

SUPERIOR MEDICAL INSTRUMENTS, LLC BUSINESS PLAN

And

ENTREPRENEURIAL PROFILE: KINETIC MUSCLES INC.

By

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A Thesis Submitted to The Honors College

In Partial Fulfillment of the Bachelor's degree
With Honors in

Entrepreneurship

THE UNIVERSITY OF ARIZONA

May 2009

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SIGNED: _____
Kelly Olson

Superior Medical Instruments, LLC

Abstract:

The enclosed business plan provides an overview of Superior Medical Instruments, LLC, a start-up medical device venture founded at the McGuire Center for Entrepreneurship. Superior Medical Instruments (SMI) is a medical device manufacturer that focuses on improving efficiency and patient care in the medical industry. SMI has developed one product to date, the Motion Assessment Package. This product is designed to streamline assessment and rehabilitation within the physical therapy industry. In addition to a detailed business plan, an entrepreneurial profile of a local Arizona venture, Kinetic Muscles Inc., is also included. Kinetic Muscles Inc. (KMI) was selected as a benchmark company for SMI due to their shared goal of improving the physical therapy industry through technology. This analysis of KMI provided valuable insight and assisted in the creation of SMI's development plan, business model, and marketing and sales strategy.

Superior Medical Instruments, LLC

Group Roles and Responsibilities:

Kelly Olson – Finance Manager

Throughout the entrepreneurship program I acted as the Chief Financial Officer for Superior Medical Instruments, LLC. This involved creating 'pro forma' financial statements, venture valuations, and a five year operating and capital budget. In addition, I also acted as the liaison between SMI and the external finance community. This included scheduling meetings between angel investors, venture capitalists, and sales and distribution partners. By participating in the graduate students' section I was exposed to a more comprehensive overview of what is required to launch a venture. Finally, I independently completed a benchmarking assignment on a local Arizona venture, Kinetic Muscles Inc. This entrepreneurial profile provided valuable insight into the physical therapy and medical device industries. Furthermore it also helped to shape and validate Superior Medical Instruments' development plan, business model, and marketing and sales strategies.

Arvin Ahmadih – Marketing Manager

- Performed primary and secondary market research
- Quantified SMI's applicable target market
- Prepared detailed sales and marketing plan

Jason Berg – General Manager

- Coordinated group meetings and assignments
- Acted as a liaison between Superior Medical Instruments and external individuals/groups
- Facilitated internal conflict resolution and decision making

Paul Swift – Operations Manager

- Researched the underlying intellectual property of our technology
- Headed technology operations and identified the capabilities and features that could be integrated into our software package using electromagnetic sensors
- Identified and evaluated competitors within the market



Arvin Ahmadiéh
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April 6, 2009

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Executive Summary

Superior Medical Instruments (SMI) is a medical device manufacturer that has designed a medical device to assess and diagnose restricted mobility. This product, the Motion Assessment Package (MAP), utilizes electromagnetic motion tracking technology to measure a patient's range of motion. The MAP increases clinical efficiency through faster, more accurate measurements and automated progress report generation. These features provide value to clinicians by reducing weekly paperwork by hours and increasing clinical reimbursements by up to \$6,000 per year.

Currently, range of motion measurements are made using goniometers. These instruments are time consuming and inaccurate. Furthermore, there is a lack of standardization in their use and as a result there is measurement variation between clinicians. The MAP provides a comprehensive solution to these problems while providing additional features that improve patient rehabilitation. Such features include biofeedback exercise guidance, 3-D motion reenactment and analysis, and longitudinal recovery tracking.

The primary target market for the MAP is the physical therapy industry. Within this industry, we plan to target private physical therapy practices. These clinics provide the highest quality of care and demand the latest technologies for their patients. Additional markets for this venture include orthopedics, athletic training, rheumatology, and academic research. These markets can be easily penetrated through minor adaptations to the MAP's software.

SMI will raise awareness for the MAP through clinical research with our strategic partner, the Arizona Arthritis Center. We also intend to advertise our product in popular medical magazines and physical therapy product catalogs. SMI will conduct direct sales through established distribution channels with our strategic distribution partners.

Superior Medical Instruments has four full-time employees: Arvin Ahmadi, Jason Berg, Kelly Olson, and Paul Swift. The venture team is also supported by an experienced advisory panel that includes: Dr. Grant Senner, Director of Business Development at Athlon Physical Therapy; Paul Howe, Computing Manager at the Arizona Arthritis Center; and Robert Morrison, Executive Director of the Desert Angles.

SMI is currently beta testing the prototype and is awaiting \$600,000 in funding to complete software development and finance their assembly and distribution operations. Superior Medical Instruments has determined a pre-money valuation of \$1,800,000. SMI's 'pro forma' financial statements forecast sales of \$15.5 million in year five.

Through the use of our proprietary hardware and software technology Superior Medical Instruments is poised to quickly penetrate the rehabilitation markets and "make assessment easy".

Problem and Opportunity

Range of motion (ROM) measurements are angle measurements that describe a joint's mobility. These measurements are crucial for diagnosing ailments and monitoring patient's progress throughout the recovery process. Areas of treatment that use these measurements include physical therapy, rheumatology, chiropractics, orthopedics and sports medicine. Medical professionals in all of these fields have expressed the need for a better way to take ROM measurements.

ROM measurements are currently being made using an outdated tool called a goniometer. The goniometer has many problems including inaccuracy and lack of standardization, causing recurring inter and intra operator error. Superior Medical Instruments provides a solution to these problems by offering a product that is accurate to within a tenth of a degree and eliminates these errors.

An opportunity exists in this growing industry, with an increasing number of hospitals and clinics nationwide. According to the Bureau of Labor Statistics, The number of physical therapists is expected to grow 27% from 2006-2016.

There is also expansion in the industry due to the growing population of Baby Boomers, who gradually seek more medical treatment as they age. According to Patterson Medical's FY07 10K, American's over 65 are expected to grow to 54 Million in 2020 and 79 Million in 2050. This substantial growth has created an opportunity to sell our product to medical fields that measure ROM.

Product Description

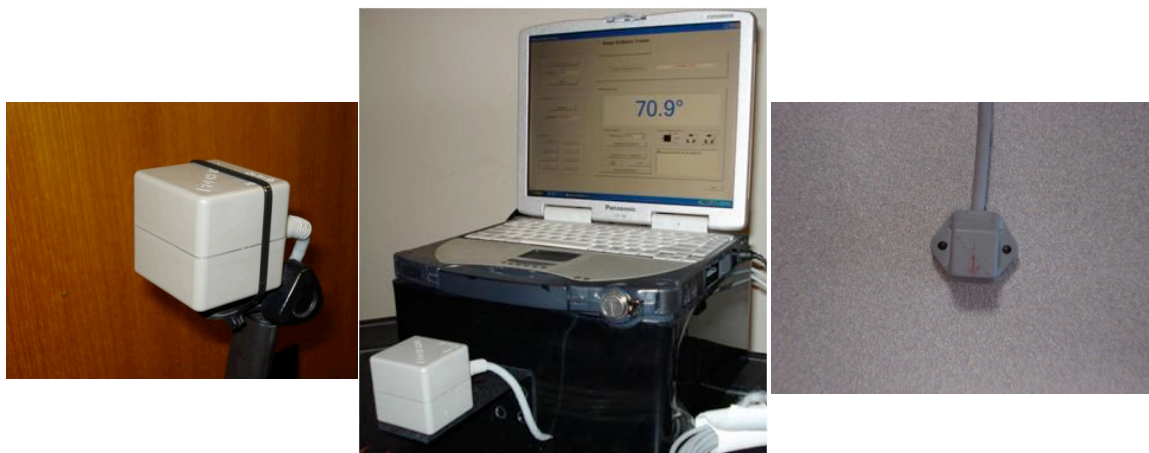
The Motion Assessment Package (MAP) has been in development in the Arizona Arthritic Center at the University of Arizona's Medical Center for the past 2 years. The product is an electronic device that is capable of tracking three dimensional positioning and orientation. This allows the MAP to measure ROM within a tenth of degree of accuracy in all three dimensions for any joint in the body. Furthermore, the nature of the product helps to eliminate the inter and intra operator error that occurs during ROM measurements. Additional software is currently under development that would allow the MAP to perform features such as:

- Disability and recovery index
- Longitudinal recovery tracking
- Biofeedback exercise guidance
- Automated progress report generation

- Electronic medical record integration
- Full 3-D analysis and reenactment

Once the development of these features is completed, the MAP software package will be customized to address the specific needs of each specialized rehabilitation field. For example, a disability and recovery index would be beneficial to the diagnosis of chronic degenerative diseases found in rheumatology such as ankylosing spondylitis, the fusing of the spinal joints. Funding is required to complete the development of the software features which will allow the MAP to quickly enter a variety of markets.

The product is a package comprised of 3 parts: a sensor, a transmitter, and a computer. The sensor is attached to the patient's body anywhere near a joint using either a Velcro strap or a disposable adhesive pad. As the patient moves their joint, the sensor receives and sends its position to the computer. The computer then calculates the sensor's movements. Inside the computer the information is manipulated into clinically relevant data through advanced algorithms. The information is then displayed to the clinician through an easy-to-use interface. The entire package, including the hardware and software, is currently protected with a provisional patent. Below are pictures, of the transmitter, the computer, and the sensor, respectively:

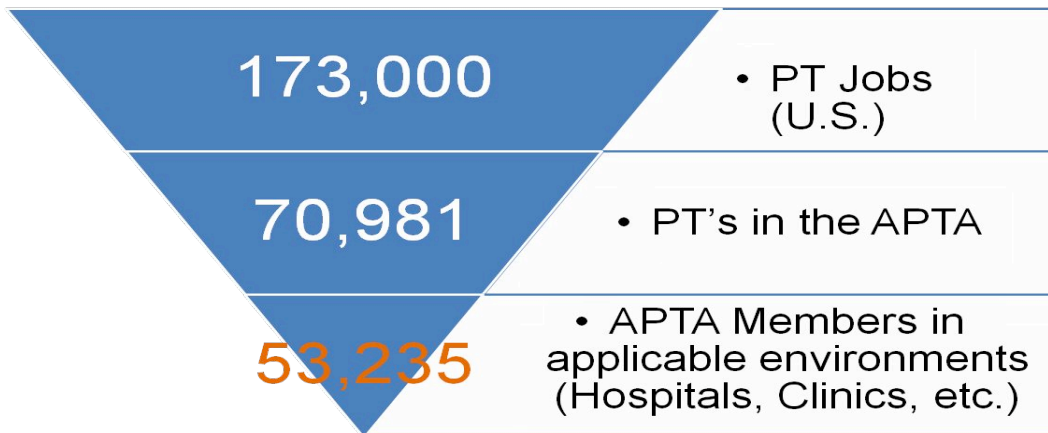


The entire package will be priced at approximately \$6,500. This pricing will place us between our low end competitor, TyQ Corp, and our high end competitor, Innovative Sports Training. Our product will provide all of the necessary functionality of the higher end product with a price that is just over the lower end product.

