Part 1: "Elevator" Introduction

EOITech is using a novel approach to materials analysis resulting in an easy to use, low cost instrument—Raman Guard analyzer. It functions like an electronic nose and taste bud enabling users to distinguish whether food items are safe or not. Other applications include for use by first responders to recognize dangerous substances and many others. The business model is to take a formerly sophisticated scientific research tool out of chemistry and analytical labs and put it into the hands of every day users like policemen, firemen and even stockroom clerks to keep the public out of the harm's way. The targeted markets are: food industry for food adulteration detection (e.g. waste fat addition into cooking oil), first responders (police and fire departments) for narcotic and hazardous material detection, and retail industry for counterfeit food and drug products.

Part 2: Market and Industry Analysis

The market of the Raman Guard product is the field portable chemical analysis market, which consists of 3 parts: the food industry, first responders and the pharmaceutical industry. The overall market size is at least $3 billion.

EOITech's targeted market segments are (1) food safety inspection, (2) hazardous material and narcotic detection and (3) counterfeit drug detection. Reasons for choosing these marketing priorities are (a) there is an urgent need for detection of adulterated food items (e.g. cooking oil) in China. The market is clamoring for a field portable analyzer; (b) first responders (police and fire departments) currently do not have a real time and easy to use chemical analyzer to assess dangerous materials found in the field. A quick and safe method of detecting hazardous material and narcotic drugs are of importance for public health and first responders' safety; (3) counterfeit pharmaceutical drug is a persistent problem in the marketplace and a ready to use analyzer is lacking. Raman Guard analyzer can fulfill these market needs. This is a fast growing market. Raman analyzers became practical for field usage only in early 2000's due to advances in laser diode technology. In 2009, Ahura, a Raman analyzer manufacturer, was acquired by Thermo Fisher Scientific for $150 million. This event precipitated a rapid growth in the Raman analyzer market for the last few years. The market growth rate is 11% per year.

The Raman analyzer market has already been established by large players such as Thermo Fisher, so we can avoid the danger of being labeled "bleeding edge technology". The nature of our competition to the established players is to explore the market segments which have been overlooked by the large unwieldy players and in which we have specific application and/or market knowledge. We plan to ride on the market blitz created by Thermo Fisher and others with our "application specific" approach and capitalize on our application knowledge of Raman spectroscopy to those market segments ripe for its introduction. Our first priority in market penetration is indirect competition in food safety and first responder segments. After establishing a beachfront in the marketplace, we plan to target counterfeit drug segment as a substitute for Thermo Fisher.

Part 3: Go-to-Market Plan

Our initial targets are (a) Supermarket buyers, inventory clerks and food inspectors; (b) police crime labs, highway patrol officers, municipal fire stations, state transportation and highway departments; (c) pharmacy incoming inspectors and clerks.

(A) Contamination of cooking oil in China ("Gutter oil"), cooking oil adulterated by waste fat is a serious public health problem in China. The problem is so severe that recently Chinese authorities made it a capital crime for committing such an offense. We have engaged a commercial food inspection laboratory to use our Raman Guard product for detection of "gutter oil" in regular cooking oil. The study result was positive and the marketing effort in China is under way; (B) We have contacted police headquarters in a major Canadian metropolis and they are ready to test our product for narcotic control; (C) we have dialog with Swedish officials for counterfeit drug detection.

The Chinese collaborator has validated the market needs. The provincial government in Guang Dong Province has already issued a Request for Proposal to equip its inspectorate of food with Raman analyzer to detect "gutter oil". The eagerness of the Canadian municipal police to test our product is another market need validation.

(A) The City of Shen Zhen office of Chinese Center for Disease Control has established a "Laboratory for Study of Raman analyzer detection of gutter oil contamination in cooking oil". This will be a primary market target for government food inspectors; (B) a commercial analysis laboratory in Shanghai has a memorandum of understanding with us to market our Raman Guard in Shanghai and Jiang Su Province. This will be our entry into commercial market.

We plan to target specific and urgent needs in certain markets (rather than the general purpose tool approach used by others). Raman analyzers are still generally a new and unfamiliar product to most, therefore they need a blend of spectroscopy knowledge and familiarity with market need to convince the marketplace to adopt it for wide deployment. That's why we are targeting specifically the "gutter oil" contamination crisis in China and narcotic detection in police crime labs. We will do the necessary hand-holding of customers and guide them every step of the way on how to effectively use a Raman analyzer. This is something a big catalog company such as Thermo Fisher cannot do. This "application specific" approach to marketing will be our go to market methodology. Our future customer acquisition strategy is akin to that of Apple Computer's iPhone marketing: we will educate the customers and show them the versatility and usefulness of a Raman analyzer; as an example, the cell phone was not new but the inclusion of apps was, and Apple explored this newness to the hilt, we will do the same.

