JOURNAL OF THE INTERNATIONAL ACADEMY FOR CASE STUDIES

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ENCOMPASS SOFTWARE: GETTING STARTED, THE FIRST MONTHS AND FUELING GROWTH

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CASE DESCRIPTION

*The primary subject matter of this case concerns **Entrepreneurship, Entrepreneurial Marketing and aspects of Leadership in an entrepreneurial context.** Using an innovative chronological approach, this case addresses several key issues faced by entrepreneurs when launching and developing new ventures. Specifically, the case explores the key tasks that need to be undertaken in a startup business (a technology firm focused on the development and commercialization of software with utility in scheduling patients in a healthcare setting), and encourages students to consider the priorities that need to be established during the first six months of operations – the most critical time frame for an entrepreneur, where future success depends on the choices made in a time of considerable uncertainty. The case is divided into three parts (Part 1: Getting Started; Part 2: The First Months: Part 3: Fueling Growth) and has a difficulty level of three, appropriate for junior level courses in entrepreneurship. The case is designed to be taught in three 75 minute class periods and is expected to require up to 6 hours of outside preparation by students (approximately two hours for each part).*

CASE SYNOPSIS

This case is written from the perspective of the protagonist, the CEO of Encompass Software, a startup company dedicated to the development and commercialization of software with utility in scheduling patients in a healthcare setting. The CEO is faced with three unique sets of challenges, with the solving of each being critical to the company's future success.

In Part 1, the CEO has decided to "take the plunge" and has just resigned her corporate job to start Encompass Software. In Part 2, the CEO is two months into operations and is ready to launch the company's new software product. In Part 3, the CEO has just hired a team and must now consider ways to best generate revenue.

[NOTE: This case is a fictionalized account of a real-life situation. Names and other identifying information have been changed. However, the applicable facts and situations are true to the real case. Additionally, the actual dates and timeframes of the industry statistics presented have been adjusted for the purpose of this case.]

ENCOMPASS SOFTWARE: GETTING STARTED, THE FIRST MONTHS AND FUELING GROWTH

Part 1 – Getting Started

Jane Haywood leaves the meeting with her new business partners and smiles. After laboring long and hard on developing her business concept, Haywood has found a way to obtain the necessary funding to execute on her idea. She feels as if all her planning and efforts are coming together and that she is well on her way.

From her years of experience in the healthcare industry, Haywood has come to understand the inefficiencies and complexities of the healthcare market. Based on interactions with doctors in her current position as Executive Director, Outpatient Services at Rivers Community Hospital, she has devised what she believes to be a more efficient and convenient way to schedule patients into healthcare facilities, one that will save doctors, clinics, and hospitals time and money.

Haywood was able to convince the hospital to fund a "pilot program" and has successfully implemented and tested the system. Although her boss refused to sign a contract with the outside group of programmers she hired to code (develop) the software, he did agree to pay them and they moved forward, completing the software. After implementing and testing the system, doctors and patients seem to love the resulting product, as it is now much easier to schedule appointments at Rivers Community Hospital. Instead of spending an average of 15 minutes on the phone with the hospital, doctors' offices can now can schedule patient appointments themselves in less than one minute. Also, patients receive email or text reminders and are able to quickly book their own routine appointments. Thus, customer satisfaction is at an all-time high and Haywood has seen an increase of over 20% in outpatient revenue due to the benefits of the software.

Based on this early success, Haywood is passionate about the concept and spends much time working with the Rivers Community Hospital CEO in an attempt to convince him to commercialize the software. "We can establish ourselves as an innovative leader in the field" she urges, but these efforts fall on deaf ears. "We are not in the business of selling software", the CEO states to Haywood, putting an end to the conversations.