An FDA consultant has determined that the MAP is a Class II device exempt from 510(k) premarket notification after his preliminary analysis. For more information on the device's FDA classification, refer to the appendices.

Target Market and Customers

According to the Bureau of Labor Statistics, there are 173,000 physical therapists in the United States. Of these we want to target those professionals that participate in a reputable industry organization such as the American Physical Therapy Association (APTA). Members of the APTA are the most interested in technological advances and are constantly seeking to improve the efficiency of their practices. The APTA has approximately 70,000 certified members. Based on demographic data from the APTA 2006 annual report, approximately 77% of their members work in environments applicable to our product (hospitals and outpatient clinics). As a result, SMI's primary target market is approximately 53,000 physical therapists.



The physical therapy market is appropriate as a primary market because physical therapists frequently take ROM measurements to diagnose and treat their patients. Physical therapists and their technicians spend a large amount of time making these measurements because they are crucial in monitoring the progress of a patient. Clinicians are burdened with manual data entry and hours of paperwork. Some of the physical therapists that we interviewed have reported that ROM measurements and the associated paperwork require approximately ten hours per week. The majority of this time is spent on the paperwork, and as a result, we estimate that this time can be reduced by up to 50%.

According to the Bureau of Labor Statistics, the number of physical therapists is expected to grow 27% from 2006-2016. This is fueled by a growing population of Baby Boomers, who are living longer and more active lifestyles, and as a result are requiring more rehabilitative treatment. According to Patterson Medical's FY07 10-K, American's over 65 are expected to grow to 54 Million in 2020 and 79 Million in 2050. This substantial growth has created an opportunity to sell MAP into a rapidly expanding industry.

Secondary and tertiary markets include rheumatology, orthopedics, sports medicine, neurology and academic research. These markets also require easy and accurate ROM measurements in addition to the other assessment features offered by our software. The MAP software package will be customized to address the specific needs of each specialized rehabilitation field and can increase our market universe to more than the 53,000 physical therapists in our target market.

Business Model

Superior Medical Instruments will earn a profit by assembling the MAP and selling it through established distribution channels. The software development will be outsourced to an experienced software development firm. The motion sensing hardware will be purchased in bulk from Polhemus, Ascension Technologies, or a variety of other suppliers and shipped to SMI's assembly center. At the assembly center the motion sensing technology will be combined with a computer and software will be loaded onto it by an experienced technicians. The MAP will then be safely packaged and shipped to its end user.

The cost of producing a single MAP will be approximately \$2,500. The product will be sold at a price of \$6,500, resulting in a margin of \$4,000. The company will generate supplementary and recurring revenues through items such as technical support and product accessories. Product accessories include disposable adhesive pads and an advanced motion glove used for the assessment of a hand's ROM. Additional sources of revenue will include extended warranties and software updates.

Sales will be executed through companies that supply hospitals and clinics with medical equipment. One such company is Patterson Medical. Their branch, Sammons Preston, is the largest supplier to physical therapy clinics in the United States. The MAP will also be accessible through medical catalogs and our own online distribution site. In addition, the MAP will be shown in trade shows to increase market and customer awareness. SMI's goal is to penetrate twenty-five percent of the primary target market by the fifth year of operations.

The first sales of the product will be made to the University of Arizona's UMC Arthritis Center and Athlon Physical Therapy, both of which are located in Tucson, Arizona.

Competitive Advantage

SMI has identified three potential competitors for the MAP: the goniometer, TyQ Corporation, and Innovative Sports Training Inc. The MAP's advantages over these competitors include time savings, increased insurance reimbursement and improved measurement accuracy.

Goniometer

The goniometer is an outdated tool that has many problems, the most important of which is that measurements must be manually recorded in patients' file which is an inefficient use of physicians' time and clinics' resources. It has also been proven to be up to ten degrees inaccurate when measuring ROM.

TyQ Corporation & Innovative Sports Training

SMI also faces two direct competitors: Ty-Q Corporation and Innovative Sports Training Inc. Ty-Q's device, the Q-ROM, is limited to spinal ROM measurements and is only capable of tracking two-dimensional movement. Innovative Sports Training's software is difficult to use and is too complex for clinical use. Neither of these competitors have an automated data entry system.

Superior Medical Instruments

Superior Medical Instruments provides a solution to these problems with the Motion Assessment Package (MAP). The MAP automatically saves measurements into patients' charts and generates progress reports. Based on interviews conducted with practicing physical therapists, clinicians spend approximately ten hours per week on taking ROM measurements and doing the associated paperwork. Our research trials have shown that the MAP can reduce the time spent on these responsibilities by 50%, saving clinicians approximately five hours per week. The MAP's ability to automatically input data and print out progress reports can be used to substantiate patient progress for insurance reimbursements as well.

*Refer to the ROM White Paper Feedback in the appendix for more information regarding these interviews.

The MAP goes beyond these advantages with its ability to render three-dimensional images on the product's screen with data from previous examinations. These images can be overlapped, showing progress over a period of time.

In addition, the MAP's range of motion measurements are the most accurate through the use of electromagnetic technology, rather than inclinometers used by Ty-Q. It is also capable of assessing any joint in the body in all three dimensions. Last, the MAP's user friendly software makes it the easiest to use, by only outputting measurements that clinicians desire.

Also, SMI has partnered with the University Medical Center's Arthritis Center at the University of Arizona. Since the MAP is being co-developed by a credible institution, our product will be more accepted than our competitors. Physicians at this institution have already begun testing the product and will bring credibility to the venture.

Environment and Context

The primary market for the MAP is physical therapy. Physical therapists and their technicians spend a significant amount of time making ROM measurements. These measurements are crucial to properly monitor progress through treatments.

According to the Bureau of Labor Statistics, employment of physical therapists is expected to grow from 173,000 in 2006 to 220,000 by 2016. This significant growth in physical therapy is due to the large aging population. In 1990, 31.1 million Americans were 65 years of age or older. By 2020, this population is projected to increase to 54 million according to Patterson Medical's FY07 10-K. This is supported by the ATPA's projection that by 2050 the elderly population will number about 79 million.

Two competitors in the industry that we have used as benchmarks are TyQ Corporation and Innovative Sports Training Inc. The presence of competitors in the industry validates the need for improved ROM assessment. TyQ concentrates on the chiropractic market only due to its limited ability to measure cervical, thoracic, and lumbar ROM only. The product they sell uses a different technology from ours: inclinometers. This technology is limited in its use, therefore preventing any other ROM measurements to be made with the sensors. TyQ offers two versions of their product, priced at \$2,000 and \$2,800 per unit.

Innovative Sports Training Inc. concentrates on the athletic performance enhancement market. They sell products capable of using multiple motion tracker technologies including inclinometers, optical trackers, and magnetic trackers. They offer a Physical Therapy Suite that can be installed into the hardware they provide. Hardware costs vary depending on the number of sensors desired, however the Physical Therapy Suite software costs \$7,500 alone.

*Refer to the Competitor Analysis in the appendix for a further breakdown and description SMI's major competitors.

Marketing and Sales Strategy

Raising awareness of our product will be achieved using four strategies: magazine and journal advertisements, trade shows, research studies and SuperiorMedical.com.

Magazine and Journal Advertisements

SMI will advertise in medical journals including the *Physical Therapy Journal* by the APTA and the *Journal of Orthopedic & Sports Physical Therapy* (JOSPT). The *Physical Therapy Journal* is the most popular journal in the field and is issued monthly, reaching over 69,000 individuals and institutions. The JOSPT is also a monthly issued journal that reaches over 23,500 individuals and institutions including clinicians, practitioners, and researchers in the physical therapy field.

Trade Shows

Another way we will raise awareness of the MAP is to attend trade shows including the *Annual Conference and Exposition of the American Physical Therapy Association* and the *Combined Sections Meeting by the American Physical Therapy Association*. Our intention is to provide product demonstrations at the trade shows and familiarize professionals with our product.

Research Studies

We also plan to provide the MAP at a discount to research institutions for their studies in hopes that its reputation of time saving and ease of use will spread. It is our goal that the MAP will someday become the gold standard for assessing range of motion.

SuperiorMedical.com

SuperiorMedical.com is another way that we will raise awareness for the MAP. The website will have everything a potential customer would want to know about the product including videos that demonstrate how the MAP is used. There will also be a way to purchase the product directly from SMI through the website.

Our business's sales strategy is to hire a distribution company, which has already established relationships with customers in our target markets.

Patterson Medical is such a company. Their branch, Sammons Preston, focuses on rehabilitation, assistive and splinting products. Their catalog and sales force is one of the largest in the industry and they have established relationships with occupational

therapists and physical therapists. Since we do not yet have these relationships, it is most appropriate for our small company to outsource these services to an established distribution firm such as Patterson Medical.

Technology Strategies

The actual hardware of the device is currently enclosed in a small accessible housing box while the transmitter and sensors must remain outside for functional purposes. Atop the housing unit is a tablet personal computer for easy user interaction and stand-alone capability. Production units will exhibit physical features that both preserve functionality of the technology and the practicality needed in everyday medical rehabilitation offices. Production units will be customizable and can include wireless sensors and a telescopic transmitting antenna depending on the clinician's needs.

Additional software development will be the major requirement to take this product to market. Software features will evolve as we gain feedback from focus groups with product interaction. Our ongoing relationship with the Arizona Arthritis Center will also be of significant value as their clinical research continues to guide the MAP's product and software development. These clinical research activities as well as focus groups will be an integral part of proving the product and the technologies' usefulness in the medical field.

Protection of the firm's intellectual property will come through software copy-writing, trade-marking of products and features, and patenting of all unique software assessment algorithms.

