. Although the target market for one45's products is very small (i.e., 17 medical schools in Canada, 128 in US) and should, in theory, be easy to reach through print advertising, this method is not appropriate. This is because there is no trade publication that speaks directly to these institutions and advertising in medical journals is prohibitively expensive (i.e., fiercely competitive with multinational drug companies for ad space) and does not provide the required focus (i.e., potential clients make up only a small percentage of their readerships).

The MEA market is a relatively small niche in which software tools are custom-fitted to individual administrative contexts. For these reasons, one45 has relied primarily on "social proof" (i.e., new clients buying-in on the basis of their colleague's satisfaction with the firm's products), word-of-mouth and relationship marketing to attain new clients. This includes a heavy focus on trust-building and cooperation, ensuring a set of shared goals exists between the firm and the client and employing constructive conflict resolution practices. Testimonials, product demonstrations and early-adopter clients have so far been sufficient to spread the word.

One45 began by pursuing footholds with individuals or groups in single departments or residency programs in Canada. The firm worked closely with these small groups, essentially "over-servicing" them. These early-adopters then became spokespeople for one45 within their schools; some made it their "mission" to get one45's products installed across their entire institutions. Although the firm did sign a couple of Canadian medical schools to "enterprise" contracts right away, the majority of the company's clients began with small footholds and then grew by word of mouth (see Section 1.7).

So, it could be said that one45 currently employs a "missionary selling" technique, whereby the company identifies and pursues contracts with potential early-adopter institutions. With no dedicated sales staff, it has been the role of the company's three principals to develop relationships with "seed" individuals at these institutions, who then provide a business foothold for the company and positive word-of-mouth ("band-wagon" effect).

So far, one45's marketing expenses have been limited to attending annual meetings of medical education organizations in Canada (Association of Faculties of Medicine of Canada, or AFMC) and the US (American Association of Medical Colleges, or AAMC) and conducting on-site visits and product demos. At the meetings, the firm makes new contacts and meets with potential clients who have already inquired into the firm's products. After the meetings the firm

conducts follow-up. More recently, the firm began sending email and snail mail promotion

packages to the mailing lists provided by the above organizations (see Appendix D for an

example of the company brochure). Other than meetings and "cold-calling" through the mail, the

rest of one45's clients have come from referrals, both within institutions and across them, or from

phone inquiries spurred by our website.

The above section has outlined one45's current sales and marketing approach. Now let's

look at the buying cycle of one45's products.

1.6   A Variable Buying Cycle

The buying cycle for one45's products depends on the size of the client, which may be

small (e.g., an individual residency program), medium-sized (e.g., multiple years of a four-year

undergraduate program) or large (e.g., an entire medical school). The reasons for this are:

- The larger the client, the larger the cost and therefore the longer the decision process (e.g., small programs might cost $3,000/year, while entire schools might cost up to $100,000/year)

- The larger the client, the more people involved in the decision (in small programs, an individual may be able to make the buying decision, whereas in big schools buying decisions are often made by committee)

- The bigger the contract, the more due diligence is required (i.e., comparison shopping with other vendors).

- Remote demonstrations (walk-throughs by phone) can be one-on-one with small programs but require entire committees to be present for large schools).

- Clients larger than one or two programs often require one or more on-site demonstrations.

- Larger clients require contracts to be vetted by lawyers.

- Unlike much of the software industry, Requests For Proposals (RFPs) so far have not been the norm. (So far, one45 has participated in one RFP process against its main US competitors. One45 prevailed.)

Buying decisions can take as little as one month for individual residency programs to

more than three years for entire medical schools. On average, one45 completes a sale in 9 to 15

months.

Now we will describe in detail one45's unique product development and implementation strategy, which has been key to the firm's success so far.

1.7   Product Development and Implementation – Intricately Linked

One45's success in Canada has been achieved through a focus strategy based on customer needs and product quality rather than low-price. Central to these efforts are the firm's development and implementation strategies, which ensure its products are both *useful* to the individual client and *easy-to-use.*. Clearly, these are key success factors in the Canadian MEA market.

On45's product development and implementation strategies are intricately linked and reflect the basic tenets of Davis' technology acceptance model (TAM) (Davis, 1989) (see Appendix E). TAM suggests an individual's "intention to use" a new software system is determined by two major variables: 1) the Perceived Usefulness of the system and, 2) the system's Perceived Ease of Use. These variables provide a worthy starting point for building successful software: tools must be *useful* and *easy to use*. These two factors are one45's core competencies and the firm's main competitive advantage.

One45 develops its products from the ground-up in partnership with lead customers (i.e., "early-adopters"). The product development process is informed by continuous feedback from, and consultation with end-users. For a long time now, medical education administrators have been handcuffed by technologies developed from the top-down. One45 has found that although these individuals are overburdened with work, they are often willing to contribute their know-how to software development *if* they believe the solutions will actually benefit them individually.

This method corresponds to the finding of Leonard-Barton and Kraus (1985), who point out that "the closer the definition and solution of problems or needs are to end-users, the greater

the probability of success." One45's work with lead customers follows the so-called "USA principle" – Understand, Simplify, and then Automate (Kapp, 2001). The firm begins by spending considerable time understanding its clients' context, needs, and processes. Next, the development teams work to simplify those processes. Only then do the processes become automated.

The firm pays explicit attention to the implementation process; specifically, a focus on the "people issues" of implementation. This is important given that the literature suggests the majority of one45's users (older women with minimal computer skills) could be especially challenged (see Appendix F). To this end, the firm employs a Director of Implementation who is in charge of Implementation Coordinators and Junior Implementation Coordinators (rather than a help-desk or support staff). The Director's focus is on successful implementation rather than simply training and helping with problems. In the initial stages, an Implementation Coordinator is assigned to a particular school and develops a working relationship with local program administrators.

The Director begins implementation by identifying one (or sometimes more) local champion at individual schools. Usually, this is the person who initially became aware of one45's products and brought them to their school's attention. In addition to helping the firm understand the local political climate, the champion works closely with the implementation team and acts as a "filter" between local users and one45. Champions organize requests, prioritize them, manage expectations and provide a "big picture" to their senior leadership. They end up playing many of the roles that Leonard-Barton and Kraus (1985) identified as keys to implementing new technology: those of the *sponsor*, the *champion*, the *project manager* and the *integrator*.

The next step in implementation is convincing the champion (and thereby local senior leadership) to abandon the idea of a "go-live date" for the institution. Instead, one45 suggests

"rolling-in" the system – implementing new tools with individual groups within the school at speeds relative to their readiness and interest. This is based on the concept of adopter groups: innovators, early adopters, early majority, late majority, and laggards. Management refers to this as "wedge" technique: implementation meets less resistance when it starts with the thin end of the wedge.

The champion also helps the firm identify innovators and early adopters within their institutions. Innovators often become the lead contributors to the development process described above. Working with this smaller group in the initial stages allows the firm to "over-service" them. Early problems can be worked out, and the firm gets feedback from a group of keen individuals. This also helps the company manage the "messages" that are being spread locally. The idea is to develop local positive word-of-mouth and entice users further down the adoption curve to "volunteer" for implementation. This is the "social proof" component to one45's implementation strategy. The "rolling-in" process allows the firm to persuade "hedgers" and avoid providing ammunition for "assassins" (Leonard-Barton and Kraus, 1985).

The firm further divides the early adopter group into "positive" early adopters and "negative" early adopters. Although positive early adopters are easier to work with, negative early adopters are often instrumental to successful implementation. They are outspoken and often identify legitimate resistance to change (Leonard-Barton and Kraus, 1985). If won over, these people provide the strongest "social proof."

The actual implementation process starts with the Implementation Coordinator (IC) accompanying the local program administrator (PA) on a Web walk-through of the system over the phone. By this time, the user's data has been imported into the system. The PA, therefore, learns to use the system with a personalized, one-on-one "guide." The IC helps the PA set up and configure the system, makes suggestions of best-practices (based on what other schools are

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doing), and helps the PA understand the pros and cons of different work flows and configurations. The IC also keeps the big picture in mind to help coordinate between programs, divisions, departments, etc. The Director of Implementation may become involved in the consultation process for unusual or difficult set-ups. As the PA becomes familiar and comfortable with the basic tools, they may request (or the IC may suggest) adding another tool.

As the IC and PA work together and incremental successes are achieved, a trusting relationship contributes additional value by making the relationship more worthwhile (Gefen, 2004). Therefore, the dual objective during this phase is successful IT implementation and building a trusting relationship with the client.

As roll-in continues along the adoption curve, the firm continually gains a better understanding of the local environment. The majority of issues that later adopters would have no tolerance for have already been dealt with. As more groups sign-on, momentum builds and the tools become increasingly refined. This is consistent with perceived critical mass being an independent predictor of successful implementation (Lou, Luo and Strong, 2000).

The roll-in process also has practical financial benefits for one45. A "go-live date" would be highly resource intensive, requiring the majority of work to be performed all at once in the early stages of implementation. This would lock up significant company resources, thereby limiting the firm's ability to respond to potential new clients. By comparison, the roll-in method allows the firm to make the work more manageable by spreading it out over time, with the result that significant development and training resources are still available should the firm sign new clients during this time. Also, without roll-in, there is no way the firm could handle implementing an entire medical school all at once while maintaining the company's development initiatives. It is important to note here that although schools are rolled-in, and only a small number of groups are brought online at first, clients are still charged the entire fee up-front. In this way, one45 gets

paid in full when the contract is signed but is able to streamline its resource use over time, in some cases across an entire academic year. In the long run, this is also better for the client because implementation is more successful and less likely to face resistance or political problems. Like the proverbial rabbit and the tortoise, slow and steady wins the race.

Now that we've learned how the firm develops and implements its products, let's look at what the company charges for them.

1.8   Clients for Life - A Subscription Pricing Model

Another important aspect of one45's success is its pricing model. The firm uses a subscription model which, by definition, guarantees an ongoing revenue stream. Each time a new client is signed, revenue grows. Therefore, the firm does not have to search for clients in order to meet revenue quotas from previous years.

The subscription model is based on learner headcount. Administrators and faculty required to support those learners are no extra cost. For UMEAdmin and GMEAdmin, the firm now charges $60 CDN per learner per year in Canada and $60 USD per learner per year in the US. There is a minimum charge of $3,000 per year for smaller programs.

A four-year undergraduate program with 100 students in each year would cost an institution $24,000 a year for UMEAdmin (4 years x 100 students x $60 = $24,000). This represents a typical medium-sized UME contract. The same is true for GME programs.

In the beginning, the company's pricing strategy was to sell products at a low price initially and then increase the price as users became aware of their value (i.e., "experiential goods"). Prices have increased from $45 per learner in 2002.

The above costs include installation, training and unlimited ongoing support to administrative users. Local administrators are trained to provide support for end-users and school-specific customization is charged out at $75 an hour. There are no setup or implementation fees and the charges are the same every year for multi-year contracts. Most clients sign the maximum five-year contract, which locks them into a yearly rate, but prices usually increase during contract renegotiation.

1.9 Summary: A Focus on Custom-fit and Customer Satisfaction

To summarize, one45 employs a focus strategy based on product differentiation that has been very successful in Canada. Its products are highly customizable, flexible and context-specific, and come with a guarantee of high-quality customer service. The firm markets itself through social proof and positive word-of-mouth, with an emphasis on relationship marketing during the implementation process. New products are usually developed in tandem with the implementation process. The firm's buying cycle is variable and is based on a subscription model. New deals average between 9-15 months from first-contact to implementation, and when clients sign with the company, they are usually "signing for life."

1.10 A New Stage of Growth – US Market Entry

With its reputation as the primary administration software vendor for Canadian medical schools and residency programs firmly established, the next logical stage of growth for one45 involves expanding its product-niche mix into the US MEA market. The question is, how should the company do this? The firm's focus strategy (i.e., marketing, development, implementation and pricing based on customer needs and product quality rather than low-price) has been very successful in Canada so far, but will it work in the US? And if not, how should the company refocus its efforts to ensure success?

This chapter has introduced one45's products, operations and current strategy. The next chapter will conduct a competitive analysis of the US MEA market with the above questions in mind. We will determine the attractiveness of the US MEA market by looking at the competitive forces and entry barriers facing a new entrant like one45. From there, the following chapter will examine the strategic alternatives available to the firm and generate a number of specific strategies for US-entry for the company to consider. After that, we will analyse the organization itself in light of these strategic alternatives to identify which strategy is most likely to succeed south of the border. The paper will then conclude with a short chapter specifically describing how this "winning" strategy might be implemented at one45.

2 THE US MEA MARKET

Having looked at one45's current operations, strategy and hopes for expansion, this
chapter will now look more closely at the US MEA Market to determine if indeed it is an
attractive niche for one45 to pursue. We will begin with an industry analysis based on the Five
Competitive Forces model put forth by Porter (1979). Then we will generate a list of key success
factors for US MEA and compare one45 with its US competitors to determine if the firm is well-
positioned to compete. Finally, we will summarize this chapter by analyzing the threats and
opportunities facing one45 as is considers US market entry.

2.1 US MEA - Like Canadian MEA, But Less Mature

Like those in Canada, American medical schools and residency programs are latecomers
to the world of technological tools. Five years ago, most administrators were still required to
collect, collate and repurpose immense volumes of data (evaluations results, rotation and duty
hours scheduling, accreditation requirements, etc.) by hand. A few schools had developed their
own, "home-grown" software tools to help ease the administrative burden, but these solutions
were usually inflexible, expensive and often caused more problems than they solved. Therefore,
the MEA software industry in the US is a new niche with exciting growth potential. It is relatively
"immature" (i.e., the majority of market share has not yet been captured) in comparison to its
saturated Canadian counterpart, in which one45 is already the market leader.

Medical schools and residency training programs desire software tools that are
specifically tailored to their unique scheduling, evaluation and assessment needs. This requires
deep contextual knowledge on the part of the developer with respect to each of its clients'
administrative realities. In other words, success in the US, as in Canada, depends upon a "focus

strategy." A successful US MEA product is characterized by 1) ease of use, 2) contextual "fit," 3) adaptability to a range of work-flows, 4) synergy throughout the organizational hierarchy, and 5) connectivity with external systems (i.e., licensing and regulatory bodies). Products must be infinitely customizable and accompanied by extremely knowledgeable support personnel.

With its similarities to the Canadian MEA market in terms of product requirements, and its relatively unsaturated status, the US MEA market appears to be an exciting, attractive niche for one45 to expand into. But how competitive is it?

First let's look at one45's major competition in US MEA. Then we'll describe the actual state of competitive rivalry in the industry.