So, Haywood arrives at a decision point. Should she drop the idea of commercializing the software and be happy with her current position or should she "take the entrepreneurial plunge" and leave her corporate job? "Do I have what it takes to start and grow a high tech effort like this?" she wonders. "I really believe the software can improve services for patients and physicians and I am excited to see if I can turn the idea into a successful business. I think it's worth the risk". But questions remain and she asks herself, "Do I have the entrepreneurial mindset, skills, and knowledge for this type of an effort or if I decide to leave, should I instead consider starting something else, such as a lifestyle company or maybe something that will stay small?" After much deliberation, stress, and a number of sleepless nights, Haywood decides. She takes the plunge, quitting her job to start her own company, Encompass Software. It's now been two weeks since she's left Rivers Community and Haywood is excited at the prospect of running her own business and keen to get going.

This brings Haywood to where she is, having just left the meeting where she agreed to accept an investment of $350,000 from a group of four angel investors, comprised of three doctors and one

food industry expert. Haywood previously had several productive meetings with the group. Each investor will put in an equal amount of money, $87,500, into Encompass Software. This $350,000 will be used to fully develop and commercialize the software system and to pay for company expenses for twelve months.

Haywood wonders, "What is the best way to ensure her expectations of the deal match those of the investors and how should she go about officially starting the company? What paperwork should I put together to make the terms of the investor transaction official? Also, what are my options for setting up the company so I can accept the investor funding? What are the advantages and disadvantages of those options and what is best for my company? Finally, what is the process for registering my company with the local and federal government? What kind of paperwork must be filed?" Haywood jots these thoughts down on her "to-do" list, as these are all questions that will need to be answered.

Based on Haywood's business plan (she has worked diligently with financial experts to develop a fiscally sound plan), she expects to become profitable within twelve months and feels no further investment will be needed. In fact, she projects to internally fund growth and believes she can achieve over $2 million in revenues by the end of her second year in business.

In exchange for the investor funding, Haywood agrees the investors will receive a 50% equity share of the company and she will retain the other 50%. She feels this balance of a "50/50" split is fair and Haywood also agrees that any "big decisions" will be made jointly with the investors, such as taking on additional funding, selling the company or taking the company public. For these types of decisions, Haywood and at least two other investors will need to agree.

Haywood will serve as Encompass Software's CEO and will report to a Board of Directors comprised of her investors. This seems like a good idea as she's known the group (see Encompass Investor Background Information) for several years, she values their healthcare and business expertise, and looks forward to their contribution to the company's growth. In particular, she feels Barry Motsovich, the food industry expert, can assist Encompass as he has experience running a large company. Yet, Haywood is unsure if it is a good idea to have investors serve on the board. "Is this in the best interest of the company or is there a potential conflict?" she wonders.

So, it's finally happening. Haywood is starting Encompass Software. She gets into her car and drives off.

Encompass Investor Background Information

The investors are comprised of 3 doctors and 1 food industry expert.

Bob Black – Surgeon turned hospital and rehabilitation facilities owner. Black left his surgeon position at a hospital due to a disagreement with its CEO. In turn, he started a competing hospital that grew to be one of the largest in the area. He then established a successful chain of rehabilitation facilities. Black is widely viewed as a leading medical expert and healthcare visionary.

Aaron Hanks – Psychologist. Hanks runs a psychology practice and dabbles on the side in other business ventures. He had at one time invested in a copper mine in South America, only to see it "nationalized", losing his investment. He had also purchased and installed a large number of mechanical cologne dispensers for public restrooms, again losing money because the machines were

frequently out of order. Hanks views his Encompass Software investment as a way to make up for these past mistakes.

Scott Smart – Psychologist. Smart does contract psychology evaluations for the Veteran's Administration. He also owns rental properties and is an avid cyclist. Because of these endeavors, Smart considers himself to be an entrepreneur and is eager to lend his knowledge and expertise to Haywood.

Barry Motsovich – Motsovich is CEO of a large food distribution company that services restaurants. He considers himself to be a business expert but admittedly has never worked with a start up and has little technology experience.

Part 2 – The First Months

Things are going great. Haywood is just two months into starting Encompass Software and corporate life is quickly fading into a distant memory. She is in control of her own business and the future looks bright.

Haywood smiles and asks herself, "How did I get involved in starting a software company? Heck, I made a "D" in computer programming during college!" Yet, here Haywood is, having secured a $350,000 investment and having quit her job. There is no turning back and it's up to her.