Management Team

SMI's management team is comprised of four senior University of Arizona students. The General Manager, Jason Berg, has 5 years of experience in corporate business and possesses strong leadership and communication skills. Arvin Ahmadi, the Marketing Manager, is an honors student who has work experience in athletic training. The Product and Operations Manager, Paul Swift, has an engineering education and over 3 years experience in orthopedic medicine. Kelly Olson, the Finance Manager, is also an honors student who has work experience in financial analysis and the computer hardware industry. The team member's complimentary skills and core competencies will help SMI successfully launch and maintain the venture.

Superior Medical Instruments is also supported by experienced professionals. Our advisory panel includes: Robert Morrison, Executive Director of the Desert Angels;

Grant Senner MD, Director of Patient Services and Business Development at Athlon Physical Therapy; and Paul Howe, Computing Manager at the Arizona Arthritis Center. Additional advisory panelists include a variety of professionals that have expertise in patent law, intellectual property protection, medical device consulting, FDA approval, rheumatology, and orthopedic surgery.

Development Plan

Superior Medical Instruments is now a registered trade name in the state of Arizona. SMI will be a Limited Liability Company. The current employees are limited to the management team, with foreseeable expansion of 1-2 employees every six months through year five. SMI will be able to maintain a relatively low employment level due to outsourcing to manufacturers and established distributors.

Software development will constitute approximately twenty-five percent of the start-up costs. The software development will be outsourced to an experienced design firm and will be maintained internally by a software engineer, hired within the first few months. Customer service, including technical issues, will initially be handled by the software engineer. Future software developments will be assigned to in-house designers or outsourced back to the original design company.

At launch, Superior Medical Instruments will be prepared to focus on the physical therapy market nationwide. SMI intends to penetrate our secondary markets by year two with international market expansion goals by year three.

The choice to supply to the physical therapy market is supported by our primary and secondary market research (see appendices). Continued relationship development with strategic partners in the medical research environment is a strong competitive advantage and ongoing goal of our firm. From this, Superior Medical Instruments will gain acceptance through publications and develop our reputation as the new standard in restricted mobility assessment.

Risks and Contingencies

Due to the multiple medical fields which require motion tracking and range of motion assessment, there is the opportunity for our technology to be tailored to a variety of different markets with minor modifications to the software. While there is a great opportunity for our venture, it is imperative to understand the potential risks so that they may be adequately addressed and mitigated.

The primary risk that our company faces is competition and difficulty in securing a patent for our intellectual property. The underlying technology of this product is over 20 years old and securing a patent is not feasible. With intellectual property risks we could face competition from larger established firms who possess economies of scale, experienced software engineers, and established distribution channels. Of these established firms, we will likely face competition from two main companies, TyQ Corporation and Innovative Sports Training. The core focus of these companies is similar to Superior Medical Instruments, but they possess few software suites applicable to our markets. SMI's distinction over these established competitors is the profile of our target customer. The needs of physical therapists and rheumatologists have not yet been affordably met. Our entrance into these markets could provide us with a first mover advantage. The MAP could become the standard for range of motion measurements and as such, our brand or product name could become synonymous with restricted mobility assessment.

There also exists the inherent threat, as with most technological products, that advances in technology could result in cheaper and more accurate hardware. This would allow an entrant to potentially gain a large portion of our market share if they developed a more cost efficient solution. However, if this sensing technology is not proprietary then SMI could easily adapt their software to work with this technology.

Operational Strategies

Superior Medical Instruments will outsource the manufacturing and sales of our products. Polhemus, Ascension Technologies, or a variety of other suppliers will manufacture the electromagnetic motion tracking system and will ship the components to our assembly center. Sales will occur through established distribution channels in the physical therapy market, online at SuperiorMedical.com, and also at industry tradeshows. Superior Medical Instruments is currently discussing a sales partnership with Patterson Medical, one of the largest equipment suppliers to the physical therapy industry. Additional products created by SMI, such as sensor adhesives and other consumables, will be available online and also through our distributors. All technical support related to the MAP hardware and software will be provided by SMI's technical team. The MAP will include a one year warranty from date of purchase and during this time all technical support and repairs/replacements will be free to the customer. After this period expires technical support and repairs will operate on a pay per use basis. SMI will raise awareness for its products through clinical research and other industry publications.

Assumptions for Pro Forma Financial Statements

The assumptions used in the 'pro forma' financial statements to forecast sales were influenced from data gathered on market size and competition in addition to forecasts related to market penetration derived from comparable companies in our target markets. Sales projections assume that we will enter into a variety of markets in year two and will proceed with international sales at the end of year three. Due to the use of range of motion in a variety of fields, our product can be easily adapted to serve the needs of various medical professions. Assumptions related to cost of goods sold for our primary product were based on the costs to create the prototype. Federal, State, and Payroll taxes were based on information found online including the IRS website and also the Arizona Department of Revenue.

Investment Funds Sought and Use of Proceeds

Superior Medical Instruments will be organized as a Limited Liability Company. Based on a 'pro forma' valuation, Superior Medical Instruments has a pre-money valuation of \$1,800,000. SMI will be seeking \$600,000 in early stage funding to supplement the \$150,000 that will be invested by the founders, for a total of \$750,000. SMI intends to receive the \$600,000 in funding spread across three tranches:

- Month 1: \$350,000
- Month 4: \$150,000
- Month 7: \$100,000

This will allow the management of Superior Medical Instruments and its investors to set milestones at which additional capital will be injected.

These funds will be used for the following purposes in Year 1:

Employee Expenses

Salaries and wages	\$ 260,000
Employee benefits	\$ 38,000
Payroll taxes	\$ 23,400
Total Employee Expenses	\$ 321,400

Operating Expenses

Software Development	\$ 200,000
Rent	\$ 36,000
Misc. Business Exp.	\$ 19,500
Insurance (Prop+Liab)	\$ 10,000

Marketing Supplies	\$ 22,000
Total Operating Expenses	\$ 287,500

Hard Assets	
Assembly Tools	\$ 20,000
Office Equipment	\$ 20,000
Computers	\$ 14,000
Furniture	\$ 8,000
Total Hard Assets	\$ 62,000

Working Capital	\$ 79,100
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Total Cash Outflows	\$ 750,000
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Cost of goods sold for year one is projected to be \$260,000 and part of the inventory purchases will be financed by the sale of our product. Based on 'pro forma' financial statements, SMI will experience its lowest cash position in month three with a cash balance of approximately \$130,000 (approximately a three months' supply at the average cash burn rate).

**Superior Medical Instruments
Projected Income Statements (\$s)**

	Year 1	Year 2	Year 3	Year 4	Year 5
NET SALES	561,603	2,541,459	6,051,098	10,445,247	15,627,310
TOTAL COST OF SALES	261,593	1,203,463	2,685,431	4,395,886	6,264,786
GROSS MARGIN	300,010	1,337,996	3,365,667	6,049,361	9,362,524
TOTAL OPERATING EXPENSES	624,473	568,763	857,939	1,101,312	1,333,654
OPERATING PROFIT (LOSS) BEFORE INTEREST AND TAXES	(324,463)	769,233	2,507,728	4,948,049	8,028,870
DISTRIBUTION FOR TAXES	-	(155,670)	(927,859)	(2,078,181)	(3,372,125)
NET PROFIT (LOSS)	<u>(324,463)</u>	<u>613,564</u>	<u>1,579,868</u>	<u>2,869,868</u>	<u>4,656,745</u>
EBITDA	(314,563)	781,367	2,527,332	4,977,013	8,074,384

Harvest Plan

Superior Medical Instruments wishes to realize cash returns to investors as soon as possible. As such, management is open to either an IPO or an acquisition by a major medical instrument manufacturer. Recent acquirers in the medical device industry include Johnson & Johnson, Patterson Medical, U.S. Surgical and Boston Scientific. We believe that an acquisition by Patterson Medical would provide the greatest synergies due to their established distribution channels in the physical therapy market. In the event there is a lack of credit financing or an available IPO market, Superior Medical Instruments is also willing to negotiate arranged dates at which shares will be repurchased from investors or a dividend paid.

Summary

SMI's product portfolio is comprised of instruments that are used to measure the range of motion in an individual's joints. Superior Medical Instruments, formed as an LLC, is seeking proposed funding of \$600,000. The primary use of funds is software development. In addition, funds will also be used to purchase hard assets such as computers, assembly tools, and furniture, and for expenses such as employee salaries and marketing fees. Superior Medical Instruments hopes to realize cash returns to its investors as soon as possible and as such are open to an IPO, acquisition, or predetermined dividend payout/stock repurchase.

Superior Medical Instruments is well poised to achieve success in the rapidly growing physical therapy market. This industry's growth is fueled by a rapidly expanding elderly population, an increase in active lifestyles, and an increase in the number of implantation and reconstructive surgeries. While Superior Medical Instruments faces competition in this market, we intend to enter at a moderate price point, providing superior technology and increased features compared to our low cost competitors, and significant value compared to our high cost competitors.

As a result of our ability to sell our products soon after funding, we do not anticipate any additional rounds of dilutive funding. Due to our low fixed-cost structure, Superior Medical Instruments projects that it will only need to sell 600 units by our third year in order to break even. As a result of zero leverage and low fixed costs, Superior Medical Instruments does not possess significant cash flow risk.

After extensive analysis Superior Medical Instruments has determined a pre-money valuation of \$1,800,000. This valuation was determined through the use of multiple

valuation methods and has given consideration to the current economic climate. We believe that our business is an excellent way to invest in this rapidly growing industry and we project that our investors will realize significant returns.

Appendices and Research

Competitor Analysis

TyQ Corporation

TyQ concentrates on the chiropractic market only due to its limited ability to measure cervical, thoracic, and lumbar ROM only. Their product, the Q-ROM, uses inclinometers to make these measurements. This technology is limited in its use, therefore preventing any other ROM measurements to be made with the sensors.

TyQ offers two versions of their product, priced at \$2,000 and \$2,800 per unit. The \$2,800 unit includes a laptop that attaches to the other hardware. The Q-ROM is available for purchase on TyQ's website or through phone purchases.

Innovative Sports Training, Inc.

Innovative Sports Training Inc. concentrates on the athletic performance enhancement market. They sell products capable of using multiple motion tracker technologies including inclinometers, optical trackers, and magnetic trackers. Therefore, a customer is capable of purchasing a product with a great degree of accuracy; however, the customer may opt to use a more basic technology that is not as accurate such as inclinometers. Their products can be available through the company directly only.

They offer a Physical Therapy Suite that can be installed into the hardware they provide. Hardware costs vary depending on the number of sensors desired, however the Physical Therapy Suite software costs \$7,500 alone. In order to use the Physical Therapy Suite, it is necessary to purchase the standard software and hardware which can range between approximately \$5,000 and \$35,000, depending on the number of sensors desired.