2.2 One45's Competition

2.2.1 Major Players

One45 has two major competitors in American MEA: New Innovations Inc. and Verinform Systems.

2.2.1.1 New Innovations Inc.

New Innovations is one45's biggest competitor in the US market. They are the US market leader, having captured 1/3 of the US postgraduate (GME) market. The company has had a sales force since its inception, which likely accounts for its market traction.

New Innovations provides ten modules for GME administration. Their system includes a private billing system, which one45's does not. However, the strategic advantages of this module are not clear because none of our clients have ever requested this functionality. Although New Innovations has a few undergraduate programs as clients, their UME product is a modified

version of their GME product and is not specifically designed for the UME user group. It does not provide CurrMIT connectivity, though it does allow for synching with PALM technology.

The company implements their system one department at a time, with little communication between groups. Therefore, their product is not a true enterprise solution and fails to leverage the possible network effect from integrating user groups at the same institution. New Innovations' pricing is comparable to one45's but does not include unlimited support.

New Innovations was one of one45's early competitors in Canada. However, three of the clients they signed (including one in the US) have since switched to one45, citing poor support, slow response and a non-user-friendly interface (see Appendix G for product information and a client list for New Innovations).

2.2.1.2 Verinform Systems

Verinform is the only competitor that provides a true enterprise solution for medical schools. The company began in the same year as one45 and in 2004 they raised $800,000 in financing. With New Innovations, Verinform is the only other group that has traction in the US market.

Verinform's main focus is on GME programs. Their *GMEToolKit* was developed by Data Harbour, one of our early competitors who were bought by Verinform. Verinform also offers an undergraduate solution but, like New Innovations, their UME module is a modified version of *GMEToolKit* and does not offer CurrMIT connectivity. Verinform also provides a private billing module.

Although their exact pricing model is not known, Verinform is "considerably" more expensive than one45's products. The company charges for training and support, whereas one45 includes these services in its base costs.

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Verinform was recently purchased by MyEvaluations.com, a company which offers its own low-cost online administration software. Currently, it appears MyEvaluations.com plans to leave Verinform Systems alone to continue pursuing market-share (see Appendix H for product information and a client list for Verinform).

2.2.2 Minor Players

One45 has two minor competitors in the US MEA market. Advanced Informatics, with their *E-Value* and *E-gme* tools, and Academic Management Solutions, with their *CoursEval* and *eCV* modules. Neither of these companies provides an enterprise solution. Their products have limited functionality in terms of features and the companies provide little support to users. The main selling point of these companies is their low cost, which is not a competitive advantage in the US MEA market (see section 2.6.1).

To summarize, one45's competition in the US is already quite well-entrenched. But what does this mean about the state of rivalry in the industry?

2.3 Rivalry is Low and Favourable

Based on one45's experience so far, competitive rivalry in the US MEA market is not particularly intense. New entrants are unlikely to face significant "retaliation" from existing players; US competitors have been aware of one45's existence since 2001 and the firm has experienced no retaliatory action. Since the market is still very young and success is mainly based on the innovation and customization of products, competitors have little leverage with which to retaliate. Also, competitors are still too busy attracting new clients to bother competing for market share. Since buyers are not price-sensitive (within reason) and products from large players are cost-prohibitive, price-wars are not likely to arise. So far, little effort has been spent trying to lure buyers away from other vendors.

Rivalry is additionally subdued given that products are complex and require detailed understanding by clients. Again, switching cost plays an important role. Apart from introducing new and better features and providing better service, few tactics are available while jockeying for position. Rivals do not compete on price and expensive forms of advertising are not effective. Of course, the possibility of acquisition by larger players could change the nature of rivalry. On the positive side, though, this also provides an available harvest strategy (i.e., being bought out).

Rivalry will likely increase as the US market matures. Saturation will spur increased competition. Though price-wars are still unlikely, increased capital expenditure may be required as aggressive marketing and sales become more important and as companies compete on R&D capabilities. Larger companies may attempt vertical integration to capitalize on their economies of scale in this regard.

To summarize, competitive rivalry in US MEA is quite low and is favourable to new entrants. So, aside from competing vendors, what else could get in one45's way as it attempts US entry?

2.4 Entry Barriers Facing One45 – Not Insurmountable

This section will outline the potential barriers facing one45 as a new entrant into the US MEA market.

2.4.1 US Marketing and Sales Experience is Key

Experience selling software in the US is one of the most significant barriers to success for Canadian software companies entering the US market (Abramson, 1992). Entrenched US competitors already have much more experience selling to American clients and are likely to have extensive networks of contacts within the US MEA community that Canadian companies cannot

compete with. In addition, foreign entrants find it difficult to attract qualified American personnel – and the contact lists they bring with them – because they usually cannot pay top salaries.

One45 currently has no dedicated sales and marketing team, nor anyone in the company with experience selling software in the US. Also, the majority of the firm's contacts within the MEA community are Canadian. In an industry based on "social proof" and word-of-mouth marketing, this lack of US experience is the company's most significant disadvantage with respect to US entry.

In some cases, Canadian companies have been able to develop their contacts and build relationships – two skills that are core competencies at one45 – and end up performing just as well in the US (Abramson, 1992). However, the US MEA market represents a "window of opportunity" that may soon close. One45 may not have the luxury of developing contacts over time, as time is of the essence.

2.4.2 Customer Loyalty is Strong

Although brand recognition is just beginning, branding is sure to become a significant Key Success Factor as the US market matures. First-movers and firms that focus on customer service will likely be the first to benefit from brand identification, but they will face stiffer competition as the market becomes increasingly saturated and companies shift their focus towards marketing and advertising.

Brand recognition aside, existing customer loyalty is already quite entrenched and represents a strong barrier to new US entrants. Underlying this is the industry's focus on product differentiation instead of price. As noted above, products must be highly flexible and context-specific to succeed. Medical schools and residency programs are usually willing to pay more, within a reasonable range, for tools that address their unique needs. This is because enterprise

solutions from the big players (e.g., PeopleSoft), while failing to satisfy the unique contextual needs of individual medical schools, are also highly cost-prohibitive (10-100 times the cost of one45 and its major competitors). As a result, clients are not particularly price-sensitive as long as costs are reasonable compared with other firms offering contextual tools. Firms do not compete on price. Instead, innovation (i.e., R&D) and deep contextual knowledge represent additional key success factors and are significant barriers to new entrants.

This being said, it is important to recognize that MEA software is not patentable. Special licenses are not required to bring a new product to market. Though product differentiation is the driving force in the market, and brands are gaining in importance, there is nothing stopping new entrants from copying successful software tools and selling them themselves.

Finally, software tools are "experiential goods." Surface similarities can make it difficult for clients to appreciate superior software. It is possible that competition based solely on "feature lists" may limit a firm's ability to demonstrate the advantages of its software. In a market driven by focus and product differentiation, in-person demonstrations are often imperative for a firm like one45 to demonstrate the true value proposition of their products.

2.4.3   Knowledge is More Important than Money

Firms do not require significant financial capital to enter the US MEA market. Expensive advertising is not required and neither are extensive product inventories. Again, the most important resource for successful market entry is innovative R&D, or *human* capital in the form of skilled designers, programmers and support staff who are able to learn the MEA context quickly. This requires individuals with deep contextual knowledge who are able to teach it effectively within the firm.

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2.4.4 Small Companies Can Compete Through Innovation

The learning curve in the MEA market is not a significant barrier to US-entry. Success is mostly governed by a firm's ability to harness a deep knowledge of the MEA context and to convince customers their products are useful and easy to use. Since customization and flexibility are key, new entrants can leap-frog well-entrenched companies simply through innovation. Raw materials, assets, government subsidies and favourable locations are all non-factors in the industry, and cost advantages that do exist are not legally enforceable because products are not patentable.

2.4.5 American Consumers are More Sophisticated and Patriotic

American consumers typically expect deeper and more specialized product offerings, higher levels of service and convenience and tend to be more sophisticated than their Canadian counterparts (Evans, Lane and O'Grady, 1992). Although these characteristics are most apparent in retail situations, these qualities are likely, at least in part, to carry over into institutional software buying situations.

The above factors play to one45's current strategy. The firm's products are more contextual and customizable than any others; they are built to satisfy the most sophisticated users. Also, customer service is one of the company's core competencies. The firm focuses not only on making *useful* products, but products that are *easy to use.*

Another cultural issue involves "consumer patriotism," the preference exhibited by US consumers to buy made-in-USA products. Companies with Canadian phone numbers and addresses may be less desirable for the simple fact of geography. These firms may also be perceived as being less knowledgeable – and consumer perceptions, however unfounded, carry a lot of weight. As long as American firms have a deep contextual knowledge of the MEA arena and their products reflect this, US competitors can capitalize on "consumer patriotism" and

thereby defend their market-share against Canadian encroachment. This suggests a US-based
sales or service office might be a useful strategy for one45 to consider as it pursues US entry.

2.4.6   Government and Regulatory Policies are Simple and Straight-forward

The Free Trade Agreement between Canada and the US makes entry into the US
relatively simple. In addition, the regulatory and licensing requirements for medical schools and
residency training programs are similar in both countries. Canadian educators tend to have an
intimate knowledge of, and often an association with, the US licensing bodies. The reverse is
rarely true. New regulations for data collection and licensing requirements in both countries
provide opportunities for software providers to innovate and develop new tools to help training
programs meet these requirements. This is yet another reason why contextual knowledge is so
important in this niche.

2.4.7   Economies of Scale are a Non-issue

Today, economies of scale in the US MEA market are a non-factor. Larger companies
(e.g., PeopleSoft) do not have a cost advantage through efficiencies of automation or vertical
integration because their products are usually cost-prohibitive and lack the contextualized
features required by customers. In fact, the responsiveness and flexibility of smaller companies
makes them more able to take a focused approach and more likely to achieve traction, at least
initially, than larger, less responsive firms.

As the US MEA market matures and become saturated, however, economies of scale in
marketing may become a significant entry barrier. Larger companies will have more resources for
advertising and a wider geographic reach; they may attempt vertical integration to capitalize on
these strengths. Today, however, marketing efforts are still dominated by "social proof" and
word-of-mouth rather than more expensive forms of advertising, and companies are just
beginning to develop brand recognition in this segment.

2.4.8 Summary of Entry Barriers Facing One45

To summarize, the major entry barriers facing one45 in the US MEA market are:

- US sales and marketing expertise
- Customer loyalty
- Geographic location ("consumer patriotism")
- Cultural differences (buyers are more sophisticated)

For the most part, it seems the US MEA market is quite favourable to new entrants, as none of the entry barriers appear insurmountable. Now that we've determined this, let's look at the impact buyers can have on the dynamics of US MEA.

2.5 Buyers are Powerful, But Only At First

Given the relatively small number of buyers in the US MEA niche and the size and significance of the purchase (ongoing subscription contract), buyers would be expected to have considerable bargaining power. However, buyers exert most of their power while selecting their first vendor and negotiating their first contract. After this, their power is mostly gone.

As in Canada, the US market is characterized by "Organizational Buying" and buyers must follow their institution's purchasing policies and requirements. Although they have price caps, institutions are most concerned with their individual needs being met and are therefore not price-sensitive within a reasonable range. So far, negotiations with American clients have been very similar to those with Canadian clients, with context-specificity being the key; deliberations have revolved around the "package" of tools that will fit their needs, and the firm has never had to negotiate on price south of the border. Buyers recognize that customized software has the potential to save them a lot of money (i.e., administrative hours) in the long-run. The power they have at this stage is the ability to demand a custom-fit. Therefore, it appears American MEA clients are no more price-sensitive than Canadian clients.

What little power buyers *do* have is gone once they negotiate their first contract. This is because of the high switching costs involved in moving to another vendor. These include high search/transaction costs for selecting a new vendor, high implementation costs (i.e., time investment), high human asset specificity and product-specific training, a strong network effect (user-groups are already well integrated) and the general "lock-in" effect (data is already collected inside current systems). Customers need to be very unhappy with their existing service to consider switching. For these reasons, the US MEA niche will become increasingly undesirable to new entrants as the market becomes saturated. To date, none of one45's clients have switched vendors. The firm has also been able to increase price at the time of contract renewal without much fuss.

There is also little threat of buyers integrating backwards and making their own products (see section 2.6.2). With low competition, buyers cannot initiate price-wars by playing vendors off one another. Reputation and branding is becoming increasingly important as the market matures, which also decreases buyer power.

Therefore, developing a strategy that focuses on signing US clients to their first contract is the key to reducing buyer power in the marketplace. This highlights how important it is for a new Canadian entrant to employ a sales and marketing team with deep experience and expertise with the American MEA market. Coupled with a product line that is customizable and easy to use, a Canadian entrant will require people who know what it takes to attract and sign new American clients early and often. Once institutions sign their first contract, the "window of opportunity" effectively closes.

To summarize, the keys to limiting buyer power in the US MEA market are:

- Products that are context-specific, easy-to-use and provide a custom fit.
- A sales and marketing staff with the requisite knowledge and experience in the US to sign new clients early and often (i.e., before the window closes).

So, are suppliers more powerful than buyers in US MEA?

2.6 No Need For Suppliers

Supplier power in the MEA market is a non-issue. The value chains of competing firms are relatively short and simple. Firms do not rely on suppliers, distribution channels, broad research capabilities or complex production mechanisms. As noted above, the main "supply" issue revolves around the availability of skilled and knowledgeable designers, programmers and support staff.

If suppliers are a non-issue, what about the threat of substitutes?

2.7 Substitutes Pose Little Threat

The main threats of substitute products are low-cost alternatives, in-house development and products from big players such as PeopleSoft. The cumulative threat of substitutes is low because low-cost products lack the features and "fit" to offset their lower cost, in-house development is fraught with risks, and products from large companies are too expensive and not contextualized.

2.7.1 Low-cost Alternatives – Limited Functionality

There are two low cost alternatives in the US MEA market: *Advanced Informatics*, with their *E-Value* and *E-gme* tools, and *Academic Management Solutions*, with their *CoursEval* and *eCV* modules. Neither of these companies provides an enterprise solution (i.e., a product-line capable of integrating with and sharing information between all hierarchies and programs within an institution). Their products have limited functionality and customization in terms of features, they do not create a "network effect" and the vendors provide little support to users. The main advantage of these companies is their low cost, though it is questionable whether this actually provides an advantage, as MEA buyers are not typically price-sensitive within a reasonable range

(see section 2.5). So far, few schools have chosen these options. When competing head-to-head against the larger competitors, the low-cost solutions are rarely, if ever, short-listed for contracts.

2.7.2 In-house Development – Too Expensive and Too Risky

Some of the systems one45 competes with are "home-grown" solutions, the result of in-house development at individual medical schools.