It is more difficult than she thought though. Haywood is working 12-hour days, spending most of her time collaborating with her contract programmer on fine-tuning the software program. Haywood feels she is now ready to launch and there is much still to do.

So, Haywood has been thinking through what needs to be accomplished for Encompass Software to be successful. There are a number of things that come to mind. First, Haywood thinks of putting together an implementation plan. She'll need to be ready to install her system and train and support customers in using the software. As the company will connect doctors in a number of offices to clinics and hospitals, she realizes this effort isn't a simple process. Haywood will need WAN and LAN networking and hardware expertise in the company. Then there is the matter of training customers how to use the software. She'll also need a process to best service clients once they have purchased from Encompass.

Haywood also knows she'll need a way to sell to her clients. How is she going to do this? If that wasn't enough, she's got to implement marketing strategies and she also has to keep accounting and financial records as her investors want to know what is happening with the company. In short, Haywood has more work to do in a day than is possible for one person.

Long days make Haywood assess her strengths and weaknesses and she starts to figure out what she enjoys doing and what tasks have become burdens. On the positives, Haywood always likes interacting with clients and she has become good at matching their needs with technical solutions. Haywood also believes in her product and is able to see a clear direction for the company. On the negatives, she'll never be a technical expert and, frankly, programming bores her. She also doesn't like the daily grind of managing an office and accounting has never been her strong suit.

Haywood realizes it's time; she needs help. She has to put together a plan that will allow her to successfully launch while staying within her $350,000 initial investment. "Whom do I bring on board now and what skills are critical to the success of Encompass?" she contemplates. "Should I hire full-time employees, contract labor, or both, and what should be the timing of these hires?" To

add to her thoughts, Haywood is nervous about taking on employees. "How can I be the most effective leader possible?" she asks herself. "How do I ensure my employees will be excited to come to work and be as motivated as I am? How will they know what we are trying to accomplish here?"

Part 3 – Fuelling Growth

Walking into the office, Haywood feels a sense of pride. In just under six months, she's managed to get her product ready for the market and she's hired a team she feels will make Encompass Software a leader in the field. The pieces are in place and Haywood is excited to take the next step.

So, she enters the conference room and greets her team. Haywood feels good but she also know there is much to do. Yes, the company's product has tested well with healthcare professionals who have reviewed it, but Haywood knows Encompass now needs to generate sales. The company's initial investment of $350,000 will carry Encompass through the end of the year, or for another 6 months based upon present monthly expenditures or "burn". Haywood has become acutely aware that in an emerging business, "money is time". Haywood's mind is clouded with the possibilities. Foremost is, how does she identify and then reach potential clients, and how does she get them to buy her product?

Encompass Software is new in the marketplace (see Industry Overview), it is unknown, and Haywood understands it can be difficult to sell to hospitals. They are notoriously slow to make decisions and are committee-based (many persons are involved in the decision making process), especially when it concerns buying and installing new technology solutions such as hers. Haywood knows most hospitals currently schedule patient appointments manually, so marketing and selling an automated system to replace what they have been processing by hand for years may be a challenge.

Haywood thinks through why she started the company and developed the product. First, good customer service is important to Haywood and she knows it's a competitive advantage. Second, Haywood understands doctors are frustrated with dealing with the manual process of hospital scheduling, where they spend on average 15 minutes per person booking needed appointments for their patients. The Encompass system solves this problem by completing the scheduling process in less than 60 seconds.

Encompass also offers the advantage of allowing doctor staffs and patients to undertake scheduling themselves via the Internet, so they can bypass calling the hospital if they desire. For hospitals, Encompass saves them time and money by automating the process, thus reducing the number of persons involved. And, because the system is completely automated, hospitals no longer need expensive medical experts to schedule appointments. Instead, by simply pressing a key, a patient's appointment could be automatically completed.

Encompass is new to the healthcare IT market and the scheduling niche is one just evolving. This is a tough task as Haywood and her team have to figure out a way for potential customers to know about the company and its product and they have to convince clients to change the way they do things.