FDA Compliance Evaluation

Regulatory Decision Path for: UA ROM Medical Device Business Model

Performed by: Joe Curtis, RAC

Date of Findings: November 20, 2008

Overview:

A group of University of Arizona business students have identified a medical device that would enable a non-physician health care employee to perform range of motion (ROM) measurements on patients while recording the measurements automatically into a computer program on a conventional PC unit. Typically, a physician would conduct such a ROM assessment with a goniometer and record their findings respectively.

As part of their due diligence in constructing their business plan, an assessment was requested to determine the regulatory decision path (RDP) to market such a technology. Mr. Joe Curtis, RAC of The Curtis Group, LLC was contacted to make this initial assessment.

Product Identification & Classification:

A review the Code of Federal Regulations, specifically 21 CFR 888.1500 and 21 CFR 888.1520 identifies the goniometer as an AC powered, and non-powered respectively, device intended to evaluate joint function by measuring and recording ranges of motion, acceleration, or forces exerted by a joint.

This device is a Class I and exempt from premarket notification & clearance by the Food & Drug Administration and is thereby subject to General Controls by the sponsor/manufacturer.

The UA ROM device, at its current design and configuration, utilizes electrodes to convey the motion information to a PC unit. Further examination of the CFR identifies a goniometer with electrodes (also in 21 CFR 888.1500) as an AC powered, or battery powered, device intended to evaluate joint function by measuring and recording ranges of motion, acceleration, or forces exerted by a joint. The Class II (special controls) goniometer uses transcutaneous adhesive electrode lead wires and patient cables to transmit and record patient data.

This type of Class II device is 510(k) Exempt from premarket notification & clearance by the Food & Drug Administration. Because it is a Class II device, special controls will apply. For example, FDA down-classified wire leads, electrodes, etc. to a premarket clearance or 510(k) exempt status but expects the sponsor/manufacturer to comply with performance standards for such wire leads and cables along with General Controls that include a functional Quality Systems Management of the sponsor/manufacturer's Current Good Manufacturing Practices (cGMP).

Product identification and classification was performed with the currently available Code of Federal Regulations and confirmed with FDA's 510(k) Exempt listings updated as recent as 11/10/2008.

Competitive Review:

The students supplied two known companies with range of motion technology;

1. TyQ Corporation
2. Polhemus, Inc.

A review of FDA's 510(k) and PMA databases revealed no 510(k) Premarket Notification Clearances or Premarket Approvals for either company.

Regulatory Decision Path Assessment:

The UA ROM device as stated and reviewed appears to function as a goniometer with electrodes or cables to transmit and record patient data. The following is the RDP for this technology:

Classification: Class II

Submission Type: 510(k) Exempt

Controls: Special Controls (adherence to General Controls and Special Controls such as standards for electrodes, wire leads and cables).



Pro Forma Income Statement (Year 1, Monthly)

Superior Medical Instruments Projected Income Statements (\$s)

Month	1	2	3	4	5	6	7	8	9	10	11	12
SALES												
Gross Sales	-	-	-	16,478	43,680	58,275	61,227	64,333	71,481	74,960	86,458	90,384
Returns and Allowances	-	-	-	(165)	(437)	(583)	(612)	(643)	(715)	(750)	(865)	(904)
NET SALES	-	-	-	16,313	43,243	57,692	60,615	63,690	70,766	74,210	85,593	89,480
COST OF SALES												
Materials	-	-	-	6,493	17,125	23,611	24,647	25,733	29,198	30,399	36,316	37,655
Labor	-	-	-	-	-	150	152	153	300	303	600	606
Taxes and Benefits	-	-	-	-	-	36	36	37	72	73	144	145
Other	-	-	-	824	2,184	2,864	3,011	3,166	3,474	3,647	4,123	4,317
TOTAL COST OF SALES	-	-	-	7,317	19,309	26,661	27,846	29,088	33,044	34,422	41,183	42,724
GROSS MARGIN	-	-	-	8,996	23,934	31,032	32,769	34,602	37,722	39,788	44,410	46,756
OPERATING EXPENSES												
Salaries and wages	21,667	21,667	21,667	21,667	21,667	21,667	21,667	21,667	21,667	21,667	21,667	21,667
Payroll taxes	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950
Employee benefits	3,167	3,167	3,167	3,167	3,167	3,167	3,167	3,167	3,167	3,167	3,167	3,167
Depreciation	-	900	900	900	900	900	900	900	900	900	900	900
Bad debt expense	-	-	-	165	437	583	612	643	715	750	865	904
Rent	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Marketing Supplies	-	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Misc. Business Exp.	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	3,000
Insurance (Prop+Liab)	833	833	833	833	833	833	833	833	833	833	833	833
Software Development (1 time)	200,000	-	-	-	-	-	-	-	-	-	-	-
Additional Operating Expenses	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OPERATING EXPENSES	232,117	35,017	35,017	35,181	35,453	35,599	35,629	35,660	35,731	35,766	35,881	37,421
OPERATING PROFIT (LOSS) BEFORE INTEREST AND TAXES	(232,117)	(35,017)	(35,017)	(26,185)	(11,519)	(4,568)	(2,860)	(1,058)	1,991	4,022	8,529	9,336
INTEREST EXPENSE	-	-	-	-	-	-	-	-	-	-	-	-
PROFIT (LOSS) BEFORE TAXES	(232,117)	(35,017)	(35,017)	(26,185)	(11,519)	(4,568)	(2,860)	(1,058)	1,991	4,022	8,529	9,336
DISTRIBUTION FOR TAXES	-	-	-	-	-	-	-	-	-	-	-	-
NET PROFIT (LOSS)	(232,117)	(35,017)	(35,017)	(26,185)	(11,519)	(4,568)	(2,860)	(1,058)	1,991	4,022	8,529	9,336



Pro Forma Income Statement (Year 2, Monthly)

Superior Medical Instruments Projected Income Statements (\$s)

Month	13	14	15	16	17	18	19	20	21	22	23	24
SALES												
Gross Sales	110,148	123,556	138,106	153,883	170,974	209,747	230,832	242,346	266,293	292,120	306,829	322,297
Returns and Allowances	(1,101)	(1,236)	(1,381)	(1,539)	(1,710)	(2,097)	(2,308)	(2,423)	(2,663)	(2,921)	(3,068)	(3,223)
NET SALES	109,047	122,320	136,725	152,344	169,265	207,649	228,524	239,922	263,630	289,199	303,761	319,074
COST OF SALES												
Materials	44,945	49,779	54,991	60,604	66,646	80,590	87,929	91,712	99,954	108,788	113,550	118,532
Labor	3,499	3,913	4,361	4,848	5,375	6,569	7,219	7,575	8,313	9,108	9,562	10,039
Taxes and Benefits	840	939	1,047	1,164	1,290	1,577	1,733	1,818	1,995	2,186	2,295	2,409
Other	5,303	5,972	6,697	7,484	8,336	10,273	11,325	11,899	13,094	14,383	15,116	15,887
TOTAL COST OF SALES	54,587	60,603	67,096	74,100	81,647	99,009	108,205	113,003	123,355	134,466	140,523	146,868
GROSS MARGIN	54,459	61,717	69,629	78,244	87,617	108,640	120,318	126,920	140,275	154,733	163,238	172,206
OPERATING EXPENSES												
Salaries and wages	23,833	23,833	23,833	23,833	23,833	23,833	26,700	31,700	31,700	31,700	31,700	31,700
Payroll taxes	2,145	2,145	2,145	2,145	2,145	2,145	2,403	2,853	2,853	2,853	2,853	2,853
Employee benefits	3,583	3,583	3,583	3,583	3,583	3,583	3,870	4,370	4,370	4,370	4,370	4,370
Depreciation	900	900	900	900	900	900	900	1,167	1,167	1,167	1,167	1,167
Bad debt expense	1,101	1,236	1,381	1,539	1,710	2,097	2,308	2,423	2,663	2,921	3,068	3,223
Rent	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Marketing Supplies	2,000	3,000	3,000	3,000	3,000	3,000	4,500	4,500	4,500	4,500	4,500	4,500
Misc. Business Exp.	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Insurance (Prop+Liab)	833	833	833	833	833	833	833	833	833	833	833	833
Software Development (1 time)	-	-	-	-	-	-	-	-	-	-	-	-
Additional Operating Expenses	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OPERATING EXPENSES	40,396	41,531	41,676	41,834	42,005	42,392	47,515	53,846	54,086	54,344	54,491	54,646
OPERATING PROFIT (LOSS) BEFORE INTEREST AND TAXES	14,063	20,187	27,953	36,410	45,612	66,248	72,803	73,073	86,189	100,389	108,746	117,560
INTEREST EXPENSE	-	-	-	-	-	-	-	-	-	-	-	-
PROFIT (LOSS) BEFORE TAXES	14,063	20,187	27,953	36,410	45,612	66,248	72,803	73,073	86,189	100,389	108,746	117,560
DISTRIBUTION FOR TAXES	-	-	-	-	-	(21,054)	(22,436)	(22,436)	(22,436)	(22,436)	(22,436)	(22,436)
NET PROFIT (LOSS)	14,063	20,187	27,953	36,410	45,612	45,194	50,367	50,637	63,753	77,953	86,310	95,124



Pro Forma Income Statement (Years 3 and 4, Quarterly)

Superior Medical Instruments Projected Income Statements (\$s)