The University of Toronto spent $2 million developing an in-house GME system and briefly competed with one45 for the Canadian market. In the end, their product did not perform as well, cost ten times as much to buy and they failed to sign a single client. UofT still uses their product, however, and appears to be happy with it. The UME system, developed by the University of Calgary, is well funded by Alberta's Heritage Foundation; it is also being used at the University of Manitoba. At the other end of the spectrum, Queen's University employs two full-time programmers to develop software for one segment of their undergraduate curriculum.

The success of in-house development has been very limited. Some of our current clients have signed with us after failures at in-house development. Therefore, apart from those schools with significant funding, schools with in-house development remain potential future clients for one45.

It is very unlikely that current clients would move to in-house development. In addition to switching costs, development and support costs would be too high. Inertia and political barriers would make implementation difficult. In the end, the cost and risk would be too high without a guarantee of success.

2.7.3 Big Players – Limited Functionality and Too Expensive

One could argue that big players, like PeopleSoft, are potential substitutes. However, their high cost and lack of contextualized features makes this unlikely. In fact, a few of our clients signed with us despite having PeopleSoft provided free-of-charge by their parent universities.

In general, the low threat of substitutes in US MEA emphasizes the fact that success in the market significantly depends on the quality of a firm's products (usability, ease-of-use and "fit") as opposed to low-price.

2.8 Summary: An Attractive Market With an Emphasis on Customer Needs

This chapter has shown that US MEA is a young, unsaturated and potentially profitable business niche. Barriers to new entrants do exist but are not prohibitive, buyer power is minimal once the first contract is signed and competitive rivalry is very subdued. Key success factors for a new Canadian entrant like one45 are mostly related to product quality and customer needs. They are as follows, more or less in order of decreasing importance:

1. Perceived usefulness of product (features "fit" with client needs and context)
2. Perceived ease-of-use of product
3. Flexibility of product: the extent to which the system can be customized to the local context, connect to existing or outside systems and provide the needed flexibility to accommodate different work flows
4. Context expertise across entire firm: specific knowledge of MEA, medical schools, residency training programs, hospitals, and the medical education "external" environment (licensing bodies, regulations, etc.)
5. Experienced marketing/sales staff with (1) a deep knowledge of MEA context, 2) experience in the US selling software to medical schools, and 3) an extensive network of contacts within the MEA field
6. Innovative R&D (skilled, knowledgeable designers): improvements and new features in response to customer feedback, external environment requirements and the increasing sophistication of clients looking for added functionality
7. Customer service: implementation, support and relationship-building both before and after the sale
8. Awareness of cultural differences between US and Canada

9. Reputation/branding (customer loyalty)

So, what does all this mean for one45 going forward? In the next chapter, we will take a short breather and consider what the above Five Forces analysis suggests about the firm's ability to compete and the threats and opportunities facing the firm. The following chapter will then generate a list of potential US entry strategies for the company to consider, and then these strategies will be tested against the firm's internal capabilities for "fit." Finally, this paper will conclude with a series of implementation suggestions for the "winning" strategy.

3   WHAT DOES THIS MEAN FOR ONE45?

Now that we've established the major market forces and key success factors for US MEA, it's time to take a step back and catch our breath. This chapter will provide a short discussion on what, exactly, the above industry analysis means for one45. We will begin by looking at one45's current ability to compete in the market, and then we will conduct a short Threats and Opportunities analysis. From there, the next chapter will take this discussion further by looking at potential strategic directions for the company to pursue.

3.1   Can One45 Compete in the US? A Resounding "Yes"

The majority of key success factors for US MEA (i.e., those related to product quality) are fundamental characteristics of one45's product and business approach. They also form major components of the firm's underlying management philosophy. The firm has notable deficiencies, however, in terms of US marketing and sales experience.

One45 compares very favourably with its major competitors in the US with respect to most of the above industry key success factors (see Appendix I for matrix analysis of key success factors for industry niche). The firm is the MEA leader in product quality (with quality being defined as the usefulness and contextual fit of features, usability and excellence in interface design). Product quality accounts for the majority of industry KSFs.

One45 is also the industry leader in customer service, with a focus on developing long-term relationships with clients and providing outstanding consultation informed by its superior context expertise. Its focus on the change management process is central to this competitive advantage.

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The only area where one45 appears deficient with respect to its US competitors is in its lack of experience with US sales and marketing. This is a significant deficiency, but it is not insurmountable.

So, yes. One45 has the potential to compete very strongly in the US MEA market, as long as special attention is paid to its lack of US sales and marketing expertise. This chapter will now conclude with a discussion of the threats and opportunities facing the company as it considers US entry.

3.2   Threats and Opportunities – Enter, But Be Quick About It

The US MEA software niche is both desirable and potentially profitable for one45. Competitive rivalry is quite low, as the market is still unsaturated and vendors are too busy attracting new clients to bother retaliating. Barriers to new entrants do exist, such as the need for US sales and marketing expertise, but these barriers are not insurmountable. Buyers exert the majority of their power in the initial contract stage, and after that they're power is mostly gone. Together, these factors should be very encouraging to one45 as it considers US entry.

The market is currently quite small, and has not yet attracted the "big players." As the market matures, however, the nature of rivalry will likely change due to searching/switching costs. US MEA will likely become much more competitive, possible in the near future. Therefore, US MEA represents a "window of opportunity" for one45, a window that will require fast and decisive action as it may close very soon.

One45 is not a typical "new entrant" (i.e., the firm is not starting from scratch). Its products have already been proven as the most customizable, flexible and easy-to-use in the industry. These qualities are the most significant key success factors in the industry and position the firm well to compete very strongly in America. The firm's attention to customer service and

the change management process means it is also the industry leader in client support, which is another key success factor for US MEA. Finally, the firm already has a modest number of US clients, and its reputation with them is very good.

The main competitive disadvantage one45 faces in terms of US entry is its complete lack of expertise in US sales and marketing. The firm does not have an extensive list of US MEA contacts and its experience south of the border is very limited. In an industry in which buyers exert the majority of their power in the initial contract stages, this is a significant deficiency, especially since the firm's major competitors are American. This also leads to uncertainty issues, commonly cited as a major cause of failure by Canadian software companies expanding south (Abramson, 1992). Cultural differences, such as more sophisticated customers and "consumer patriotism," may also complicate the issue.

One45 develops excellent software, but these tools are not patentable. Competitive advantage through innovation is short-lived because competitors may copy them. Moreover, software tools are "experiential goods." Surface similarities make it difficult for clients to appreciate superior software. Competition based on "feature lists" may make it difficult to demonstrate the advantages of its software. Other companies with sub-optimal tools may win clients, and the absence of a "billing module" in the firm's GMEAdmin software may appear as a disadvantage. Also, one45's reliance on a partnership with T-Res for providing PDA capabilities, though generally considered an asset, may turn out to be a limiting feature.

To conclude, the US MEA market is an exciting and time-sensitive business opportunity that one45 should pursue. The biggest threat facing the company is that the window will close before the firm achieves a significant share of the remaining market. So, how should the firm position itself strategically in order to best exploit this promising opportunity? The next chapter will answer this question.

4 GENERATING STRATEGIC OPTIONS FOR ONE45

Now that we've determined US MEA is an attractive business opportunity for one45, the question is this: how should the firm go about exploiting it? What sort of entry strategy is the firm best-suited to pursue? In this short chapter, we will discuss the various strategic options available to the company, and whether or not they make sense in light of the industry dynamics we've established above.

We will begin with a short discussion of the merits (or lack thereof) of the three generic business approaches (i.e., differentiation, focus and cost-leadership) with respect to US MEA. Then we will generate a selection of promising entry strategies, which the following chapter will analyze for "fit" with one45's existing internal capabilities.

4.1 Competitive Stance: A Focus/Differentiation Strategy is Best

Of the three generic business approaches and their various combinations, a combined focus/differentiation strategy is best suited to the US MEA market. Here's why:

4.1.1 The Case For Differentiation

As we're already noted, a successful MEA product must be customizable, flexible and easy-to-use (cost is much less of a consideration). Ideally, good MEA tools are designed to solve specific problems for specific customers. In other words, they must be unique to the individual settings and problems faced by each individual client. Product quality, which incorporates the majority of industry key success factors, is defined as the usefulness and contextual fit of features, usability and excellence in interface design. Companies that can consistently demonstrate the uniqueness, or custom-fit, of their products are usually the most successful.

Unique products have the added benefits of increasing customer loyalty, which further decreases customer price-sensitivity. Both of these factors then help to insulate the firm from new entrants by increasing market entry barriers.

4.1.2   The Case For Focus

Medical education administration software is a highly specialized and relatively small business niche. Buyers have very specific needs and operate within a complex educational context. Their first priority in purchasing software is making sure these needs are met.

For these reasons, MEA firms are most successful when they combine the above Differentiation approach with a Focus on this very specific target market. This has been the foundation of one45's business approach since its inception. It has already proven to be very successful in Canada, and early evidence from the US seems to suggest likewise.

4.1.3   The Case Against Cost-Leadership

As we've noted throughout Chapter Two, low-cost is not a competitive advantage in US MEA. As long as clients receive a package of excellent software tools that meet their specific needs, buyers are relatively insensitive to price (within a reasonable range). Again, context-specificity and a custom-fit are the keys to pleasing MEA customers; they realize products that "fit" well within their institutions promise to save them a lot more money in the long run. In one45's US experience so far, the firm has never had to negotiate on price. In addition, current low-cost substitutes do not offer enterprise solutions, have limited functionality and routinely lose out to firms offering more expensive enterprise solutions in head-to-head competitions for contracts.

So, if a combined Focus/Differentiation strategy is clearly the best approach to US MEA, what specific US-entry strategies should one45 consider? In the next section, we will identify

three possible strategies that fit within the firm's current Focus/Differentiation framework. Then, in the following chapter, we will test these three strategies for "fit" against the firm's internal capabilities.

4.2   Three Specific Entry Strategies For One45

We will now outline three specific entry strategies (all of which fall within the company's proven Focus/Differentiation framework) that might enable one45 to achieve its goal of significant US market traction. They are:

1. Maintain status quo
2. Create a US Marketing and Sales Department
3. Implement a US-based sales and service office

To end this chapter, we will look at the above options in a little more detail. Then the following chapter will evaluate these options in light of one45's existing capabilities.

4.2.1   Option 1: Status Quo

One potential entry strategy for one45 to consider involves not changing a thing (i.e., "business as usual"). The firm's business strategy in Canada has been very successful so far. The Canadian and US MEA markets share significant similarities that suggest a major strategic refocus may not be required to achieve market traction. Product quality ("fit," ease-of-use and flexibility) and issues around customer service make up the majority of success factors in US MEA industry, and one45 has established itself as a leader in both. In addition, one45 has already had some early (if modest) success in signing US clients with its current strategy. Granted, this progress has been slow, but this may be simply because US entry has yet to become a corporate focus.

The main disadvantage with this strategy, of course, is the firm's deficiency in US marketing and sales expertise and its lack of extensive US MEA contact lists, both of which are

key success factors for the industry. These are significant disadvantages which should be given close consideration as the firm decides among its strategic options.

4.2.2 Option 2: US Sales and Marketing Department

Another entry strategy for one45 involves creating a sales and marketing division specifically focused on achieving US traction. This department will be led from the US by an individual with deep knowledge of the MEA context, demonstrated success in selling software to medical education programs in America and an extensive network of US MEA contacts. This individual's main task will be to help one45 capture significant market share in the US quickly, before the window closes. The new division will operate from a "virtual" home office in the US, with an American phone number and mailing address, and will communicate via blackberry and email while on the road.

4.2.3 Option 3: US-based Sales and Service Office

The third entry strategy for one45 is to set up a US-based sales and service office. The new satellite office will be staffed by members of the firm's deeply knowledgeable management and service personnel. It will operate in much the same way as head-office in Vancouver, but without an in-house development division.

This chapter has identified three promising business strategies available to one45 as it considers entering the American MEA market. The next chapter will take these three strategies and evaluate their merits in light of one45's current capabilities and behaviours. The goal will be to determine, through a systematic study of the firm's operations, which of these three options is the best "fit" and is most likely to help one45 achieve its US market objective.

5 TESTING THE THREE STRATEGIES

Now that we have identified three possible entry strategies, this chapter will determine which of these options one45 is best-suited to implement in light of its US entry goals. It will begin by briefly outlining the major corporate capabilities required to implement each option (i.e., what the options will demand of the firm). We will then conduct an internal analysis of one45 to identify current capability gaps with respect to the three options (in terms of management preferences, organizational culture and resource availability) and determine whether or not they can be filled, and at what costs and benefits to the company. The chapter will conclude by making a recommendation as to which option the firm should proceed with. From there, the final chapter of this paper will provide a road-map for implementing the "winning" strategy.

5.1 Required Capabilities – What Do the Options Demand of One45?

5.1.1 Option 1: Status Quo

The firm requires no special capabilities, other than the ones it already possesses, to carry out this strategic alternative (i.e., "business as usual").

5.1.2 Option 2: US Sales and Marketing Department

The firm will need to attract at least one, and perhaps two, qualified individuals (i.e., people with deep contextual knowledge of MEA, experience selling software in the US and an extensive list of US MEA contacts) to manage the new department. The company will need to pay these individuals a competitive salary and will have to underwrite this cost until the new employees becomes revenue-neutral. Also, organizational structures will need to be put in place

that allow these individuals to work remotely (i.e., from the US) with a certain level of autonomy, away from one45 headquarters in Vancouver.

5.1.3 Option 3: US-based Sales and Service Office

This option is the most expensive of the three strategies. The firm will need to fund the overhead costs of new office-space in the US. It will also need to hire a remote management team and new support personnel, who will each require extensive training in the MEA context. Also, the firm will need to create reporting and communication systems for coordination with head-office in Vancouver.

With the above capability requirements in mind, we will now determine if one45 has any capability gaps in management, organization or resources with respect to each strategy, and whether these gaps can (or should) be filled. Through this process, we will narrow the field of options and determine which of the above US-entry strategies the firm should pursue.

The following internal analysis of one45 is informed by the *Diamond-E Framework* of strategic analysis put forth by Crossan, Fry and Killing (2005).

5.2 Management Preferences – How One45's Senior Managers Like To Operate

We will now analyze the firm's management preferences with respect to risk-taking, capital investment and behaviour, in light of its goal of achieving traction in US MEA. Then, by applying these findings to the three strategies, we will identify the gaps between what the firm has to offer and what each strategy will require, and determine whether or not these gaps can reasonably be filled.