To further complicate her task, the hospital market is diverse, with differing needs depending on the size (number of beds) of the facilities or the markets served. Haywood reviews the following information put together by her team:

MARKET STATISTICS

1. There are 5,724 hospitals in the U.S., according to the American Hospital Association.[1]
2. Of these, 2,903 hospitals are nonprofit and 1,025 are for-profit. Additionally, 1,045 are owned by state or local (county, hospital district) government entities.[1]
3. Of all hospitals in the U.S., 1,984, or 35 percent, serve rural communities and are considered rural hospitals.[1]
4. Hospitals vary greatly is size, from small rural facilities with just a few key service lines to large, tertiary care facilities. Here is a break out of U.S. hospitals by bed count:[2]

0-99 beds	2,557
100-199 beds	1,063
200-299 beds	582
300-399 beds	348
400-499 beds	192
500 beds or more	266

Within these hospitals, doctors contract with insurance companies, and generally, they can do business with any facility in a given service area.

Haywood also knows hospital spending on IT solutions is growing. According to the leading healthcare software research group, Gartner, spending by global healthcare providers for IT services will grow by 4.33% to reach $31.96 billion within two years.[3]

Although the scheduling niche is a developing one, the company does also have competitors. Encompass' two primary ones are a very large company and a smaller one that has been in business for five years. The large competitor earns $2 billion per year in revenue and it sells complete hospital information systems.[4] As a part of its total package, it includes a scheduling module that can be as costly as a million dollars per hospital. The smaller competitor was the first to enter the market and it has sold a little over 20 systems, with most of its sales in the mid-west. It charges around $250,000 per hospital for the system. While the competitor products are computer-based, they are not completely automated (can't automatically process scheduling appointments by "pressing one key") like the Encompass Software solution.

Haywood is considering a low-cost entry strategy and wants to discuss it with her team. "It makes sense to me we can acquire more customers if we charge less, but is this best for the company?" she asks her team. "Also, what are the best ways to create awareness of the company and our product and do we want to market to all types of hospitals?" With these issues at hand, Haywood and her team get to work.

INDUSTRY OVERVIEW

Scheduling is one of the most basic, important functions a health care organization performs. Within most health care facilities, however, various departments, physician groups, outpatient facilities and other clinics all schedule appointments separately, resulting in conflicts and inefficiencies.

Other industries, such as manufacturing, have developed and used sophisticated enterprise-wide scheduling systems for decades. The first real scheduling systems began to appear in the health care field during the 1980s, when staff shortages required more effective nurse workload management. Many early users soon began to adapt these systems to help predict staffing needs and adjust work force resources for skill-level mix and associated costs as patient volume and workloads changed.

In today's complex health care environment, an enterprise-wide scheduling system allows a health care organization to better manage its business and financial needs by providing timely and accurate information capture of patient services.

What Should A Scheduling System Do?

Based on industry research and member feedback, the Voluntary Hospital Association, a volunteer member-based network, (https://www.vha.com) identified the following core features as critical to a successful enterprise-wide scheduling system. It should provide:

- The ability to schedule patients for multiple services across the health care organization from any location.
- Convenience in scheduling personnel, facilities and equipment – helping to efficiently use expensive resources.
- Access to current patient insurance and billing information.
- The ability to screen procedures for medical compliance prior to patient encounters, thereby reducing costly denials and claims resubmissions.
- Real-time capability to estimate the cost of scheduling and staffing decisions and forecast staffing needs and budgets.

What Are The Benefits?

The VHA concluded an enterprise-wide scheduling system provides a number of key benefits:

- Telephone time is reduced from 10 minutes to four minutes to schedule an appointment.
- Fifty percent increase in appointments starting on time.
- Rescheduling can be reduced by 85 percent, and patient delays cut by 60 percent.
- Phone time reduced from 20 minutes to five minutes through elimination of duplicative data collection.
- All resources required to deliver appropriate care are available at the right time and in the right place.