	Year 3						Year 4					
	Qtr1	Qtr2	Qtr3	Qtr4	Total	% Sales	Qtr1	Qtr2	Qtr3	Qtr4	Total	% Sales
SALES												
Gross Sales	1,176,007	1,383,441	1,633,429	1,919,344	6,112,220	101.0%	2,113,133	2,447,367	2,793,230	3,197,025	10,550,754	101.0%
Returns and Allowances	(11,760)	(13,834)	(16,334)	(19,193)	(61,122)	-1.0%	(21,131)	(24,474)	(27,932)	(31,970)	(105,508)	-1.0%
NET SALES	1,164,247	1,369,606	1,617,094	1,900,150	6,051,098	100.0%	2,092,002	2,422,893	2,765,298	3,165,054	10,445,247	100.0%
COST OF SALES												
Materials	425,968	492,064	570,648	658,904	2,147,584	35.5%	713,822	812,953	912,524	1,027,590	3,466,888	33.2%
Labor	36,560	42,954	50,658	59,467	189,638	3.1%	65,442	75,739	86,394	98,832	326,408	3.1%
Taxes and Benefits	8,774	10,309	12,158	14,272	45,513	0.8%	15,706	18,177	20,735	23,720	78,338	0.7%
Other	58,104	68,454	80,932	95,205	302,695	5.0%	104,872	121,560	138,828	158,993	524,252	5.0%
TOTAL COST OF SALES	529,406	613,781	714,395	827,849	2,685,431	44.4%	899,842	1,028,429	1,158,481	1,309,135	4,395,886	42.1%
GROSS MARGIN	634,841	755,825	902,699	1,072,302	3,365,667	55.6%	1,192,160	1,394,464	1,606,817	1,855,919	6,049,361	57.9%
OPERATING EXPENSES												
Salaries and wages	95,100	112,700	136,500	140,500	484,800	8.0%	140,500	148,500	152,500	164,500	606,000	5.8%
Payroll taxes	8,559	10,143	12,285	12,645	43,632	0.7%	12,645	13,365	13,725	14,805	54,540	0.5%
Employee benefits	13,110	14,870	17,250	17,650	62,880	1.0%	18,250	19,050	19,450	20,650	77,400	0.7%
Depreciation	4,519	5,029	5,029	5,029	19,605	0.3%	6,529	7,279	7,279	7,879	28,964	0.3%
Bad debt expense	11,760	13,834	16,334	19,193	61,122	1.0%	21,131	24,474	27,932	31,970	105,508	1.0%
Rent	13,500	13,500	13,500	13,500	54,000	0.9%	13,500	13,500	18,000	18,000	63,000	0.6%
Marketing Supplies	13,500	13,500	13,500	13,500	54,000	0.9%	16,500	18,000	18,000	18,000	70,500	0.7%
Misc. Business Exp.	14,000	16,500	16,500	16,500	63,500	1.0%	16,500	16,500	24,000	24,000	81,000	0.8%
Insurance (Prop+Liab)	3,600	3,600	3,600	3,600	14,400	0.2%	3,600	3,600	3,600	3,600	14,400	0.1%
Software Development (1 time)	-	-	-	-	-	0.0%	-	-	-	-	-	0.0%
Additional Operating Expenses	-	-	-	-	-	0.0%	-	-	-	-	-	0.0%
TOTAL OPERATING EXPENSES	177,648	203,676	234,498	242,117	857,939	14.2%	249,155	264,267	284,486	303,404	1,101,312	10.5%
OPERATING PROFIT (LOSS) BEFORE INTEREST AND TAXES	457,193	552,149	668,201	830,185	2,507,728	41.4%	943,005	1,130,197	1,322,331	1,552,515	4,948,049	47.4%
INTEREST EXPENSE	-	-	-	-	-	0.0%	-	-	-	-	-	0.0%
PROFIT (LOSS) BEFORE TAXES	457,193	552,149	668,201	830,185	2,507,728	41.4%	943,005	1,130,197	1,322,331	1,552,515	4,948,049	47.4%
DISTRIBUTION FOR TAXES	(231,965)	(231,965)	(231,965)	(231,965)	(927,859)	-15.3%	(519,545)	(519,545)	(519,545)	(519,545)	(2,078,181)	-19.9%
NET PROFIT (LOSS)	225,228	320,184	436,236	598,220	1,579,868	26.1%	423,460	610,652	802,786	1,032,970	2,869,868	27.5%

Pro Forma Income Statement (Year 5, Quarterly)

Superior Medical Instruments Projected Income Statements (\$s)

	Year 5					
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total	% Sales
SALES						
Gross Sales	3,582,085	3,816,225	4,063,264	4,323,588	15,785,161	101.0%
Returns and Allowances	(35,821)	(38,162)	(40,633)	(43,236)	(157,852)	-1.0%
NET SALES	3,546,264	3,778,063	4,022,631	4,280,352	15,627,310	100.0%
COST OF SALES						
Materials	1,133,180	1,188,802	1,246,438	1,306,074	4,874,494	31.2%
Labor	110,694	117,913	125,529	133,554	487,691	3.1%
Taxes and Benefits	26,567	28,299	30,127	32,053	117,046	0.7%
Other	178,220	189,900	202,224	215,212	785,556	5.0%
TOTAL COST OF SALES	1,448,661	1,524,914	1,604,318	1,686,893	6,264,786	40.1%
GROSS MARGIN	2,097,603	2,253,149	2,418,313	2,593,459	9,362,524	59.9%
OPERATING EXPENSES						
Salaries and wages	170,050	170,050	176,050	179,050	695,200	4.4%
Payroll taxes	15,305	15,305	15,845	16,115	62,568	0.4%
Employee benefits	21,205	21,205	21,805	22,105	86,320	0.6%
Depreciation	10,014	11,286	12,007	12,207	45,514	0.3%
Bad debt expense	35,821	38,162	40,633	43,236	157,852	1.0%
Rent	18,000	18,000	18,000	18,000	72,000	0.5%
Marketing Supplies	18,000	18,000	18,000	18,000	72,000	0.5%
Misc. Business Exp.	24,000	33,000	33,000	33,000	123,000	0.8%
Insurance (Prop+Liab)	4,800	4,800	4,800	4,800	19,200	0.1%
Software Development (1 time)	-	-	-	-	-	0.0%
Additional Operating Expenses	-	-	-	-	-	0.0%
TOTAL OPERATING EXPENSES	317,195	329,807	340,139	346,513	1,333,654	8.5%
OPERATING PROFIT (LOSS) BEFORE INTEREST AND TAXES	1,780,409	1,923,342	2,078,173	2,246,946	8,028,870	51.4%
INTEREST EXPENSE	-	-	-	-	-	0.0%
PROFIT (LOSS) BEFORE TAXES	1,780,409	1,923,342	2,078,173	2,246,946	8,028,870	51.4%
DISTRIBUTION FOR TAXES	(843,031)	(843,031)	(843,031)	(843,031)	(3,372,125)	-21.6%
NET PROFIT (LOSS)	937,377	1,080,310	1,235,142	1,403,915	4,656,745	29.8%

Pro Forma Statement of Cash Flows (Year 1, Monthly)

Superior Medical Instruments

Projected Cash Flows (\$s)

Month	1	2	3	4	5	6	7	8	9	10	11	12
CASH FLOWS FROM OPERATIONS												
Net income	(232,117)	(35,017)	(35,017)	(26,185)	(11,519)	(4,568)	(2,860)	(1,058)	1,991	4,022	8,529	9,336
Adjustments to reconcile net income to cash flows from operations												
Depreciation	-	900	900	900	900	900	900	900	900	900	900	900
Changes in certain assets and liabilities												
Accounts receivable	-	-	-	(16,313)	(31,009)	(21,182)	(6,535)	(3,806)	(7,845)	(5,213)	(12,244)	(6,733)
Inventory	-	(3,246)	(11,809)	(13,875)	(7,004)	(1,579)	(2,818)	(4,066)	(4,160)	(6,587)	(4,984)	(9,707)
Other current assets	-	-	-	-	-	-	-	-	-	-	-	-
Accounts payable	-	1,623	4,281	4,280	1,881	530	1,138	1,167	1,780	1,814	2,157	3,031
Other current payables	-	-	-	-	-	-	-	-	-	-	-	-
Revolving line of credit	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL CASH FLOWS FROM OPERATIONS	(232,117)	(35,740)	(41,644)	(51,194)	(46,751)	(25,898)	(10,175)	(6,863)	(7,334)	(5,063)	(5,642)	(3,173)
CASH FLOWS FROM INVESTING ACTIVITIES												
Purchase of equipment	(62,000)	-	-	-	-	-	-	-	-	-	-	-
Other Assets	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL CASH FLOWS FROM INVESTING ACTIVITIES	(62,000)	-	-	-	-	-	-	-	-	-	-	-
CASH FLOW BEFORE FINANCING	(294,117)	(35,740)	(41,644)	(51,194)	(46,751)	(25,898)	(10,175)	(6,863)	(7,334)	(5,063)	(5,642)	(3,173)
CASH FLOWS FROM FINANCING ACTIVITIES												
Borrowing of long-term debt	-	-	-	-	-	-	-	-	-	-	-	-
Repayment of long-term debt	-	-	-	-	-	-	-	-	-	-	-	-
CASH FLOW BEFORE MEMBERS' CONTRIBUTIONS	(294,117)	(35,740)	(41,644)	(51,194)	(46,751)	(25,898)	(10,175)	(6,863)	(7,334)	(5,063)	(5,642)	(3,173)
Members' Capital Contributions	500,000	-	-	150,000	-	-	100,000	-	-	-	-	-
Members' Interest Repurchased	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL CASH FLOWS FROM FINANCING ACTIVITIES	500,000	-	-	150,000	-	-	100,000	-	-	-	-	-
NET CASH FLOWS	205,883	(35,740)	(41,644)	98,806	(46,751)	(25,898)	89,825	(6,863)	(7,334)	(5,063)	(5,642)	(3,173)
CASH, BEGINNING OF PERIOD	-	205,883	170,144	128,499	227,305	180,554	154,656	244,481	237,618	230,283	225,220	219,578
CASH, END OF PERIOD	205,883	170,144	128,499	227,305	180,554	154,656	244,481	237,618	230,283	225,220	219,578	216,405

Pro Forma Statement of Cash Flows (Year 2, Monthly)

Superior Medical Instruments

Projected Cash Flows (\$s)