5.2.1 One45 is Risk Averse

One45's senior management is risk-averse. The firm has never sought outside sources of funding, has no investors and is debt-free. Management has preferred to expand and diversify only when revenue has permitted (i.e., "organically") and has no interest in changing this conservative approach to capital investment as it attempts US entry. Most importantly, management is committed to protecting the successes the firm has already enjoyed in Canada (i.e., the firm's "nest-egg").

Historically, one45 has grown at a rate of approximately 35 percent per year (in gross revenue). As noted above, this growth has been "organic" in nature and has rarely challenged the company's operational or product development capabilities. Throughout this time, the firm has been able to maintain its high level of customer service, hire and train new employees who are compatible with the company culture, and continue to innovate in R&D. All of these are key success factors in the industry.

In terms of US-entry, one45's management is adamant that expansion not affect the firm's existing high level of customer satisfaction nor the firm's overall culture of relationship-building and innovation. Management is aware that companies moving beyond a saturated market often end up neglecting those "old" markets for the sake of new ones. The firm clearly does not want to fall into this trap, to risk losing the value it has already built in Canada just for the sake of growth. With this aversion to taking risks, coupled with the competing reality that "time is of the essence" in the US MEA market, management believes a similar rate of growth (35 percent per year) south of the border is a reasonable, sustainable goal for the company. Too much faster, and the firm will risk sacrificing its achievements to-date. Much slower, and the "window of opportunity" may close.

5.2.2 One45 is Frugal

Not only are one45's senior managers risk-averse, they are also relatively frugal. The firm keeps costs as low as possible and avoids extravagant or unnecessary expenses. For instance, until recently the firm was operating out of the basement of one of its founders.

Frugality is usually a characteristic of a firm pursuing a low-cost strategy. Although keeping costs down is generally a worthwhile pursuit, an overemphasis on frugality may be disadvantageous for a firm using a focus/niche approach, as one45 is. For example, when hiring, the firm may not be willing to pay salaries that are high enough to attract the best candidates for the job.

5.2.3 One45's Senior Managers are Idealists

Kiersey (1998) has developed a useful instrument for analyzing individual personality temperament and character. Similar to the Myers-Briggs Type Indicator (MBTI), the Kiersey Temperament Sorter II focuses on behaviours rather than thinking styles. Appendix J outlines the Kiersey Groups, Types, Leadership Styles, and Role Variants for all member of one45's management team.

One45's senior managers are all Kiersey Idealists (NF). NFs are facilitators and motivators preoccupied with morale and personnel. Strategy, logistics and tactics are much less important to a Kiersey Idealist than is diplomacy (i.e., individual development, education, mediation and conciliation). NF's generally do not react well to urgent, time-sensitive matters.

The technical managers of one45, on the other hand, are all Kiersey Rationals (NT). In addition, senior managers Ric Arseneau and John Simms are also Rationals on the MBTI. NTs are engineers and coordinators who have an affinity for working with complex technologies and designing innovative systems. They employ a long-term, enterprise outlook. Logistics, tactics and

diplomacy are much less important to a Kiersey Rational than is technical strategy (i.e., mobilizing, entailing, devising and designing new systems).

The strong representation of NF/NT at one45 makes the firm well suited to its current goals of developing technically superior products while focusing on customer service. However, for a company wishing to expand into a new, potentially more aggressive market like the US, the lack of Artisan (SP) and Guardian (SJ) temperaments (i.e., tactical and logistical mindsets) is a significant deficiency. These are the people who are typically very good at marketing and sales, which has been identified as a Key Success Factor in US MEA. In addition, NF/NT leadership is typically "thin-skinned" and is likely to be overly sensitive to initial difficulties and/or failures, such as lower than expected returns on investment. Without the balancing effects of the SP/SJ temperaments, one45 may have difficulty overcoming hardship and sticking to its expansionist plans.

To summarize, management's goals with respect to US-entry are two-fold: 1) the firm wants to achieve traction in the US MEA market quickly, before the "window of opportunity" closes, and 2) in doing so, the company wants to keep its risk to a minimum and avoid going into debt. As we see below, these competing priorities (rapid traction versus frugality and risk-aversion) coupled with the behavioural imbalance in the firm's leadership have significant impacts on which entry strategy the company should choose.

5.2.4 Management Preference Gaps and the Three Strategies

Now let's look at the management preference gaps with respect to the three strategies and see how (or if) they can filled.

5.2.4.1 Option 1: Status Quo

From the perspective of current management preferences, the Status Quo entry strategy has a few deficiencies. Without logicians or tacticians in management, the firm may not have the expertise or will to aggressively develop its US MEA contact list, which we've already established is one of the key methods of gaining traction through word-of-mouth. It is possible, though, that management could learn these skills over time, and the firm could still achieve traction in the US by developing this contact list more slowly, thus closing this capability gap. This all depends on how fast the US MEA market matures.

The firm's general lack of urgency and focus on "organic" growth is also a concern, because the US MEA market represents a "window" of opportunity that may close very soon. Speed is of the essence (remember that buyer power is highest before the first contract is signed), and the firm may not have the capability or willingness to act quickly enough to achieve traction. A projected growth rate of 35 percent per year may turn out to be insufficient to achieve significant market share.

The clear advantage of the Status Quo option, though, is that it plays well to management's risk-aversion and frugality and allows the company to maintain its focus on its current client base while avoiding putting its "nest-egg" at risk. If the firm chooses this option and it doesn't succeed, the firm has risked nothing. For these reasons, the Status Quo option remains a potential US-entry strategy.

5.2.4.2 Option 2: US Sales and Marketing Department

This option will require the funding of at least one, and perhaps two, entirely new positions at one45. Given management's preference to avoid debt, there appears to be a conflict here. However, given the firm's long buying cycle and implementation strategy as described above, one45 currently has enough capital available to fund two new positions for up to a year

without going into debt. The hope is that these positions would become at least (and hopefully better than) revenue-neutral within the year, with the new employees generating more than enough new US business to cover their added expense. To encourage this outcome, the new employees could be given a compensation package partly based on their performance in gaining US traction for the company. This would be a win-win situation for the firm and the individuals, as the more business they generate, the easier it will be to meet their salaries and the more they would be paid. By structuring it this way, management's issues of frugality and risk-aversion would be mostly solved.

It would be preferable that the new marketing manager(s) would be either a Kiersey logician or tactician, which would help round-out the firm's behavioural makeup and close this capability gap for the future. A new marketing department would also help add a new sense of urgency to the firm, which would help it move faster and more aggressively in pursuit of US market share. It is important to note here that this option, if successful, could well serve as a "bridgehead" to a US-based Sales and Service Office for the firm (Option 3).

On the whole, although capability gaps have been identified, they can be realistically closed. It therefore appears one45 is well-positioned from the standpoint of management preferences to pursue this strategy.

5.2.4.3 Option 3: US-based Sales and Service Office

As noted above, this strategy is by far the most expensive of the three. This option would require a level of capital currently unavailable to the company. Management would have to take on a significant loan to build an office in the US (perhaps as much as $250,000), and therefore significantly increase its risk. Given management's major priorities for US-entry are to keep the company debt-free and to avoid significant risk, and given the complexities involved with this option in terms of distance and training (and the absence of logician or tactician managers to

oversee it), we believe this option is not a viable alternative for one45 going forward. From hereon, this paper will cease considering this option as a possible route to US traction, as recommended by Crossan et al (2005).

Having looked at management preferences and eliminated one of the strategic options, let's now turn to the organizational capabilities of the firm in light of the two remaining strategies.

5.3 The Organization – Companies Have Feelings, Too

5.3.1 Like its Management, One45 is an Idealistic Organization

Organizations, like individuals, have personalities. Bridges (1992) describes sixteen types of organizational characters similar to the Kiersey Temperament Sorter II and the MBTI classification of individuals.

One45's personality is similar to its managers: Idealist/Rational (see Appendix J). The firm is an idealistic, upbeat, "can-do" organization, an interesting and exciting place to work. Such companies are usually on the cutting-edge and are at their best designing or inventing solutions to difficult problems. They are not, however, particularly well-suited to pursuing new, time-sensitive business opportunities, as these firms typically lack a "burning desire" to succeed at all costs. This describes one45 exactly. In pursuing US-entry, an opportunity that will not be around for long, the firm will need to build a new sense of urgency and aggressiveness into its culture to achieve significant traction.

Decision-making at one45 is characterized by collaboration and mediation and hiring practices are holistic in nature; the firm hires people who are a good "fit" with company culture and every employee has a "say" on potential new hires. This focus on culture has served the firm well up to now, but as it attempts to grow south of the border, the company may need to loosen its

definition of itself. Somehow, whether through hiring new people or developing these skills on its own, the firm will need to work the tactician/logician mindsets (or "business acumen") into the firm's culture to some degree. These perspectives are likely to clash with the current "fit," but they are also likely to be crucial additions to a firm hoping to expand somewhat rapidly.

5.3.2   One45 Steers Clear of Formal Structure

Currently, the company is organized into two functional groups: 1) development, and 2) support/implementation. There is considerable communication and synergy between the two groups. One45's "egalitarian" culture is reflected within these groups by a flat, diffuse organizational structure. Leadership is more defined by capability that by position and there is little concern for precisely defined roles. Employees work in a non-hierarchical environment in which good ideas and collaboration are prized and encouraged. There is also a general lack of interest among management and employees for formalized procedures and policies. The firm has, by necessity, established more structure and systems as it has grown. The underlying structure is now somewhat more formal and less fly-by-the-seat-of-your-pants innovation.

As one45 attempts to expand into the US, this lack of formalized roles and systems will likely pose problems. Bridges (1992) warns that this type of organization is in "danger of being too 'fluid.'" As the firm grows and its culture necessarily shifts somewhat towards a more tactical/logician perspective (assuming this is possible to achieve – see below), the firm will need to develop a new respect for bureaucracy, as well as new systems of control and supervision to coordinate the operations of a larger, more multi-dimensional company. Without these systems in place, the firm may not be able to manage its forays south of the border.

5.3.3   Organization Gaps and the Two Strategies

Now let's look at the above cultural and structural gaps with respect to the two remaining US-entry strategies.

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5.3.3.1 Option 1: Status Quo

As noted above, One45's Idealist/Rational culture is well-entrenched and lacks a sense of urgency and aggressiveness. As with the management preference gaps above, the firm could try to develop these capabilities in-house over time, but it may not do so in time to take advantage of the immature US MEA market. The same goes for the organization's lack of real business acumen. This is a worrying deficiency, but one that could be solved through concerted effort on behalf of the firm's management should no other entry strategy prove more attractive.

From a structural standpoint, the firm has proven itself capable of developing more formalized policies and procedures when the situation has demanded it. The strong Kiersey NT characteristics of its technical management has likely contributed to this ability. Therefore, there is no reason to think the firm will not be able to implement new systems of management, oversight and control as the company grows.

Though far from ideal, the Status Quo option for US-entry is still a possibility for one45.

5.3.3.2 Option 2: US Sales and Marketing Department

By hiring one or two individuals to run a new marketing department, the firm would have the opportunity to close its most pressing organizational capability gaps. These new individuals would preferably be Kiersey SP/SJ in behaviour, thus bringing more tactical strength, business acumen, aggressiveness and desire to the firm, all of which have been identified as likely requirements for success in US MEA. However, the firm will have to pay close attention to how these new employees fit into the overall culture of the company. A "clash" of worldviews is possible. For a company so focused on its overriding culture of freedom and innovation, with little attention being paid to the bottom-line, the organization may experience significant "growing pains" as more profit-oriented outlooks take hold in management.

This brings us to structure. If one45 could devise an overall management strategy for the new US sales department that keeps it somewhat culturally separate from the firm's current R&D and service sectors, the firm might be able to avoid this "clash." The fact that this new department would be based in the US and not at company headquarters in Vancouver will help with this, as will the fact that the new employees will be focused solely on generating new US clients, leaving the "old-guard" free to continue business-as-usual with the firm's current clients (most of whom are in Canada). The firm will need to look carefully at its organizational structure to decide the best way to do this.

Finally, Kiersey SJs and SPs are usually uncomfortable working without structured hierarchies, systems of oversight and well-defined roles. This is an obvious gap in one45's current structure, which is much more fluid and informal. Management will likely have to walk a fine line as it attempts to close this capability gap. Regulations and procedures will be needed for the new department to run smoothly and happily, but these regulations must not be allowed to "infect" the firm's current culture of innovation and experimentation too much. Again, geographic separation between marketing and headquarters will help with this, as will the natural separation between the functions of the two groups. Different performance indicators will be required for the new employees (based on new business generation rather than on cultural fit and customer satisfaction, which is how current employees are evaluated). As long as they don't violate the firm's basic values of honesty, integrity and reliability, the new marketing manager(s) should be afforded a level of autonomy similar to that enjoyed by the firm's developers, with an additional level of bureaucracy laid over top to satisfy their SP/SJ ways of relating to the world and authority.

Though capability gaps do exist within the organization's culture and structure with respect to setting up a US sales and marketing department, it appears these gaps can be filled as long as management takes great care in structuring the new venture.

5.4 Resources – What is One45 Missing?

Now let's look at one45's resources to identify where capability gaps lie, and compare the two remaining entry strategies for fit.

5.4.1 No Experience in US Sales and Marketing

One45's main marketing strength is its deep knowledge of the MEA context. The firm's distinctive products and focus on service have been successful in "delighting" our clients and generating positive word-of-mouth and referrals. The company's focus on relationship marketing has been crucial to its success so far.

This "organic" approach to growth has been successful in Canada, but more slow going in the US where competitors already have traction. Unlike these competitors, the firm does not have a dedicated sales force and has therefore paid little attention to marketing or developing its US MEA contact list. This is easily the firm's most significant competitive disadvantage in terms of US market capture. One45 needs to find a method of opening American doors. Once inside, the firm is well positioned to market itself through its unique implementation strategy.

Even if the firm were to develop a sales and marketing team, Abramson (2005) suggests that a Canadian team may be disadvantaged in conducting business in the US. The difficulty stems from different perceptions and needs in establishing an effective buyer-seller relationship. Abramson's research suggests, therefore, that firms are likely better served by hiring an American with experience in the industry (this is also identified above as a key success factor for the industry), and companies should not try to guide his/her sales and marketing style by enforcing Canadian standards. Either way, American sales and marketing experience remains one45's biggest deficiency and challenge.

5.4.2 Very Little Available Capital

One45 has a strong revenue model (i.e., subscription), good financial performance and has a positive cash flow. As mentioned above, the company's implementation strategy allows it to fund growth via revenues and the firm has no debt. The firm has no external investors and does not have to worry about their expectations. On the down side, one45 does not have "deep pockets." Management has no experience raising capital, has not had to develop banker or investor relationships and is enthusiastic to keep the company debt-free as it attempts US-entry. The firm does have enough available capital to fund two new management positions for up to a year, but beyond that, its financial capabilities are very limited.