The incumbents are two types: large companies like Thermo Fisher and small players (e.g. B&W Tek and Ocean Optics). A common mistake made by all the incumbents is the fixation on "handheld" Raman hardware to the negligence of all other

aspect of Raman technology. We will explore this weakness in our competitor-displacement campaign. To this end, we have developed specialized software and spectral library tools with the goal of enabling non-experts to use our Raman Guard analyzer easily on their requisite samples. Our software/firmware suite of spectral analysis tools is our key to displace the incumbents and potential competitors. Another analog: we want to be PC vendors with Microsoft software suite rather than IBM. Our channel/partnership strategy is as follows: step 1- make ourselves visible in the marketplace; step 2-approach Thermo Fisher's main competitors such as VWR and Cole Palmer to partner up and displace Thermo Fisher; step 3-we will also approach Thermo Fisher to offer partnership for using our spectral analysis tool suite for their Raman products.

Part 4: Technical Product Description and Plan

Our products consist of (a) hardware - the Raman Guard portable spectrometer, and (b) software- the spectral library building and searching tool suite. The initial product offering is the Raman Guard analyzer with onboard software suite. The software tool suite can be separately licensed by partners. We will also offer service to customize the software tool suite to suit specific application needs. This service will be available to both customers and channel partners.

We have done technology validation tests of the Raman Guard internally and also with 3rd party test labs. The validation test data showed that Raman Guard could detect the presence of "gutter oil" in pure cooking oil down to 5% level. The Raman Guard analyzer has design validation test data on file for inspection. Future validation plans include: hazardous material test and library building, narcotic drug test and library building (per US Dept. of Justice "Guideline for the Selection of Drug Detectors NIJ Guide 601-00, 2000) and counterfeit pharmaceutical drug study (per FDA's CDER Critical Path Program and FDA Medical Countermeasures Initiative (MCMi) guidelines).

We have prototypes built and operational proving the concept is sound. The remaining technical risk is therefore minimal and lies mainly around developing a suitable industrial design. A lot of the uniqueness of our product lies in the software, the Raman spectral analysis and pattern recognition code. Currently this held as a trade secret, but we plan to apply for patent and/or copyright protection in due course. The inclusion of this software though makes our instrument application-specific and user-friendly. It can be used by anyone with minimal training to identify waste cooking oil, even in dilution (in other words when mixed with new oil), in a matter of seconds. It is easy to use and robust for use in the field.

Part 5: Risk vs. Talent Narrative

Last year we collected initial market validation data, realized practical prototypes and collected performance data to validate our approach. Our prototype proves all the elements required can be integrated into a suitably-sized package. We need to show that in such a package we have control of the electronic and thermal management issues under long term operation. There is some small risk the different elements of the design may have an adverse effect on each other and require some design iteration. We are using the prototype units to further validate our market assumptions and refine the technological approach to ensure both the business and technology approach are correct. Our current business risks are team-size related, as we work on market research, administrative, sales and other non-technical tasks, with the need to move development along as quickly as possible. One immediate need then is to find enough money to take on administrative help to deal with elements of these tasks as soon as possible allowing the core team members to deal with higher level tasks.

There are currently three key partners in the company. Hugh Garvey, President, has a degree in Physics from the University of Southampton in the UK. Hugh was the General Manager of two high tech companies for ~15 years prior to EOITech overseeing the creation of the hardware for the current highest performing handheld Raman analyzer on the market, a finalist in the 2015 R&D 100 awards, taking both companies from loss-making enterprises to successes in their own right. He also has experience in business development with 10 years spent in sales management for high performance cameras and image sensors growing the revenue substantially in each company he worked with.

Jien-Ping (J.P.) Jiang, Ph.D.is our Chief Technology Officer and has a wealth of expertise in microbial detection in the environment, optical sensor designs, Raman spectroscopy of biological substances, and spectroscopic detection algorithm development. J.P. has developed and commercialized two optical instruments for detection of microbes in air and water. These instruments are currently in use in the pharmaceutical industry.

Michael Damento, Ph.D. is the VP Engineering. Dr. Damento is a Materials Scientist from the University of Arizona and has many high performance instrument designs in his portfolio, including the opto-mechanical design for the spectrometer in the instrument mentioned above.

We will soon need dedicated resources for software design, sales management and later for electronic design. Given the right cash injection, we intend to take care of these missing pieces in 2017.

During 2016 we participated in the UofA Eller College of Management Executive Edge program as well as the Mentored Launch program at the AzCI, with the mentor in residence, Ralph Hershberger who has a wealth of experience in selling lab equipment and Anita Bell, Director of the AzCI facility as the group mentors. Furthermore, we participated in the ThyveNext program run by Startup Tucson early in 2015 and have access to the mentors there, namely Justin Williams, Greg Teesdale and Tony Ford. Our technical mentor at the University of Arizona, Dept. of Chemical Sciences is Professor Bonner Denton.