Month	13	14	15	16	17	18	19	20	21	22	23	24
CASH FLOWS FROM OPERATIONS												
Net income	14,063	20,187	27,953	36,410	45,612	45,194	50,367	50,637	63,753	77,953	86,310	95,124
Adjustments to reconcile net income to cash flows from operations												
Depreciation	900	900	900	900	900	900	900	1,167	1,167	1,167	1,167	1,167
Changes in certain assets and liabilities												
Accounts receivable	(20,538)	(18,165)	(17,724)	(19,220)	(20,825)	(42,615)	(30,471)	(16,618)	(26,557)	(31,495)	(20,954)	(18,953)
Inventory	(7,440)	(8,018)	(8,634)	(13,013)	(17,613)	(9,230)	(7,904)	(12,659)	(11,215)	(7,252)	(12,749)	(18,507)
Other current assets	-	-	-	-	-	-	-	-	-	-	-	-
Accounts payable	2,511	2,706	2,914	4,996	5,321	2,780	3,006	4,269	3,399	2,436	5,129	5,370
Other current payables	-	-	-	-	-	-	-	-	-	-	-	-
Revolving line of credit	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL CASH FLOWS FROM OPERATIONS	(10,504)	(2,390)	5,409	10,073	13,395	(2,970)	15,899	26,796	30,546	42,807	58,903	64,200
CASH FLOWS FROM INVESTING ACTIVITIES												
Purchase of equipment	-	-	-	-	-	-	(16,000)	-	-	-	-	-
Other Assets	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL CASH FLOWS FROM INVESTING ACTIVITIES	-	-	-	-	-	-	(16,000)	-	-	-	-	-
CASH FLOW BEFORE FINANCING	(10,504)	(2,390)	5,409	10,073	13,395	(2,970)	(101)	26,796	30,546	42,807	58,903	64,200
CASH FLOWS FROM FINANCING ACTIVITIES												
Borrowing of long-term debt	-	-	-	-	-	-	-	-	-	-	-	-
Repayment of long-term debt	-	-	-	-	-	-	-	-	-	-	-	-
CASH FLOW BEFORE MEMBERS' CONTRIBUTIONS	(10,504)	(2,390)	5,409	10,073	13,395	(2,970)	(101)	26,796	30,546	42,807	58,903	64,200
Members' Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Members' Interest Repurchased	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL CASH FLOWS FROM FINANCING ACTIVITIES	-	-	-	-	-	-	-	-	-	-	-	-
NET CASH FLOWS	(10,504)	(2,390)	5,409	10,073	13,395	(2,970)	(101)	26,796	30,546	42,807	58,903	64,200
CASH, BEGINNING OF PERIOD	216,405	205,901	203,511	208,919	218,992	232,387	229,417	229,316	256,112	286,658	329,465	388,368
CASH, END OF PERIOD	205,901	203,511	208,919	218,992	232,387	229,417	229,316	256,112	286,658	329,465	388,368	452,568

Pro Forma Balance Sheet (Years 1-5, Annually)

Superior Medical Instruments

Projected Balance Sheets (\$s)	Year 1	Year 2	Year 3	Year 4	Year 5
ASSETS					
Current Assets					
Cash	216,405	452,568	1,491,994	3,620,660	7,723,656
Accounts Receivable	110,878	395,014	820,135	1,368,601	1,812,900
Inventory	69,835	204,071	349,203	560,522	675,810
Other	-	-	-	-	-
Total Current Assets	397,118	1,051,653	2,661,331	5,549,783	10,212,366
Property and Equipment					
(less accumulated depreciation)	62,000	78,000	116,000	197,000	275,000
Net Property and Equipment	(9,900)	(22,033)	(41,638)	(70,602)	(116,117)
Other Assets					
	-	-	-	-	-
TOTAL ASSETS	449,218	1,107,620	2,735,693	5,676,181	10,371,249
LIABILITIES AND MEMBERS' CAPITAL					
Liabilities					
Current Liabilities					
Accounts Payable	23,681	68,519	116,724	187,343	225,667
Other Current Payables	-	-	-	-	-
Revolving Line of Credit	-	-	-	-	-
Current Portion of L-T Debt	-	-	-	-	-
Total Current Liabilities	23,681	68,519	116,724	187,343	225,667
Long-Term Debt					
	-	-	-	-	-
Total Liabilities	23,681	68,519	116,724	187,343	225,667
Members' Capital					
Members' Paid-In Capital	750,000	750,000	750,000	750,000	750,000
Undistributed Members' Earnings	(324,463)	289,101	1,868,969	4,738,838	9,395,582
Less: Members' Interest Repurchased	-	-	-	-	-
Total Members' Capital	425,537	1,039,101	2,618,969	5,488,838	10,145,582
TOTAL LIABILITIES AND MEMBERS' CAPITAL	449,218	1,107,620	2,735,693	5,676,181	10,371,249

Management Resumes

Jason R Berg

Jberg1@email.arizona.edu

Current Address:
1409 E. Blacklidge Dr.
Tucson, AZ 85719
(480)510-4479

Permanent Address:
1150 N. Fiji Way
Gilbert, AZ 85234
(480)545-7698

Education:

The University of Arizona
Eller College of Management
Majors: Business Management;
Entrepreneurship
GPA: 3.8
Dean's List with Distinction

Expected Graduation:
May 2009

Experience:

Summer 2004-2008

Phoenix, AZ

CSK Auto Internship

- Working directly under merchandise manager, learned fundamentals of product selection, cost comparison, planogram development and marketing strategy implementation.
- Analyzed sales data on specific items to assist merchandise manager in decision making.
- Learned negotiation skills in dealing with vendors and the implementation of new products.
- Tracked the impact of promotions on unit sales to learn what creates largest gross margin and thus is most profitable.
- Developed and implemented complete oil filter program exceeding \$3.5 million in sales while enhancing category margin.
- Responsible for planogram mix programs and new item additions for retail stores.

Leadership Activities:

- Delta Sigma Pi Professional Business Fraternity
- Elected by peers to Exploratory Committee Chair Fall 2007
- SCNO – Student Consulting for Nob-profit Organizations Spring 2008
- Leader of 5 person team in developing and presenting a business plan
- Tucson Men's League Soccer 2006

Skills:

- Microsoft Office Specialist, having demonstrated proficiencies in Excel 2003
- Strong computers skills including Microsoft Office programs such as Word, Power Point, and Access

Kelly Michael Olson

kmols@email.arizona.edu
2189 S. Saint Suzanne Drive, Tucson, AZ 85713
(480) 202-4243

Education

University of Arizona Honors College **Tucson, AZ**
Eller College of Management
Bachelor of Science in Business Administration with Honors **Expected: 05/09**
Majors: Finance, Business Economics, and Entrepreneurship (4.0 GPA)
Minor: Spanish Language (3.5 GPA)
Cumulative GPA: 3.88, Dean's List

Relevant Coursework

Investments; Applied Investment Management; Risk Management and Derivatives; Econometrics; Macroeconomics;
Intermediate Financial Accounting; Microeconomics; Entrepreneurial Finance; Quantitative Methods for Economic Strategy

Experience

Intel Corporation **Chandler, AZ**
Intel designs and manufactures microcomputer components for desktop, laptop, and server systems.
They are the world's largest semiconductor company and are a member of the Fortune Global 500.

Operations Finance Analyst **05/08 - 08/08**

- Performed historical analysis to determine volatility and expected returns in carbon exchange markets
- Utilized historical analysis in Monte Carlo simulations to forecast the potential costs of carbon reduction legislation
- Refined TCO model to include the costs of electrical consumption resulting in more efficient tool purchasing decisions
- Performed benchmarking of carbon emissions and "green" initiatives in order to better understand competitive position

Thrivent Financial and Investment Management **Tucson, AZ**
Thrivent Financial is a Fortune 500 financial services organization that specializes in life insurance, annuities, mutual funds, disability income insurance, bank products, and other financial instruments.

Financial Intern **05/06 - 09/06**

- Consulted with clients in order to develop personalized investment and insurance strategies
- Used multivariable Excel models to perform sensitivity analysis, ensuring that retirements would be properly funded
- Performed valuations to determine the minimum contributions required to successfully fund investment goals
- Actively prospected clients resulting in increased revenues and increased assets under management
- Graphically designed marketing materials to be distributed to top clients

Honors and Awards

- McCord Scholarship Finalist, 2007
- Eller Set Aside Grant Recipient, 2006
- 1st Place, Eller Business Math Case Competition, 2006
- Wildcat Excellence Scholarship, 2005-2008 (Full Tuition + Stipend)
- National Merit Commended Scholar, 2005 (1490 SAT)

Other Data

- Certified Microsoft Office Excel Specialist
- Regression and data analysis experience in SAS and Stata statistical packages
- Advanced skills with Microsoft Office and Adobe Creative Suite
- Intermediate Spanish skills: Able to read, write, and converse
- Licensed Life and Health Producer
- Interests: Technology (Computers, Internet, Digital Audio/Video), Philosophy, Outdoor Activities

Paul Swift

4101 E Holmes · Tucson, AZ 85711

Phone: (520) 481-1730 Email: PSwift@email.arizona.edu

Work Experience

SRC/SEMATECH Engr. Research Center for Environmentally Benign Semiconductor Manufacturing

Research assistant · Chem. Engr. Department · The University of Arizona · Tucson, AZ 85721 · Fall 2007 – Present

- Manufacturing Electro Chemical Residue Sensors (ECRS) for in-situ monitoring of contaminant levels. Studies will support development of higher efficiency cleaning cycles in high volume integrated circuit fabrication centers
- Assisting graduate research with semiconductor manufacturing studies; Characterization of absorption and desorption profiles for maximization of purge gas distribution systems efficiency

Bio Skills Center of Tucson

Manager, Orthopedic Surgical Lab Technician · Tucson, AZ 85712 · Fall 2005 – Present

- Help in the oversight of the surgical lab technicians in their work related responsibilities to ensure a problem free environment
- Provide a safe, educational environment for the continued learning of Orthopedic surgeons while maintaining a business cautious status quo for the company

NASA Glenn Research Center and Plumbrook Station Research Center

Research intern · Safety, Health, and Environmental Division · Cleveland, OH 44142 · Summer 2008

- Developed interim procedural guidelines, materials, and final report for Center operations regarding exposure assessment of nanomaterials
- Daily responsibilities included supervising high school interns (2), calibrating sampling equipment, field surveys, preparing samples, recording data, and developing a reports based on lab assessments

NASA Ames Research Center

Research intern · BioVIS Technology Center · Moffett Field, CA 94035 · Summer 2007

- Developed, conducted, and reported on personal interest research project exploring the effects of hypergravity environment on the skeletal structure and bone cells of the oyster toad fish

Honors

- 2008 Nominated and Accepted as NASA Student Ambassador
- 2008 Accepted and completing McGuire Entrepreneurship Program · Ranked top 5 nationally
- 2008 Member of University of Arizona chapter of American Institute of Chemical Engineers
- 2008 National Champion, 33rd National Collegiate Taekwondo Association tournament · 2nd place 32nd NCTA
- 2007,'08 Twice recipient of NASA MUST (Motivating Undergraduates in Science and Technology) Scholarship
- 2006 Poster presenter at regional American Chemical Society (ACS) meeting · Topic: "Solid State ²H NMR Spectroscopy for the Undergraduate Physical Chemistry Laboratory"
- 2007 Co-founder and treasurer for Anatomy Enthusiast Society (AES), University sponsored club

Education

Graduation: Spring 2010 · The University of Arizona · Tucson, AZ 85721

Majors: Chemical Engineering and Business Entrepreneurship

Units Completed: 121 Enrolled: 13 units

Skills

- Operating Systems: MS Windows, Macintosh, Unix
- Software Programs: Excel, ProgeCAD LT 2006, MatLab, COMSOL Multiphysics
- Programming Languages: C, Visual Basic, Java
- Experiment Instrumentation: APIMS (Atmospheric Pressure Ionization Mass Spectrometer), CRDS (Cavity Ring-Down Spectrometer), FTIR (Fourier Transform Infrared Spectrometer), NMR (Nuclear Magnetic Resonance Spectroscopy), ABM Mask Aligner, RIE (Reactive Ion Etcher), SEM (Scanning electron Microscopy)

Improving Progress Monitoring and Patient Care in Physical Therapy with Technology

Introduction

The purpose of this paper is to discover new and more efficient ways to improve patient care and rehabilitation in the physical therapy industry. If you find it difficult to objectively monitor your patients' progress, a new class of technology may be the solution you're looking for. Please complete the following three questions to the fullest of your ability before you continue with this paper.