5.4.3 One45's Reputation in the US – The Strong, Silent Type

One45 has a reputation in Canada for high-quality enterprise software tools and a commitment to customer service. The firm is also known for its fairness and concern for education and learning. Management has developed strong relationships within the software and healthcare education communities in Canada. This is evidenced by the firm's ability so far to rely on positive referrals for new business.

One45 is just beginning to gain a foothold in the American MEA market, however, and this has been a slow process so far. Although the firm has a strong reputation with its current US clients, these are very few; this is a significant deficiency considering the word-of-mouth referral nature of the business. Finding a way to leverage the company's strong reputation in Canada will be a key component to whichever growth strategy the firm decides to pursue.

5.4.4 Resource Gaps and the Two Strategies

Now let's compare one45's resource gaps with the two strategies to see which, if either, provide reasonable solutions.

5.4.4.1 Option 1: Status Quo

From a marketing perspective, one45's current lack of US MEA contacts or US sales experience is a major problem. Without this, it seems unlikely the firm could achieve any sort of traction in the US market before the window closes and the niche matures. Unlike the above managerial and organizational capability gaps, which may not be deal-breakers for this entry strategy, the firm's inexperience in the US is a resounding deficiency that leads us to conclude the Status Quo option will provide limited success (and market share) going forward.

Of course, if no other options seem likely to do better, the firm could continue with its current strategy and simply build its US business in much the same manner as it doing so now (i.e., slowly, without focusing on it specifically). But to realign the firm's foundational goals and objectives towards US market capture without improving its marketing capabilities in some significant ways would likely be folly.

5.4.4.2 Option 2: US Sales and Marketing Department

This option would, by definition, close the firm's most pressing capability gap. The new marketing manager(s) would be experienced in selling software in the US and bring with them an extensive list of US MEA contacts. This option would also satisfy Abramson's (2005) suggestion that American sales departments in Canadian companies be headed by Americans.

Financially, the firm would be able to support the creation of up to two new managerial positions for a period of up to a year, at which point the positions would have to become revenue-neutral (or better). With this strategy, the firm would not have to incur debt or approach investors for funding. In terms of leveraging one45's positive corporate reputation in Canada (and burgeoning reputation in the US), this would be one of the new department's major goals, and strategies would be devised on how best to do this. The advantage of hiring experienced

Americans to do this is they would bring their own made-in-USA reputations to the firm, thereby somewhat mitigating the firm's near-complete lack of visibility in the US.

5.5 Conclusion: One45's Road to America Runs Through Sales and Marketing, USA

From the above internal analysis of one45, it seems clear that US-entry strategy #2 – creating a US Sales and Marketing Department – is the best option for the firm to pursue as it attempts to expand to the US. This option closes the company's capability gaps with respect to risk-aversion, frugality, urgency, aggressiveness, tactical strength, business acumen and financial resources. Most importantly, this option would solve the firm's most pressing issue – its complete lack of US marketing and sales experience, the only industry KSF the firm is significantly deficient in. It is therefore the recommendation of this paper that one45 begin discussions within management as to how best to implement this strategy.

Clearly, much forethought and planning will be required to implement this strategy without jeopardizing the firm's existing successes or its much-prized culture of freedom and innovation. The next and final chapter of this paper will make specific recommendations as to how exactly the company might do this.

6 WHEN THE RUBBER HITS THE PAVEMENT – AN IMPLEMENTATION PLAN

Now let's look at how one45 might implement a new US sales and marketing department, from the perspectives of Recruitment, Training, Geography, Goals/Objectives, Compensation, Management Protocol and Performance Review. For the purpose of this analysis, we will assume the company will begin by hiring one new individual to be the firm's US Marketing Manager (as noted above, the firm could also hire two new individuals).

6.1 Recruitment – Ask US Clients for Help

The key to this strategy will be attracting the right individual. The ideal person will have significant US software sales experience (preferably in MEA), an extensive list of US MEA contacts, a deep knowledge of the MEA context and a ready-made reputation in the US. This person will also require demonstrated Kiersey SJ/SP behavioural characteristics (tactical, logistical and business acumen). Although the logical place to start looking for a person like this would be the marketing departments of the firm's US competition (i.e., New Innovations and Verinform), this option is not compatible with one45's culture or the values of its senior management.

Instead, one45 should look to the firm's existing US clients, with whom the company has a good reputation and strong relationship. Through this network, the firm should try to identify an individual who is already a mid- to senior-level medical school administrator who has an entrepreneurial spirit and is looking for a change. Failing that, the firm should look to sales and marketing departments of software companies the firm does not directly compete with.

One45 is unable to offer as high a base-salary as its competition. The firm will therefore offer the new individual a compensation package that includes either 1) ownership in the company, or 2) significant performance-based rewards (i.e., a portion of the salary derived from commission, based on US revenue growth) (see Section 6.5). Under this system, the new person will stand to make significantly more working at one45 should they excel in their new position. In addition to this compensation package, the firm will need to develop a recruitment strategy that emphasizes one45's strengths from an employee's perspective – namely the firm's success to-date in Canada, its unique culture and focus on staff morale, and the company's significant potential for growth in the US as indicated in this paper. Competitive advantages over US-based firms will need to be stressed.

An individual who is willing to leave a steady job in administration or sales to "take a chance" with a new US entrant will likely be relatively young, independent, a free-thinker and not averse to taking risks (i.e., likely a Kiersey SP). Though these qualities may be hard to find, they are exactly the qualities one45's should be seeking.

Failing the above two options, the firm could look to smaller US software firms or post employment opportunities in trade magazines and websites to access other arenas of software sales. These individuals would obviously not have the requisite US MEA contacts, but they would have American sales experience and could be trained in the specifics of MEA. Finding the right person who fits with the company culture and comes with experience is likely to be the most challenging stage of the implementation of this strategy. Although time is of the essence with US MEA, the search process may be lengthy and rather time consuming.

6.2 Training – Not Just Products, but the Whole Package

Once hired, the new employee will require training in one45's product line and, perhaps, the MEA context. But they will also require a deep appreciation of the firm's culture and how it

operates differently from its competitors. One45 offers much more than simply good software; the firm delivers a broad scope of intangible assets, such as its consulting and relationship-marketing skills. The new hire will need to become very familiar with these aspects of the company, as they are being hired to present "the face" of the organization to potential clients.

Training will take place at head office in Vancouver. While learning the specifics of the firm's technology (and the MEA context, if required), the individual will simultaneously become immersed in the culture of the organization and meet often with senior and technical management. In this manner, the new hire will gain an appreciation for one45's unique culture of innovation and will be able to envision how their role fits within the organization as a whole. This will be a crucial phase of the new hire's training. Face-time with current employees will be crucial, as the Marketing Manager will eventually be working remotely from the US. To maintain smooth relations throughout the firm, the new individual should be given ample time to connect with everyone involved at one45.

6.3   Geographic Location – The Northeast is the Promised Land

The new hire should be based in the US. They will work from home in a "virtual" office, and will communicate via blackberry and email while on the road. This will allow one45 to overcome the expected "consumer patriotism" it will face as it attempts US-entry. An American phone number and mailing address will be crucial to this strategy.

Although it would seem beneficial for the new hire to work from the Pacific Northwest because of its proximity to head-office in Vancouver, the north-western states have few medical schools. In addition, the firm already has modest traction and good "word of mouth" in the southern states. By contrast, the northeast has not only proven to be the most difficult to crack for one45 but also comprises, by far, the highest concentration of potential client schools. The new Marketing Manager would optimally be based somewhere near a large airport in the northeast.

From a city like Chicago, for example, they would be within a one-hour flight of approximately 40% of all the medical schools in the US. Illinois itself has seven medical schools, New York State has twelve, while Oregon and Washington combined only have two. In addition, the north-eastern states represent an entirely different subculture from the ones one45 is used to dealing with (interestingly, the south has proven to be quite similar in culture to Canada, at least in terms of MEA). It would therefore be prudent for one45 to gain a physical foothold in this region, not only from a market traction standpoint but from a time-zone perspective as well. The firm will then have representatives on both the western and eastern seaboards.

6.4   Goals and Objectives – Focus on US Market Share

The main goal of the new Marketing Manager will be to help the company achieve fast and significant traction in the US MEA market. Specifically, the new hire should be given six months to ramp up operations, and another six months to become revenue-neutral (i.e., salary, commission and all expenses covered by new US deals). After that, the new position should become revenue-generating, which should be measured against the firm's established growth rate of 35% a year.

In addition, the Marketing Manager will be expected to use his/her experience in US MEA to help the firm build its corporate reputation south of the border. They will develop the firm's first real marketing strategy, and will explore new marketing ideas as they pertain to the somewhat idiosyncratic MEA niche. The new individual will also be required to keep files on and become well-schooled in the activities of the firm's major US competition, in preparation for the expected increase in rivalry and competitive reprisal as the market matures. If this individual proves successful at one45 and US business grows significantly, they may also be required to hire and develop an entire team of sales representatives to work in the new department. This is the

ultimate goal, to have a fully staffed US Sales and Marketing Department operating with significant autonomy from head office.

It is important to recognize that, at least at first, there will be considerable blurring between the responsibilities of the Marketing Manager and senior management. One45 already has an excellent track-record at "closing deals" and relationship marketing. What's been missing in the firm's US strategy is a policy of monitoring the US MEA market for potential leads and then aggressively pursuing these leads for a "foot in the door." This isn't surprising given the company culture. At least initially, therefore, the new hire will be required to bring a more tenacious approach to the first stage of the sales and marketing cycle.

Determining where the line is between this and the more traditional "first-contact" responsibilities (identifying "seed" individuals, cold-calling institutions, conducting initial meetings, etc.), which the new individual will be tasked with, will likely require a significant level of cohesion between the two groups. The Marketing Manager should be expected to "open doors" with first-contact and product demonstrations, and then be able to "hand-off" these new clients to experienced senior or technical managers. This synergy will likely need time to be develop.

6.5   Compensation – With Success Comes the High Salary

As noted above, the compensation package for the new hire should be a combination of base-salary and either ownership opportunities (based on new US deals) or commission. Traditionally, though, most sales people are more motivated by commission, so a starting salary of $70K (US) plus commission (10% per year for three years) on all new US contracts would be a reasonable, and affordable, place to start. This rate of commission is higher than the industry standard, but this is feasible given that history has shown that clients, if satisfied, usually become

"clients for life" (i.e., ongoing subscription), while the firm only pays commission for the first three years of a new deal.

In addition, a travel allowance starting at approximately $20K (US) should be provided to the new Marketing Manager, and this figure, along with base-salary, should increase yearly in proportion to the number of deals being pursued.

6.6 Management Protocol/Structure – A Delicate Balance

When structuring the new Sales and Marketing Department, management must avoid forcing a Canadian style or approach on the US team. On the other hand, the new department will be responsible for making first impressions in the US marketplace and managing the firm's corporate reputation south of the border, and should therefore portray an image of the company that is in keeping with its current culture. This tension between head-office control and departmental autonomy will likely play a big role in how management structures the new venture.

Senior management will need to develop new methods of oversight, reporting and dialogue with the Marketing Manager that operate separately from the rest of the company. These methods should be developed in consultation with the new hire. As noted previously, it is likely the new hire will prefer a higher level of bureaucracy than one45 is used to having (due to the SJ/SP mentality), so current leadership will need to develop a new familiarity with more traditional management procedures and policies. This should be possible, as the firm has already shown itself capable of doing this when the situation demands it.

In doing this, however, management should pay close attention to their existing employees, who currently perform some of the tasks the new Marketing Manager will be hired to perform (e.g., cold-call follow-up, trade show attendance, etc.). With the new marketing department, current employees may be required to relinquish some of their duties, a process that

may require a certain level of role redefinition within the firm and therefore has the potential to affect staff morale.

6.7   Performance Review – It's Been a Year Already?

Senior management should develop new performance indicators for the Marketing Manager that reflect the specific goals of the position (i.e., revenue-neutrality within one year). Instead of focusing employee evaluations on customer service and cultural fit (which are the main criteria for assessment for those working at head office), the new hire's performance should be evaluated specifically on their ability to generate new US business. Obviously, the yearly review will be when senior management must decide whether the new strategy is working or not, and whether to continue the new department, give it an overhaul or let it die.

6.8   Conclusion: Time is Short and the Market Beckons

This paper has provided an in-depth analysis of one45 software inc. and the US MEA market. It has determined the capability gaps within the firm and, given these, determined the proper strategic direction for one45 to pursue with respect to its stated goal of achieving significant traction in the US MEA market. This market, from one45's perspective, is very attractive. It represents an exciting opportunity for the firm to build upon the success it has already achieved in Canada.

The main conclusion of this paper is that one45 should reposition itself for expansion by creating a new US sales and marketing department. This strategy leverages the companies strong competitive advantages of superior product quality and customer service, and it also fills the most pressing capability gaps within the firm, most notably its complete lack of US sales and marketing expertise. If the firm can find the right person to lead this new department, and if it can successfully negotiate the firm's transition from a small, innovative organization to a larger, more

business oriented company – without sacrificing its prized, free-thinking culture – the firm will be well positioned to achieve its expansionist goals.

The findings contained herein are intended as a conversation-starter among senior management, a potential road-map for the company to follow as it launches a new stage of corporate growth. The final recommendation of this paper is that management begin this conversation soon, before this "window of opportunity" closes.

APPENDICES

Appendix A – CanMEDS 2005 and the ACGME Outcomes Project

CanMEDS (Canadian Medical Education Directives for Specialists) 2005 Framework

The CanMEDS 2005 Framework establishes the key competencies required for medical education and practice in Canada. It forms the basis of the Royal College of Physicians and Surgeons in Canada's (RCPSC) accreditation requirements, which every medical education program in the country must meet, as well as the College's standards for evaluation, examination, training and professional development. CanMEDS is based on seven core roles: Medical Expert, Communicator, Collaborator, Manager, Health Advocate, Scholar and Professional. Each year, medical schools and residency programs must submit huge volumes of data to the RCPSC that demonstrate their institution's ability to promote excellence in these seven fundamental roles.

ACGME (Accreditation Council for Graduate Medical Education) Outcomes Project

The ACGME is responsible for the accreditation of post-MD medical education programs in the US. The Outcomes Project sets forth the six core competencies medical residents should achieve mastery of during their training: patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism and systems-based practice. For purposes of accreditation (as with CanMEDS in Canada), every American post-graduate medical program must submit large volumes of data to the ACGME that demonstrate excellence with respect to these training objectives.