- Reduce clinicians' administrative workload and focus clinical resources on delivering patient care.
- Proper staffing improves the overall quality of care while greatly reducing costs.

Ultimately, an enterprise-wide scheduling system streamlines access to patient care and information capture, improves profitability by providing timely and accurate tracking of services and expected reimbursement, reduces waste and inefficiency, and ensures proper use of expensive resources.

The Current Scheduling Environment

Overall, health care organizations spend $250 billion annually on medical claims paperwork and $26 billion annually on hospital "revenue cycle operations". Research shows claim denial rates are up, gross inpatient charges are down and gross days in accounts receivable are increasing. As a result, many health care organizations are correcting wasteful steps in the revenue cycle caused by incomplete or erroneous data that slows the reimbursement process.

Revenue cycle operations involve many steps – including scheduling, registration, admissions, medical records, billing and collections. Scheduling or patient access specifically refers to all processes required to identify and register a patient for treatment and services. It is the patient's first point of contact with the hospital, and the entry point of information into the revenue cycle. A key objective of the patient access phase is comprehensive data compilation to ensure a "clean" claim.

Health Care Organization Needs

VHA identified a reasonably strong need for enterprise scheduling solution within its membership. VHA's Strategic Sourcing Study shows that 17 percent of VHA hospitals outsource scheduling, with 15 percent likely to outsource over the next two years. The study of 324 respondents from 254 member organizations represents 11.5 percent of VHA's total membership. Information technology functions – such as scheduling – make up the largest current segment of outsourced operations, with 13 percent of hospital technology budgets currently allocated to external vendor sourcing.

It is interesting to note that VHA's research found that few health care organizations have actually implemented scheduling enterprise-wide. Even in the most sophisticated facilities, implementation appears to be piecemeal. The results of a Gartner study validate these findings. According to the Gartner study, of the top applications that providers identified for acquisition or replacement in the next two years, enterprise-wide scheduling placed fourth among 35 percent of all providers surveyed.

The study also found that:

1. 21 percent of providers plan to add an enterprise-wide patient scheduling system.
2. 34 percent plan to purchase in the next 12 months, 37 percent in the next 12-24 months.
3. 61 percent of providers have an enterprise patient scheduling system. Of these only 38

4. 60 percent of respondents planned to implement a patient scheduling system throughout the enterprise. The remaining 40 percent planned to implement scheduling only in some function within the organization.

5. Nearly half (48 percent) of respondents indicated that a full implementation of the enterprise patient scheduling system is 12 to 24 months away, while 22 percent indicated that full implementation was more than 24 months away.

6. 63 percent of the providers that are looking to add or replace their enterprise scheduling systems have not selected a vendor. Gartner believes this may be due to the perception that many of the new scheduling products being developed by vendors fail to achieve the functionality of the systems they would replace.

Purchasing Barriers

Contrary to Gartner research, and based largely on anecdotal information from members, VHA has learned product maturity and functionality are not necessarily the top barriers to purchasing or implementing an enterprise-wide scheduling system. Significant barriers identified by VHA include:

1. Political issues. It is not uncommon for departments to view centralized scheduling as a loss of control due to political turf wars that make it difficult for organizations to eliminate redundant services.

2. Infrastructure barriers. Lack of automation is a significant barrier to enterprise-wide scheduling implementation. In fact, many hospitals have not been able to make the transition from paper-based processes to full automation.

3. Cost and capital funding challenges. Enterprise-wide implementation of a scheduling system can require a significant investment. Most providers are choosing to implement the application in a limited scope.

ENDNOTES

1. American Hospital Association. "AHA Hospital Statistics."
2. Centers for Disease Control and Prevention. "Table 116. Hospitals, beds, and occupancy rates, by type of ownership and size of hospital: United States." Available online at http://www.cdc.gov/nchs/data/hus/2011/116.pdf
3. Forecast: Enterprise it spending for the healthcare provider market, worldwide.
4. Complete hospital information systems include, in addition to scheduling, clinical functions, financial applications, and electronic medical records.