Pre-Questions

Medical professionals are required to maintain a high level of objectivity in order to provide the most effective patient care.

A. What are some of the problems that you face in obtaining objective measurements for the assessment of your patients' disability and progress?

- 1) Time to carry out the measurements.
- 2) Methods to collect the objective data that is also functional + reliable, valid.
- 3) Correlating a pain value to the onset of their impairment. That is, at what point in the range of motion, or phase of walking, etc did the deviation occur and did this correlate with pain?

B. What actions do you currently take to overcome these difficulties?

- 1) Reassess 1x/wk rather than every session.
- 2) Writing out the results of gait analysis (qualitative) and other functional tests vs providing quantitative info in some cases. This has limitations as it is more subjective.

C. What current or novel techniques/technologies can you think of that would improve the assessment of your patients' disability and progress? (i.e. electronic medical records, improved measurement tool, etc.)

1) Hand held devices with tabs menus
in order to "document"
session treatments.

2) Video motion analysis that is
obtained with that same hand held
device. Motion analysis software
then provides objective evaluation.

Background

For decades physical therapists have used a goniometer to access the range of motion in their patients' joints. While range of motion measurements can vary significantly from measurement to measurement as a result of changing motivation and pain levels, the use of a goniometer increases the variation in the measurements as a result of its poor inter and intra rater reliability. Over the past two years, inventor Paul Howe and the Arizona Arthritis Center have been developing a new tool that will be used to access range of motion. This product idea originated from a discussion on the need for improved measurement techniques at the 2007 Southwest Rheumatology Conference.

Product Information

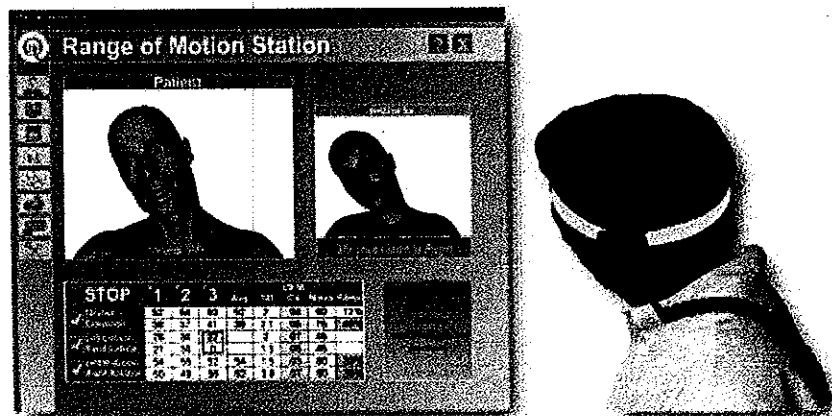
The resulting measurement tool that was created is an electronic system that is composed of two sensors (which are placed on the patients' body), one transmitter, and one central processing unit. In this technology, the transmitter emits an electromagnetic field which is received by the sensors. These sensors interpret the electromagnetic field and continually relay their position and orientation (angle) measurements back to the central processing unit. By using a two sensor arrangement, it is not necessary that the patient remain stationary as one of the sensors can be used as a reference point. Once the measurement process is complete, the central processing unit computes and displays a measurement corresponding to the patients' range of motion. The technology that is being employed is able to provide measurements that are accurate to within one tenth of a degree and one quarter of an inch. As a result of this new and innovative technology, the product being created has numerous potential applications.

Product Capabilities

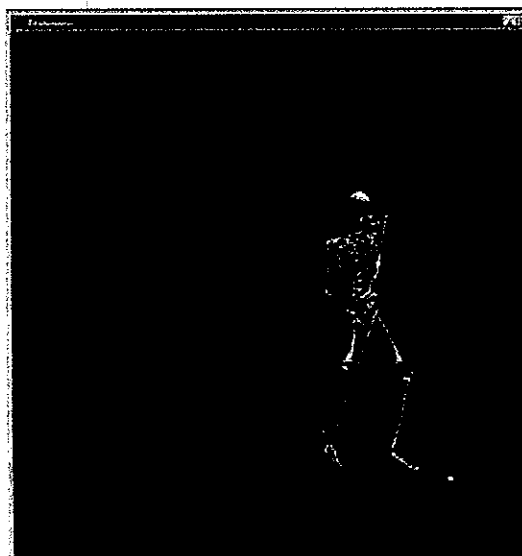
- Position Sensing (relays 3-dimensional X, Y, and Z coordinates to the central processing unit)
- Orientation Sensing (relays Yaw, Pitch, and Roll angles to the CPU)
- Velocity and Acceleration Measurements

Potential Applications

- Fast, Easy, and Accurate Range of Motion Measurements
- 3D Range of Motion Imagery
- Range of Motion Measurement and Imagery Database
- Development of Recovery Rating or Disability Index
- Diagnosis for Chronic Degenerative Diseases



Range of Motion Measurement



3D Motion Tracking Imagery

Post-Questions

- A. Would this product improve or eliminate any of the problems you listed in **Question A** of the **Pre-Questions** section of the paper? If so, which ones?

It has the potential to provide functional + objective information. Time demands currently appear to be a limiting factor.

- B. Could this product's technology be utilized for any additional applications in your clinical work? (including the novel techniques you listed in **Question C** of the **Pre-Questions** section of the paper?) If yes, please explain.

It would have to be smaller in size in order to carry out the dual function of electronic medical records and motion analysis.

- C. Without consideration of cost, would this product provide value to your daily clinical work? If so, what application would provide the most value?

1. As it is now, I feel that it would not secondary to the time associated with setting it up.

2. It has the most potential to provide objective information with perhaps, improved reliability.

Additional Ideas and Comments

Do you have any additional ideas for how this technology could be applied to the medical industry? These ideas can be within or outside of your profession and may be as rudimentary or elaborate as you would like. Also, please feel free to provide any additional comments that you may have.

I have experienced working with a software system called SportsCad. It provides info on velocity, range of motion, etc. It would be interesting to "sync" those abilities with the correct device in question. That is, what is the potential to video an activity then "ask" ^(to) the device,

to provide an evaluation of a segment's velocity, range of motion, etc.

Entrepreneurial Profile:
Kinetic Muscles Inc.

May 05, 2009

By
Kelly Olson

Executive Summary

Kinetic Muscles Inc. was founded in 2001 by a father-son team, James and Ed Koeneman. James had developed a system of pneumatic actuators to act as “air muscles” upon the request of Barrow Neurological Institute in Phoenix. These “air muscles” were designed to assist patients in post-stroke rehabilitative therapy. (Pope) This design would later form the foundation of the company’s first product, the “Hand Mentor”. The company sought to address the underserved stroke population and paired their strong technical skills with the emerging science of neuroplasticity. (TechWizard)

An analysis of Kinetic Muscles Inc. (KMI) has improved my understanding of what is required for entrepreneurial success in the physical therapy market. The actions and strategies undertaken by KMI have mirrored the teachings of both our mentor, Bob Morrison, and the McGuire Entrepreneurship program. There are many parallels that make KMI an appropriate benchmark and their business strategy has both influenced and validated our strategies at Superior Medical Instruments (SMI). KMI has been the most influential in the creation of SMI’s **Development Plan, Business Model, and Marketing and Sales Strategy.**

History and Opportunity of Kinetic Muscles Inc.

James Koeneman, a retired engineer and adjunct bioengineering professor at Arizona State University, developed his first incarnation of the “Hand Mentor” in his kitchen in Phoenix, AZ. The device was conceived to help rehabilitate the malfunctioning limbs of stroke patients by assisting them with a process known as repetitive therapy. While James and his son Ed originally thought their proprietary “air muscle” technology would be used to assist patients suffering from carpal tunnel syndrome, an initial road show around clinics introduced them to a new use for their product in the emerging science of neuroplasticity. (Raz, 2006)

Neuroplasticity is a scientific concept that states that the adult brain can form new neural pathways around a part of the brain that has been damaged. By combining the assistive “air muscle” technology with repetitive therapy techniques, Koeneman devised a device that would help stroke patients regain use of their malfunctioning limbs in a quicker and more cost effective manner. The underlying foundations for this opportunity were a large and growing baby boomer population of stroke survivors, growing stroke-related expenditures, and prohibitively high repetitive therapy costs. According to data from the American Heart Association and the American Stroke Association, “In 2004 there were more than 4.8 million stroke survivors living in the United States, with almost 600,000 new stroke survivors each year” and the stroke-related medical market was an estimated \$57 billion market. (Raz, 2006) In addition, the U.S. medical-device market was rapidly expanding and was expected to grow from \$76 billion in 2006 to \$139 billion by 2013 according to a report by industry research group Frost & Sullivan. Furthermore, repetitive therapy must be done on a consistent basis

many times a week and the expenses can quickly add up when not covered by insurance. Grant Farrell, KMI's CEO, has said that, "the Hand Mentor was born because conventional stroke therapy didn't offer enough repetition" and that patients can require therapy from six months to several years. (Murphy, 2008) As a result of this enormous opportunity the Koenemans decided to build a business around their prototype.