Appendix B – Breakdown of Canadian MEA Market

		n	one45	available		Legend
UBC						market captured
	UME	896	100%			
	GME	976	100%			market available
UofA						
	UME	500	100%			market not available
	GME	663	100%			
U Calgary						
	UME	300	homegrown			
	GME	535	100%			
U Sask						
	UME	240	100%			
	GME	229	100%			
U Manitoba						
	UME	372	UofC system			
	GME	432	28%	313		
U Ottawa						
	UME	608	100%			
	GME	671	100%			
Queens						
	UME	400	6% *			
	GME	316	100%			
UofT						
	UME	816	homegrown			
	GME	2,128	homegrown			
McMaster						
	UME	444	homegrown			
	GME	666	100%			
UWO						
	UME	532	100%			
	GME	609	100%			
Northern ON						
	UME	224		224		
	GME	0				
Dalhousie						
	UME	360	homegrown			
	GME	455	100%			
Memorial						
	UME	240	100%			
	GME	210	100%			
Quebec Schools						
McGill						
	UME	1,096		1096		
	GME	817		817		
U Montreal						
	UME	1,274		1274		
	GME	862		862		
U Sherbrook						
	UME	668		668		
	GME	420		420		
U Laval						
	UME	812		812		
	GME	558		558		

*Queens has a homegrown solution but still uses one45 for a small subgroup

Market	UME	GME
Captured	3,041	5,449
Available (non-Quebec)	224	313
Available (Quebec)	3,850	2,657
Not Available	2,667	2,128
Total	**9782**	**10547**

% Market Captured	UME	GME
Available Market (excluding PQ)	93%	95%
Available Market (including PQ)	43%	65%
Total Market (excluding PQ)	51%	69%
Total Market (including PQ)	31%	52%

Canadian Medical Schools (excluding Quebec): Market Breakdown

Canadian Medical Schools (including Quebec): Market Breakdown
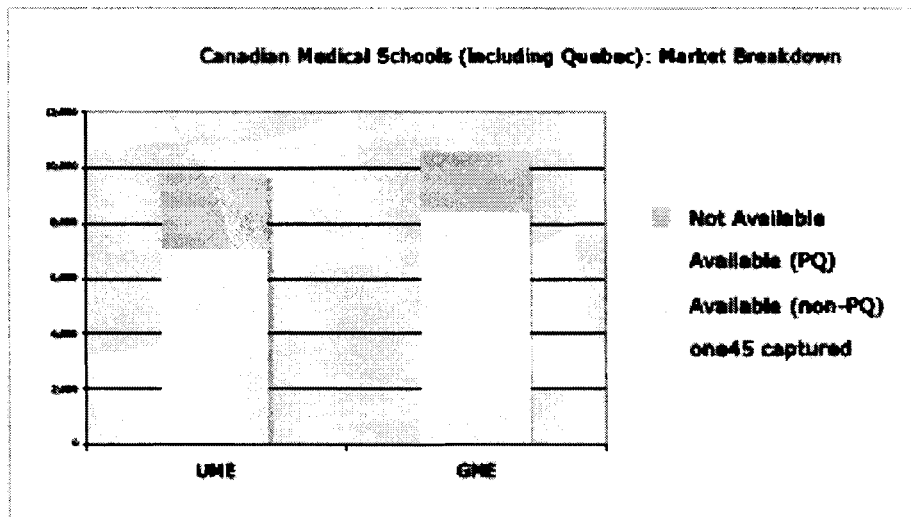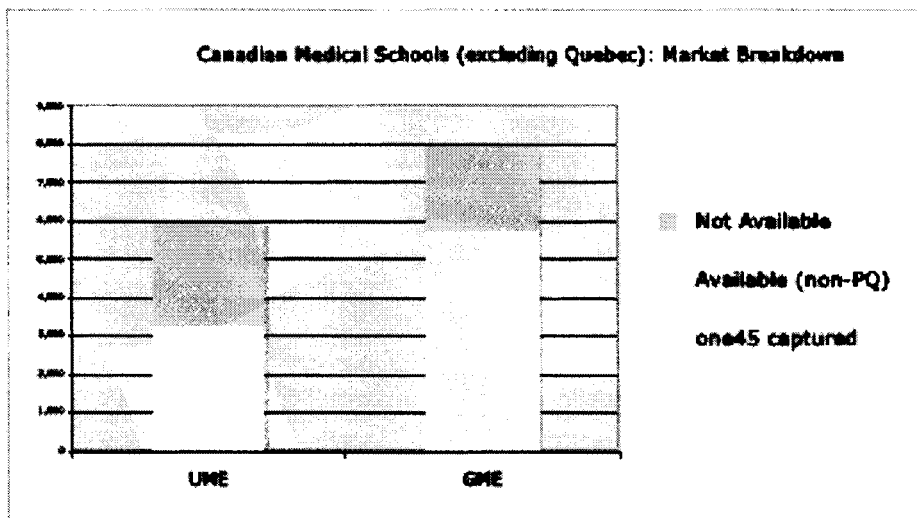
Appendix C - Breakdown of US MEA Market

	students (n)	Potential Revenue (per year)	
		UME/GME	Fac
Medical Schools	68,343	4,100,580	4,100,580
Residency Programs	104,520	6,271,200	6,271,200
Total		**$10,371,780**	**$10,371,780**
Grand Total		**$20,743,560**	

2005 US Med School Enrollment

	State	School	number	Potential Rev (per year)
1	AL	Alabama	636	38,160
2		South Alabama	261	15,660
3	AR	Arkansas	582	34,920
4	AZ	Arizona	451	27,060
5	CA	Loma Linda	685	41,100
6		Southern Cal-Keck	657	39,420
7		Stanford	473	28,380
8		UC Berkeley/SF Joint Prog	37	2,220
9		UC Davis	377	22,620
10		UC Irvine	388	23,280
11		UC San Diego	494	29,640
12		UC San Francisco	600	36,000
13		UCLA-Geffen	593	35,580
14		UCLA/DrewJoint Program	97	5,820
15	CO	Colorado	547	32,820
16	CT	Connecticut	319	19,140
17		Yale	492	29,520
18	DC	George Washington	681	40,860
19		Georgetown	707	42,420
20		Howard	457	27,420
21	FL	Florida	489	29,340

2005 US Med School Enrollment - cont'd

	State	School	number	Potential Rev (per year)
22		Florida State	220	13,200
23		Miami-Miller	645	38,700
24		South Florida	455	27,300
25	GA	Emory	468	28,080
26		Georgia	721	43,260
27		Mercer	243	14,580
28		Morehouse	196	11,760
29	HI	Hawaii-Burns	258	15,480
30	IA	Iowa-Carver	563	33,780
31	IL	Chicago Med-Finch	764	45,840
32		Chicago-Pritzker	438	26,280
33		Illinois	1,322	79,320
34		Loyola-Stritch	551	33,060
35		Northwestern-Feinberg	681	40,860
36		Rush	525	31,500
37		Southern Illinois	293	17,580
38	IN	Indiana	1,159	69,540
39	KS	Kansas	706	42,360
40	KY	Kentucky	402	24,120
41		Louisville	582	34,920
42	LA	LSU New Orleans	689	41,340
43		LSU Shreveport	409	24,540
44		Tulane	614	36,840
45	MA	Boston	642	38,520
46		Harvard	692	41,520
47		Massachusetts	412	24,720
48		Tufts	693	41,580
49	MD	Johns Hopkins	463	27,780
50		Maryland	611	36,660
51		Uniformed Services-Hebert	675	40,500
52	MI	Michigan	712	42,720
53		Michigan State	455	27,300
54		Wayne State	1,074	64,440
55	MN	Mayo	165	9,900
56		Minnesota Duluth	105	6,300
57		Minnesota Twin Cities	797	47,820

2005 US Med School Enrollment – cont'd

	State	School	number	Potential Rev (per year)
58	MO	Missouri Columbia	370	22,200
59		Missouri Kansas City	371	22,260
60		St Louis	613	36,780
61		Washington U St Louis	472	28,320
62	MS	Mississippi	411	24,660
63	NC	Duke	459	27,540
64		East Carolina-Brody	286	17,160
65		North Carolina	639	38,340
66		Wake Forest	430	25,800
67	ND	North Dakota	236	14,160
68	NE	Creighton	486	29,160
69		Nebraska	481	28,860
70	NH	Dartmouth	320	19,200
71	NJ	UMDNJ New Jersey	685	41,100
72		UMDNJ-RW Johnson	645	38,700
73	NM	New Mexico	314	18,840
74	NV	Nevada	214	12,840
75	NY	Albany	539	32,340
76		Buffalo	562	33,720
77		Columbia	599	35,940
78		Cornell-Weill	399	23,940
79		Einstein	730	43,800
80		Mount Sinai	489	29,340
81		New York Medical	763	45,780
82		New York University	702	42,120
83		Rochester	396	23,760
84		SUNY Downstate	751	45,060
85		SUNY Upstate	610	36,600
86		Stony Brook	447	26,820
87	OH	Case Western	623	37,380
88		Cincinnati	626	37,560
89		MC Ohio	612	36,720
90		Northeastern Ohio	462	27,720
91		Ohio State	839	50,340
92		Wright State	390	23,400
93	OK	Oklahoma	585	35,100

2005 US Med School Enrollment – cont'd

	State	School	number	Potential Rev (per year)
94	OR	Oregon	446	26,760
95	PA	Drexel	1,012	60,720
96		Jefferson	926	55,560
97		Penn State	521	31,260
98		Pennsylvania	703	42,180
99		Pittsburgh	581	34,860
100		Temple	747	44,820
101	PR	Caribe	263	15,780
102		Ponce	258	15,480
103		Puerto Rico	464	27,840
104	RI	Brown	304	18,240
105	SC	MU South Carolina	574	34,440
106		South Carolina	321	19,260
107	SD	South Dakota	207	12,420
108	TN	East Tennessee-Quillen	239	14,340
109		Meharry	378	22,680
110		Tennessee	618	37,080
111		Vanderbilt	436	26,160
112	TX	Baylor	680	40,800
113		Texas A & M	304	18,240
114		Texas Tech	537	32,220
115		UT Galveston	821	49,260
116		UT Houston	854	51,240
117		UT San Antonio	830	49,800
118		UT Southwestern	901	54,060
119	UT	Utah	425	25,500
120	VA	Eastern Virginia	440	26,400
121		Virginia	565	33,900
122		Virginia Commonwealth	737	44,220
123	VT	Vermont	419	25,140
124	WA	U Washington	805	48,300
125	WI	MC Wisconsin	811	48,660
126		Wisconsin	618	37,080
127	WV	Marshall-Edwards	207	12,420
128		West Virginia	412	24,720

2005 US Med School Enrollment cont'd

State	School	number	Potential Rev (per year)
Totals		68,343	$4,100,580

2005 US Residency Programs

Program Type	Number of Programs	Positions Filled	Potential Rev (per year)
Allergy and immunology	72	281	16,860
Clinical and laboratory immunology	1	1	60
Anesthesiology	129	5057	303,420
Critical care medicine	52	66	3,960
Pain medicine	90	247	14,820
Pediatric anesthesiology	43	126	7,560
Colon and rectal surgery	43	75	4,500
Dermatology	112	1057	63,420
Dermatopathology	46	69	4,140
Procedural dermatology	31	33	1,980
Emergency medicine	135	4264	255,840
Medical toxicology	21	42	2,520
Pediatric emergency medicine	12	38	2,280
Sports medicine	3	3	180
Undersea and Hyperbaric Medicine	1	2	120
Family medicine	466	9814	588,840
Geriatric medicine	36	53	3,180
Sports medicine	81	119	7,140
Internal medicine	388	22201	1,332,060
Cardiovascular disease	172	2230	133,800
Clinical cardiac electrophysiology	85	145	8,700
Critical care medicine	31	142	8,520
Endocrinology, diabetes, and metab	122	488	29,280
Gastroenterology	158	1253	75,180
Geriatric medicine	103	322	19,320
Hematology	12	55	3,300
Hematology and oncology	125	1239	74,340

2005 US Residency Programs – cont'd

Program Type	Number of Programs	Positions Filled	Potential Rev (per year)
Infectious disease	141	654	39,240
Interventional cardiology	127	269	16,140
Nephrology	134	802	48,120
Oncology	19	138	8,280
Pulmonary disease	25	95	5,700
Pulmonary disease and critical care	127	1168	70,080
Rheumatology	108	380	22,800
Sports medicine	1	1	60
Medical genetics	48	78	4,680
Molecular genetic pathology	15	13	780
Neurological surgery	97	805	48,300
Neurology	121	1622	97,320
Child neurology	71	215	12,900
Clinical neurophysiology	91	229	13,740
Neuromuscular medicine	7	8	480
Neurodevelopmental disabilities	8	9	540
Pain medicine	4	6	360
Vascular neurology	30	26	1,560
Nuclear medicine	61	160	9,600
Obstetrics and gynecology	252	4794	287,640
Ophthalmology	117	1361	81,660
Orthopaedic surgery	151	3167	190,020
Adult reconstructive ortho	18	32	1,920
Foot and ankle orthopaedics	6	10	600
Hand surgery	53	105	6,300
Musculoskeletal oncology	9	15	900
Orthopaedic sports medicine	65	138	8,280
Orthopaedic surgery of the spine	12	25	1,500
Orthopaedic trauma	7	9	540
Pediatric orthopaedics	22	24	1,440
Otolaryngology	103	1335	80,100
Neurotology	15	22	1,320
Pediatric otolaryngology	5	15	900
Pathology-anatomic and clinical	152	2321	139,260
Blood banking/transfusion med	48	49	2,940
Chemical pathology	3	0	0
Cytopathology	85	131	7,860
Forensic pathology	39	48	2,880
Hematology	77	103	6,180
Medical microbiology	12	5	300

2005 US Residency Programs – cont'd

Program Type	Number of Programs	Positions Filled	Potential Rev (per year)
Neuropathology	35	33	1,980
Pediatric pathology	26	24	1,440
Selective pathology	40	106	6,360
Pediatrics	204	7995	479,700
Adolescent medicine	25	65	3,900
Neonatal-perinatal medicine	98	547	32,820
Pediatric cardiology	49	286	17,160
Pediatric critical care medicine	60	330	19,800
Pediatric emergency medicine	45	245	14,700
Pediatric endocrinology	68	207	12,420
Pediatric gastroenterology	50	185	11,100
Pediatric hematology/oncology	61	331	19,860
Pediatric infectious diseases	62	161	9,660
Pediatric nephrology	35	102	6,120
Pediatric pulmonology	46	131	7,860
Pediatric rheumatology	26	58	3,480
Pediatric sports medicine	8	12	720
Developmental-behavioral pediatrics	28	61	3,660
Physical medicine and rehabilitation	79	1204	72,240
Pain medicine	11	26	1,560
Pediatric rehabilitation	4	1	60
Spinal cord injury medicine	20	12	720
Plastic surgery	90	589	35,340
Craniofacial surgery	5	4	240
Hand surgery	14	16	960
Preventive medicine	75	345	20,700
Medical toxicology	4	11	660
Undersea and hyperbaric medicine	1	2	120
Psychiatry	181	4809	288,540
Addiction psychiatry	43	56	3,360
Child and adolescent psychiatry	114	739	44,340
Forensic psychiatry	45	70	4,200
Geriatric psychiatry	60	98	5,880
Pain Medicine	1	0	0
Psychosomatic medicine	20	17	1,020
Radiation oncology	81	543	32,580
Radiology-diagnostic	190	4324	259,440
Abdominal radiology	12	40	2,400
Cardiothoracic radiology	2	2	120
Endovascular surgical neuroradiology	3	4	240

2005 US Residency Programs – cont'd

Program Type	Number of Programs	Positions Filled	Potential Rev (per year)
Musculoskeletal radiology	11	18	1,080
Neuroradiology	88	222	13,320
Nuclear radiology	21	10	600
Pediatric radiology	46	48	2,880
Vascular and interventional radiology	99	147	8,820
Sleep medicine	25	30	1,800
Surgery-general	252	7463	447,780
Hand surgery	2	10	600
Pediatric surgery	31	57	3,420
Surgical critical care	85	132	7,920
Vascular surgery	94	191	11,460
Thoracic surgery	88	312	18,720
Urology	119	980	58,800
Pediatric urology	20	18	1,080
Transitional year	130	1282	76,920
TOTALS	8,188	104,520	**$6,271,200**

Appendix D – One45 Software Inc. sample tri-fold brochure

Evaluation

- Automate the setting, marking and collating of evaluations

- Evaluate rotations, courses, academic half day, teaching rounds, residents, students, and faculty

- Collect valuable research data with surveys

- Use your forms, with your questions, scales and objectives in a ACGME Outcome Project

- Generate email reminders for overdue forms

Reporting

- Generate individual or batch reports on evaluation results and resident procedure logs

- Establish low performance flags to identify those students and residents having problems

- Export results to PDF or Excel by import into SPSS

- Create reference groups for comparison across services, sites, programs and years

Ask Your Peers

"administration
made simple and
powerful"

one45
SOFTWARE INC.

one45
SOFTWARE INC.   umeAdmin
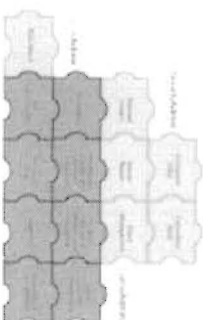
umeAdmin

"one stop shopping for ume administration"

Core Benefits

- Receive personalized customer support and consultation
- Get the data you need when you need it
- Identify trends for decision making
- Improve workflow efficiency
- Better serve your students and faculty
- Enhance communication and reduce duplicate effort across all levels

Assessment/Accreditation

- Make educational requirements clear to students
- Track student compliance with LCME requirements
- Map LCME objectives and custom competencies to courses, turns, and procedure logs
- Customize assessment/accreditation requirements and tracking

Patient/Procedure Logs

- Create flexible patient case and procedure logs with your own questions and subs
- Empower your supervisors to sign off on individual logs and complete custom feedback questions
- Track compliance of skills in a variety of ways
- Publish number completed, mandatory skills, LCME requirements, and feedback for your students
- Connect with T-Res to enable PDA-based procedure logs

Scheduling

- Write and manage your course curriculum and clerkship rotation schedules from central and departmental levels
- Generate schedules automatically based on rotation availability and student preferences (lottery)
- Import/export data from to AAMC's CurrMIT
- Publish schedules for students and faculty online
- Attach departments and context specific directives and learning objects
- Export schedules to Excel
- Share data across users and departments
- Manage academic session and teaching rounds schedules
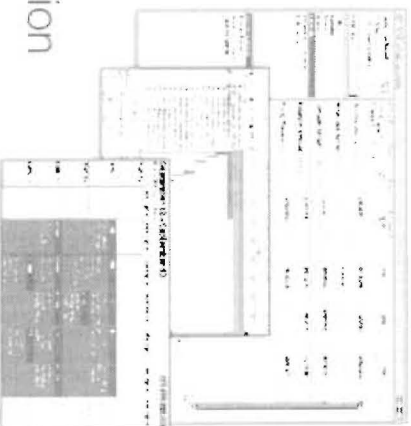
"a complete system designed by medical education experts for the medical education community"

Appendix E – Technology Acceptance Model (TAM)
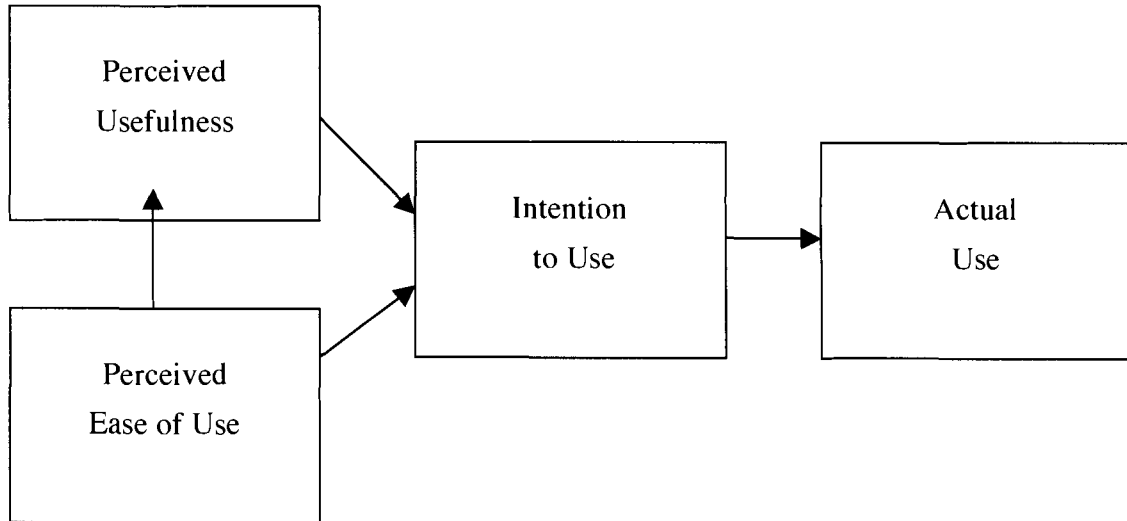
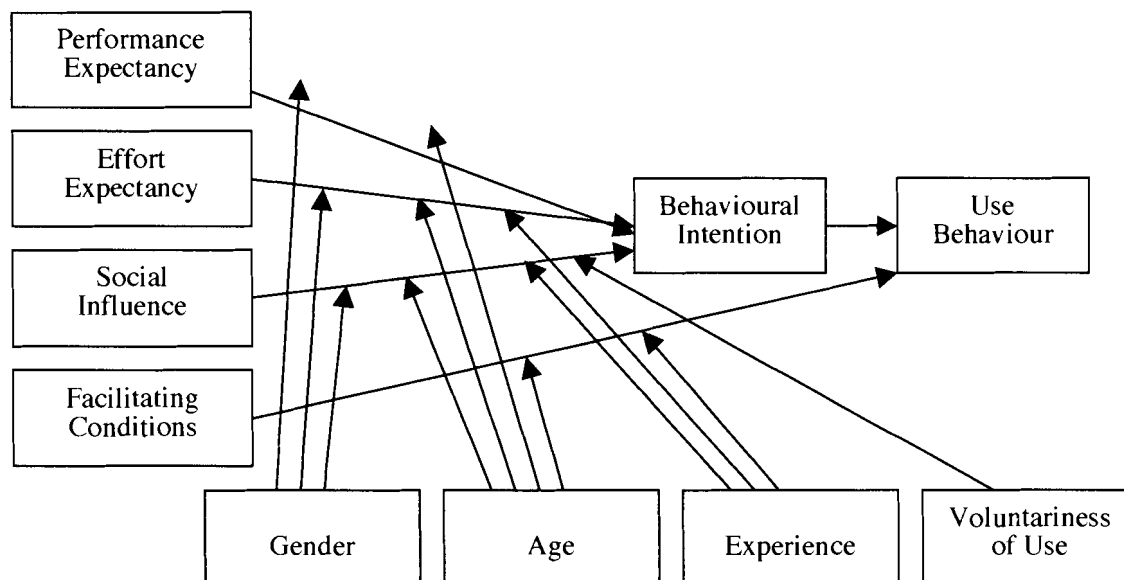Adapted from: F D. Davis, "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," MIS Quarterly, Vol.13, No.3, Sep., 1989, pp. 319-340.

Appendix F – Unified Theory of Acceptance and Use of Technology (UTAUT)

Core Determinants Of Intention And Usage

Performance Expectancy: the degree to which an individual believes that using the system will help him or her to attain gains in job performance (strongest predictor of intention).

Effort Expectancy: the degree of ease associated with the use of the system.

Social Influence: the degree to which an individual perceives that important others believe he or she should use the new system.

Facilitating Conditions: the degree to which an Individual believes that an organizational and technical infrastructure exists to support use of the system.

Key Moderators: gender, age, voluntariness, and experience

Performance expectancy: effect stronger for men and younger workers

Effort expectancy: effect stronger for women.older workers, and those with limited experience

Social influence: effect stronger for women, older workers, under conditions of mandatory use, and with limited experience

Facilitating conditions: effect stronger for older workers with increasing experience

Adapted from: Venkatesh, V., Morris, M. G., Davis, G. B., and Davis, F. D. "User Acceptance Of Information Technology: Toward A Unified View," MIS Quarterly Vol. 27 No. 3, September 2003, pp. 447.

Appendix G – Product Information and Client List for New Innovations Inc.

IRIS

The IRIS module allows GME and finance personnel to gather and export IRIS information for their Medicare Cost Reports based on the demographic and rotation information contained in the residency management suite.

- Demographics information is pulled directly from the Personnel Data module of the residency management suite
- Rotational information is pulled directly from the Block Schedule module of the residency management suite
- GME, Weighted GME and IME figures are calculated on command
- Export to dBase functionality available
- Import legacy IRIS information functionality available
- GME and IME figures can be calculated from either the Block Schedule information, or the Duty Hours Log
- Extensive reporting for all aspects of the IRIS module

BILLING

The billing module allows finance personnel to bill their funding sources for resident training costs. It enables an institution to configure custom "Contracts" that define the contractual obligations between itself and its funding sources.

- Automatically calculates moneys due/owed "on the fly" for configured contracts
- Based on each resident's block schedule
- Allows a considerable portion of an institution's billing process to be automated
- Supports internal and external funding sources
- Supports grants
- Extensive reporting for all aspects of the billing module

EVALUATIONS

The Evaluations module provides a program or institution the tools necessary to gather and compile data on the performance of their personnel and the rotations that they are associated with. A complete 360 evaluation process can be achieved by setting up rules to automatically generate evaluations for all of the residents, faculty, and other house staff.

- Automatically generate evaluations for all people assigned to a rotation
- Allow evaluators to submit evaluations anonymously
- Print individual evaluations
- Require electronic signature of both evaluators and/or subjects
- Generate compiled reports for any time period with:
- Peer or departmental average
- Individual average
- Minimum and maximum scores
- Standard Deviation
- Listing of ALL scores
- Ability to include comments
- Automatic email notifications
- Ability to generate reports showing evaluations that were not completed
- Allow people to choose to evaluate individuals not assigned to them

BLOCK SCHEDULES

The Block Schedule module allows administrators to build and maintain the annual block schedule from any internet ready PC. Using a simple interface, administrators have the ability to generate a monthly face sheet to print out and display in the department showing where all personnel are working with the ability to show rotators if they so choose. All personnel in the institution with access to our software have the ability to view their personal schedule for any time period.

- Web interface entry of departmental block schedules
- Ability to view block schedules for any number of intervals
- Ability to configure and save templates for viewing specific schedule data

- Easily edit an individual's block schedule
- User can view their personal schedule and any rotational contact information
- Block schedules can be used to help generate evaluations
- Personnel can be made available to schedule in several different departments

CONTINUITY CLINICS

The Continuity Clinic module tracks a history of each patient that a physician sees, and diagnoses a physician is exposed to. Data can also be shared between residents and departments. Reports are provided to track diagnoses that a physician logs and patient history.

- Patient data can be configured to be visible only to the physician that saw him/her, other residents, or other departments.
- Patient names can be turned on or off.
- Reports will track the history of a patient visits.
- Totals for diagnoses can be tracked through reports.
- Sensitive information can be excluded from reports.
- Data can be shared with the Procedure Logger so that a physician can log a patient visit in the Continuity Clinic module and log a procedure in the Procedure Logger module at the same time.

PDA SUITE

PDA applications allow users to enter/view data anywhere they go. Included are the Conference Attendance, Duty Hours, Information Listing, and Procedure Logger and down loading your personal Call/Clinic Schedule applications. The data can then be synchronized to the NI server for immediate reporting in the suite.

- Palm OS and Pocket PC devices are supported.
- Devices synchronize directly to the NI server to get the most current information.
- Simplified installation downloads from the Web.
- Data can be carried with a user where ever he/she goes.
- Includes Conferences, Duty Hours, Procedure Logging, Information Listing, Personal Schedules

PROCEDURE LOGGER

The Procedure Logger module collects logged procedures from either the suite or via a PDA, and provides several different reports on a resident's progress in reaching required goals in procedure credentialing. Reports are also provided to track supervisors of the logged procedures.

- Procedures can be entered via the Web or a PDA.
- Supervisors can confirm procedures, and give a pass/fail status.
- E-Mails can be configured to be sent to supervisors reminding them to confirm procedures.
- Residents can be either automatically credentialed for a procedure when requirements are met, or be credentialed manually by an administrator.
- Residents and Administrators can be notified via E-Mail when procedure credentialing requirements have been met.
- Several different reports are included to track a resident's progress as procedures are logged.
- The procedure entry page can be customized to show/hide fields that each department does or does not want to track.

CONFERENCES

The conference module allows administrators to track conference attendance. They can add one or more file attachments to a conference which may be viewed by personnel expected to attend the conference. Speakers can be assigned to the conference and depending on the department's configuration choices, the speakers can receive an email reminder before the conference takes place. Personnel with proper privileges assigned may take their own attendance. These attendance features are available on PDA devices as well.