Development Plan

In 2003, KMI received their first Small Business Innovation Research (SBIR) grant from the National Institute of Health (NIH). This grant provided KMI with \$100,000 to develop their first product, the "Hand Mentor". Later that year KMI registered their device with the FDA and began their marketing strategy. The following year KMI was awarded a second SBIR grant in the sum of \$200,000 to further their product development of a new instrument, the "Foot Mentor". (Pope) (Kinetic Muscles) These two grants paved the way for a SBIR Phase 2 grant that was awarded to KMI in 2005. This SBIR Phase 2 grant of \$1.2 million provided sufficient funding for KMI to conduct a clinical trial with their "Hand Mentor" product and ultimately supported the nationwide release of the product in 2007. In total, KMI's technology was the basis for grants and a contract from the NIH totaling over \$3.5 million. (Kinetic Muscles)

Understanding the ability of KMI to obtain funding in the form of grants has altered our venture team's perception of funding sources. While our team initially intended to fund operations solely through bootstrapping and equity investments, we have now begun serious consideration of grant funding. Our team has begun to specifically research the grants offered by the NIH as it is apparent that they are

interested in automated rehabilitation technology. This is an especially important consideration in today's economy as venture capital and credit financing is becoming increasingly scarce.

KMI has also helped our team understand how to leverage our core competencies to broader markets and new product lines. Ed Koeneman, Chief Operating Officer of KMI, has stated, "Since the stroke patient is affected up and down one side of the body, you have products coming out for the hand, the knee, the foot, the elbow... it made good business sense to start a company and develop these as a line of products rather than just something for the hand." (Raz, 2006) This idea of making minor modifications to the core technology of the business has inspired our company, SMI, to begin looking beyond the physical therapy market. Much like KMI, our company will be capable of making small software and hardware changes to our product package, and these changes will enable us to enter markets such as rheumatology, neurology, and sports medicine. It is important however to heed the advice of Mr. Koeneman when he says, "With startups, I whole-heartedly believe we must focus on our primary market." (Winograd, Flexing it: Kinetic Muscles rewrites injured brains, 2004)

Business Model and Core Competencies

Kinetic Muscles' business model is centered around their technical expertise and their knowledge of the emerging field of neuroplasticity. "Air muscles", a key piece of KMI's technological strategy, are rubber bladders that deflate and inflate, mimicking the natural movement of muscles. (Raz, 2006) These "air muscles", when attached, allow a

patient to perform a repetitive task safely and without fatigue. This repetitive therapy is a key component to the rewiring of a patient's brain. In order to stay at the forefront of both neurological research and industrial design, KMI has partnered with a variety of academic institutions to further strengthen their core competencies.

One of KMI's key academic partners is Dr. Steven Wolf, professor at the Emory University School of Medicine. Dr. Wolf serves as the head of KMI's scientific advisory board and is one of the leading researchers in stroke rehabilitation. (Potter, 2005) In fact, "KMI's neurorehabilitation therapy is based on the research of Steven Wolf... who demonstrated that repetitive practice is effective in restoring function in limbs paralyzed by stroke." (Pope) In addition to Dr. Wolf, KMI also "keeps abreast of design issues by working with the industrial design department at Arizona State University, as well as the psychology department at ASU's main campus and the applied psychology department at its Polytechnic campus in Mesa." (Gonzales, Home medical device safety concerns spur FDA action, 2006) Other advisors to KMI include, "Dr. Christina Kwasnica at Barrow Neurological Institute; Jiping He from the spinal cord research lab at Arizona State University; and Dr. Richard Herman, director of the neurobiology program at Banner Good Samaritan Regional Medical Center in Phoenix." (Gonzales, Biotech firm seeks funds to sell product, 2004) Furthermore, in addition to staying at the forefront of research and design, KMI has also created a unique competitive advantage through its first-mover advantage. Through the use of proprietary software and hardware technology, KMI has isolated itself in the market as the only manufacturer of a product designed to assist with repetitive therapy.

In a similar fashion, our company, Superior Medical Instruments, has begun forming relationships with individuals such as Grant Senner, Director of Business Development at Athlon Physical Therapy, Paul Howe, the inventor of our MAP product, and Dr. Salvatore Albani, Director of the Arizona Arthritis Center. These advisors have given us invaluable insight into the problems and needs of clinicians in their respective fields. During a focus group arranged by Dr. Senner, our group learned that biofeedback and automated report generation were the two most important features to be included in a physical therapy version of our product. In addition, our team also learned more about the everyday operations in a physical therapy clinic and how we could better design our product to seamlessly integrate with current rehabilitation practices. Finally, by partnering with these renowned professionals and academics our company intends to stay at the forefront of the rehabilitative instrument market. These partnerships will be mutually beneficial as they will not only increase the credibility of our products, but will also allow the physicians to perform novel research in the field of mobility assessment.

Marketing and Sales Strategy

KMI's marketing and sales strategy has perhaps been the most influential consideration in the development of our own marketing efforts. There are two main components to KMI's sales strategy that have enabled them to achieve entrepreneurial success. These strategies are i) outsourcing sales and distribution and ii) forming strategic alliances.

While the "Hand Mentor" can be purchased directly from KMI, Kinetic Muscles recently signed a joint distribution agreement with Columbia Scientific to penetrate the

neurological rehabilitation market. Columbia Scientific provides products to over 1500 rehabilitation centers and will be the exclusive United States distributor of the “Hand Mentor”. (Flinn, 2006) By outsourcing their sales and distribution processes, KMI will be able to better focus on its core competencies. As a start up company it is often very difficult to support a sufficient sales team as it can be costly to hire experienced sales professionals. This problem is compounded when selling into a niche market, such as the neurorehabilitation market, or a market with broad geographical scope. With this in mind our team has identified the largest distributors in our own market, the out-patient physical therapy market. After a review of the largest sales organizations, our team has selected Patterson Medical as the ideal distributor of our Motion Assessment Package.

The second strategy that has made Kinetic Muscles successful is the use of strategic alliances. In addition to forming sales partnerships, KMI has also developed relationships with universities and hospital networks that have allowed them to both test their product and gain credibility. For example, KMI recently announced that it had reached an agreement with HealthSouth Corporation, the nation’s largest provider of inpatient rehabilitative services. In this agreement HealthSouth agreed to use KMI’s “Hand Mentor Pro” in a select number of their rehabilitation hospitals. Grant Farrell, CEO of KMI, stated that, “HealthSouth has been a terrific partner during the development and market testing of the [product],” and, “[their] vast network of hospitals and clinics will provide a significant ramp in our penetration of the stroke rehabilitation market.” (Koeneman, 2008) Superior Medical Instruments has sought to imitate this strategy by maintaining a relationship with Athlon Physical Therapy, the University of Arizona’s University Medical Center, and the Arizona Arthritis Center. We believe that

by participating in the medical community our company will be able to gain clinical credibility while furthering our understanding of the target market's preferences. Ultimately our venture hopes to launch the use of our prototypes in clinics across the Southwest for test-marketing purposes.

Methodology

The primary sources of data used in this analysis were the corporate website for KMI and third party articles written by local universities, newspapers, and business journals. For a more detailed list of sources please see the attached works cited document at the end of this report. Since KMI is a privately held, non-SEC reporting company, it was difficult to obtain detailed information about the company's finances. Overall the data was determined to be sufficiently reliable for an anecdotal analysis of the company's operations. After all the relevant data was consolidated, an outline of the report was then created and the collected information was disseminated into the relevant sections of the outline.

Summary and Future Challenges

Overall, KMI has achieved great entrepreneurial success in designing and funding their core product, the "Hand Mentor". As of October 2008, KMI is conducting several clinical trials on its "Hand Mentor" device. These trials are expected to run through the middle of 2009 and are expected to provide further evidence of the benefits of repetitive therapy techniques. Furthermore, in order to expand their value proposition, KMI is also studying how their product impacts the rehabilitation costs of a stroke patient.

Although KMI has achieved a great deal of success over the past seven years, their company still faces substantial reimbursement and funding challenges. While it is undeniable that improved recovery, increased convenience, and lower expenses are excellent benefits for the end-user, KMI still lacks a strong value proposition for its key purchasers; public hospitals, private clinics, and insurance providers. Mr. Koeneman has expressed that some patients have had a limit placed on the number of therapeutic visits allowed for their recovery, despite research showing the benefits of repetitive therapy in stroke survivors. KMI has sought to mitigate this threat by applying for Medicare coverage. Mr. Koeneman has even said that, “it’s not a matter of if it’s going to get covered, it’s when,” and that “usually, once Medicare pays for a treatment, big insurance companies follow suit.” (Gonzales, Biotech firm seeks funds to sell product, 2004) (Winograd, Hand Mentor designed to aid stroke victims, 2004)

This information is particularly applicable to our venture as physical therapists are often unable to receive additional reimbursement for range-of-motion (ROM) measurements. ROM measurements are generally considered to be part of the normal assessment process in the physical therapy industry and as such insurance providers will often deny claims that bill for both an assessment and a ROM measurement. This lack of reimbursement incentive is one of the main reasons that clinicians have not sought to provide more comprehensive ROM assessments. However, this standard differs from industry to industry as chiropractors are typically able to charge for ROM measurements under a separate billing code. With this in mind, one way for our company to increase the value proposition to our clients is to petition the American Medical Association to treat ROM assessment in the physical therapy industry in a

similar manner as the chiropractic industry. In addition, SMI could also follow suit and petition Medicare for ROM reimbursement when using our device. While these are significant undertakings, they are one possible way to help increase the value and ROI of our product for physicians.

A second way in which KMI has moved to reduce the reimbursement risk for the physicians who use their product is the addition of progress report printing. These reports detail the patients' efforts and provide substantiation for insurance providers that the treatment is working. In a similar vein our venture has also outlined a reporting process for our ROM product. This report will detail the progress in the patients' ROM and will give our physical therapy clients the ability to show insurance providers that a patient is still improving and that their progress has not yet plateaued.

A final risk that KMI faces is that they may be unable to obtain future funding for their venture. KMI is reliant on venture funding to grow their sales and manufacturing operations and the current state of the economy has dried up capital from many potential investors. The president and CEO of the Arizona Technology Council even stated that, "access to capital is the number one issue for emerging technology companies in Arizona." (Gonzales, Home medical device safety concerns spur FDA action, 2006) However, it should be noted that KMI was founded in 2001, soon after the collapse of the technology bubble (and the associated sources of capital), and has retained the ability to finance R&D and operations over the past eight years through grants and investments from friends, family, and angels. (TechWizard)

In conclusion, it has proven extremely beneficial to analyze the strategies of KMI as a benchmark company. Through an analysis of KMI's venture strategies, our team has learned a great deal about the "best practices" for a start up business in the physical therapy industry. While the ultimate successes of our venture and KMI are yet to be determined, it is clear that both of our companies are on the track to success.

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