- Conference attendance reports
- Ability to create recurring conferences
- File attachment capabilities
- Individual attendance taking
- Speaker assignments with email reminders
- Linking of Core Competencies
- Ability to divide conferences by Categories and Sub Categories

DUTY HOURS

The Duty Hours module allows programs to track a resident's hours worked. The module provides the ability to configure Duty Hour Rules that may be configured to match the ACGME Standards for duty hours. Rule validations are run each time a resident enters his/her hours. Violations to the department's rules will appear on the resident's schedule for easy detection. Reports of violations as well as various hourly reports are available to both administrators and the residents.

- Department configured duty hour rule validations
- Violations report designed to detect potential and past violations
- Hourly report
- Hourly report by Rotation
- Duty Hours entered may be used to facilitate IRIS calculations
- Departments may choose to have hours automatically recorded for assignments added on a residents assignment schedule.

CURRICULUM

This module allows Curriculum to be attached to a rotation so that a resident may have access to view that curriculum through their "My Schedule" or "My Rotations" portions of the RMS. Administrators may choose which rotation and which status types should have access to the curriculum. They may choose to have residents receive an email reminder "x" amount of days before their rotation begins telling them to review their curriculum. Residents have the ability to electronically sign off on the curriculum they've reviewed.

- Ability to assign curriculum for a particular rotation.
- Ability to assign curriculum for a particular status type.
- Residents will receive email reminders to view their curriculum prior to the start of the rotation.
- Residents may sign off electronically indicating they've reviewed the curriculum.

CLIENT STATISTICS
- 40.2% of all Anesthesiology Programs

- 53.3% of all Family Medicine Programs
- 46.5% of all Emergency Medicine Programs
- 34.5% of all Internal Medicine Programs
- 38.7% of all Pediatrics Programs
- 43% of all Ob/Gyn Programs
- 38.3% of all Surgery Programs
- 39.4% of ALL ACGME Residents are using the Residency Management Suite

CLIENT LIST

- New York Methodist Hospital: 05/24/06
- Valley Hospital Medical Center: 04/28/06
- University of Illinois College of Medicine: 03/21/06
- Reading Hospital: 03/14/06
- Lahey Clinic: 03/13/06
- Cambridge Health Alliance: 03/09/06
- South University PA Program: 03/09/06
- Barnert Hospital: 03/08/06
- Utah Valley Regional Medical Center: 03/08/06
- Kaiser Permanente Oakland: 02/24/06
- Loma Linda University Medical Center: 02/15/06
- Berkshire Medical Center: 01/27/06
- Missouri City PA Program: 01/16/06
- Presbyterian Medical Center: 01/11/06
- University of Pennsylvania: 01/11/06
- Pennsylvania Hospital: 01/11/06
- Atlantic Health System: 01/10/06
- North East Iowa Medical Education Foundation: 01/06/06
- Beth Israel Deaconess Medical Center: 12/15/05
- Charleston Area Medical Center/West Virginia University: 12/15/05
- Children's Hospital Boston: 12/12/05
- Staten Island University Hospital: 12/12/05
- Nassau University Medical Center: Residecy Management Suite 12/9/05
- Flower Hospital: 12/1/05
- Toledo Hospital: 11/28/05
- Forest Park Hospital: 11/15/05

- Baptist Memorial Hospital: 11/15/05
- Hahnemann University Hospital: 11/01/05
- Forbes Regional Hospital: 10/21/05
- Baylor University Medical Center: 09/05
- Jamaica Hospital: 08/05
- Maimonides Medical Center: 08/05
- Newark Beth Israel Medical Center: 08/05
- Saint Barnabas Medical Center: 08/05
- Mount Sinai Medical Center: 08/05
- Lehigh Valley Hospital: 08/05
- Jackson Memorial Medical Center: 08/05
- Crozer Chester Medical Center: 08/05
- St. Vincent's Medical Center: 07/05
- Cuyahoga Community College PA program: 07/05
- Veterans Affairs Medical Center: 07/05
- University of Kansas Medical Center UME: 07/05
- Stanislaus County Health Services: 07/05
- Spartanburg Regional Healthcare System: 07/05
- Creighton University: 06/05
- St. Louis University School of Medicine: 06/05
- Creighton University UME: 05/05
- The Methodist Hospital: 05/05
- Saints Mary & Elizabeth Medical Center: 05/05
- Brigham and Women's Hospital: 05/05
- Massachusettes General Hospital: 05/05
- University of New Mexico: 05/05
- Graduate Hospital: 05/05
- Ingham Regional Medical Center: 05/05
- St. Vincent Hospital and Health Care Center: 05/05
- Temple University Hospital: 05/05
- University of Minnesota Medical School: Residency Management Suit 05/05
- Marianjoy Rehabilitation Hospital: 05/05
- Hershey Medical Center UME: 05/05
- University of Tennessee College of Medicine UME: 04/05
- Genesys Regional Medical Center: 04/05

- A.T. Still University of Health Sciences UME: 04/05
- San Jose Medical Center: 04/05
- SUMMA EMS: 04/05
- Pitt County Memorial Hospital: 03/05
- University of Louisville UME: 03/05
- Contra Costal Regional Medical Center: 03/05
- Mercer University School of Medicine UME: 03/05
- University of South Alabama GME: 03/05
- University of South Alabama UME: 03/05
- Maine Medical Center: 03/05
- Deaconess Hospital: 02/05
- TriHealth: 02/05
- NEOUCOM Medical School UME: 01/05
- Wright State University School of Medicine UME: 01/05
- Georgetown School of Medicine UME: 01/05
- UMDNJ School of Osteopathic Medicine: 01/05
- University of California San Diego Medical Center: 12/04
- Emory Medical Center UME: 11/04
- University of Texas MD Anderson Cancer Center: 10/04
- Hinsdale Hospital: 10/04
- La Grange Memorial Hospital: 10/04
- University of Louisville School of Medicine: 09/04
- Mercy Medical Center - CA: 09/04
- Boston Medical Center: 08/04
- Christiana Care Health Services: 08/04
- Children's Hospital Boston: 08/04
- Kaiser Permanente Santa Clara: 07/04
- Miami Children's Hospital: 07/04
- Washington Hospital Center: 07/04
- National Rehabilitation Center: 07/04
- Good Samaritan Hospital of Maryland: 07/04
- Franklin Square Hospital: 07/04
- Georgetown University Hospital: 07/04
- Union Memorial Hospital: 07/04
- Harbor Hospital Center: 07/04

- Westchester General Hospital: 07/04
- St. Lukes Hospital: 06/04
- Riverside Methodist Hospital: 06/04
- White Memorial Medical Center: 06/04
- Evanston Hospital: 06/04
- Mcgaw Medical Center of Northwestern University: 06/04
- Union Hospital: 06/04
- Hershey Medical School: 06/04
- Maricopa Medical Center: 06/04
- Providence Portland Medical Center: 06/04
- St. Vincent Hospital and Medical Center: 06/04
- Florida Hospital Medical Center: 05/04
- Mid-Hudson Family Health Institute: 05/04
- St. Joseph Regional Medical Center: 05/04
- St. Joseph of Macomb: 05/04
- Metropolitan Hospital: 05/04
- North Oakland Medical Center: 05/04
- Cedars Sinai Medical Center: 04/04
- Children's Hospital of Orange County: 04/04
- Forum Health: 04/04
- Cooper Hospital: 04/04
- Phoebe Putney Memorial Hospital: 04/04
- Scripps Clinic - La Jolla: 04/04
- Baylor University Medical Center: 03/04
- Eastern Virginia Medical School: 03/04
- Naval Aerospace Medical Institute: 03/04
- Memorial Hermann Hospital: 02/04
- Cleveland Clinic Florida: 02/04
- Conemaugh Valley Memorial Hospital: 02/04
- Albany Medical Center: 01/04
- Naval Medical Center - Portsmouth: 01/04
- Virginia Commonwealth University Health System: 01/04
- The Western Pennsylvania Hospital: 11/03
- University of Chicago: Residency Management Suit 10/03
- Medical College of Ohio: 10/03

- Christus St. Joseph: 09/03
- St. Vincent's Medical Center: 08/03
- University of Texas Austin: 08/03
- Scripps Hospital: 08/03
- St. Francis Hospital and Health Center: 07/03
- Washington Hospital: 07/03
- Palmetto Health: 07/03
- University of Hawaii: 07/03
- St John Health System (5 hospitals): 07/03
- Ohio University UME: 07/03
- CORE (All 13 Ohio Osteopathic Hospitals) select 07/03
- University of Colorado: 07/03
- Keesler Airforce Base: 07/03
- Detroit Medical Center: 06/03
- DAGMEC (Dayton Area Graduate Medical Education Consortium - 7 Hospitals): 06/03
- Children's Hospital Medical Center of Akron: 06/03
- University of Missouri Columbia: 05/03
- Wellspan Hospital: 04/03
- Morehouse: 05/03
- University of Arizona - Tuscon: 02/03
- Duke Medical Center: 02/03
- University of Cincinnati: 01/03
- University of Colorado: 01/03
- Emory Medical Center: 01/03
- University of Texas Health Sciences Center: RMS 12/02
- University of Tennessee Memphis: 10/02
- San Antonio Uniformed Services (Army and Airforce): 10/03
- Texas Tech: 09/02
- Scott and White: 09/02
- University of Tennessee Knoxville: - 09/02
- University of Arkansas: 10/02
- Medical College of Wisconsin: 06/02
- UAMS (Area Health Education Centers - 7 family practices): 06/02
- John Peter Smith: 01/02

- Summa Health System: 10/01
- Prince Georges Hospital: 06/01
- Grant Medical Center: 05/01
- Akron General Medical Center: 03/01

Appendix H – Product Information and Client List for Verinform Systems

Verinform Systems provides protocol management software solutions to the healthcare community. Their industry-leading VerinformRM residency management system enables clients to enhance physician training, deliver the best available care to patients, comply with complex regulations and support allowed reimbursement. VerinformRM satisfies the specific and unique needs of each clinical program, while aggregating data required by the GME office and Fiscal Services across single or multiple institutions.

PRODUCT DESCRIPTION

VerinformRM 3.0

- web-based
- manages rotation, call, clinic and leave
- manages evaluations
- tracks procedures and conference attendance
- produces Medicare Cost Report
- calculates affiliate institution invoices
- resident profiles
- attending physician profiles
- automatically produces RRC reports
- ACGME duty hours
- IRIS exports
- manages Interim Program Reviews
- new intern demographic and educational data can be imported from ERAS without retyping
- generate mailing labels
- Calculates meal tickets based on the call schedule
- Automatically calculates percentage of patient care, research and reading performed by each trainee for each rotation
- GMEToolKit™
- assist residency programs, academic medical centers, consortiums, and networks efficiently manage their reimbursement and accreditation data

Technical Features

- browser based
- runs on server within institution
- HIPAA-compliant (the Health Insurance Portability and Accountability Act of 1996)
- Oracle database
- supports all standard server operating systems
- software maintained and updated by Verinform
- deployed on a program-by-program basis, for the entire institution\
- customizable by program

Marketing

- web site
- web-based demonstration
- Sales team

Support

- email support
- telephone support
- web-based courses
- 90 min
- $75

Documentation

- End User Manuals
- Administrator Handbook
- Technical Documentation

PARTIAL CLIENT LIST

- Advocate Lutheran General (Chicago, IL)
- Advocate Illinois Masonic (Chicago, IL)
- Albert Einstein (Philadelphia, PA)
- Atlantic Health System (Morristown, NJ)
- Barnert Hospital (Paterson, NJ)
- Carilion Medical Center (Roanoke, VA)
- CentraState (Freehold, NJ)

- Charleston Area Medical Center (Charleston, WV)
- Children's Hospital of LA (Los Angeles, CA)
- Frankford Hospitals (Philadelphia, PA)
- Hamot Medical Center (Erie, PA)
- Harbor-UCLA (Los Angeles, CA)
- Henry Ford Health System (Detroit, MI)
- Huntington Hospital (Pasadena, CA)
- LAC+USC (Los Angeles, CA)
- Louisiana State University (Shreveport, LA)
- Loyola University Medical Center (Maywood, IL)
- Lutheran Medical Center (New York, NY)
- Memorial Health University Medical Center (Savannah, GA)
- Methodist Hospital of Dallas (Dallas, TX)
- MLK-Drew (KDMC) (Los Angeles, CA)
- New Jersey Medical School (UMDNJ) (Newark, NJ)
- Oakwood Hospital (Dearborn, MI)
- Olive View (Los Angeles, CA)
- Oregon Health & Science University (Portland, OR)
- OHSU Medical School (Portland, OR)
- St. Christopher's Children's Hospital (Philadelphia, PA)
- St. Francis (Chicago, IL)
- St. Joseph's (Chicago, IL)
- Thomas Jefferson University Hospitals (Philadelphia, PA)
- Tufts—New England Medical Center(Boston, MA)
- UCLA Medical Center (Los Angeles, CA)
- Underwood Memorial (Woodbury, NJ)
- University of North Carolina (Chapel Hill, NC)
- University of Pennsylvania (Philadelphia, PA)
- University of Texas Southwestern (Dallas, TX)
- University of Utah (Salt Lake City, UT)
- University of Washington (Seattle, WA)
- University of Washington Medical School (Seattle, WA)
- USC Family Medicine (Los Angeles, CA)
- VA Medical Center (Austin, TX)
- Via Christi (Wichita, KS)

Appendix I – Matrix: Key Success Factors for Industry Niche

Key Success Factors	one45	New Innovations	Verinform
Perceived Usefulness of Product	+++	+++	+++
Perceived Ease-of-Use of Product	+++	++	++
Flexibility of Product	+++	+	++
Context Expertise Across Firm	+++	+	+
Experienced US Marketing & Sales Staff	+	+++	+++
Innovative R&D	+++	+	++
Customer Service	+++	+	++
Reputation / Branding	+	++	++

Appendix J - Kiersey Groups, Types, Leadership Styles and Role Variants for one45's Management Team

		Group	Type	Leadership Style	Role Variant
Senior Mgmt / Co-Founders					
Ric Arseneau	INFP	NF	Idealist	Diplomat	Healer
Derek Hemmes	ENFP	NF	Idealist	Diplomat	Champion
John Simms	INFP/J	NF	Idealist	Diplomat	Healer/Counselor
Technical Mgmt					
Brian Clare	ENT/FJ	NT	Rational	Strategist	Fieldmarshal
Jason Ladicos	INTP/J	NT	Rational	Strategist	Architect
one45 Organization					
	ENFP	NF			
	ENTP	NT			
Missing		SP		Tactical	

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