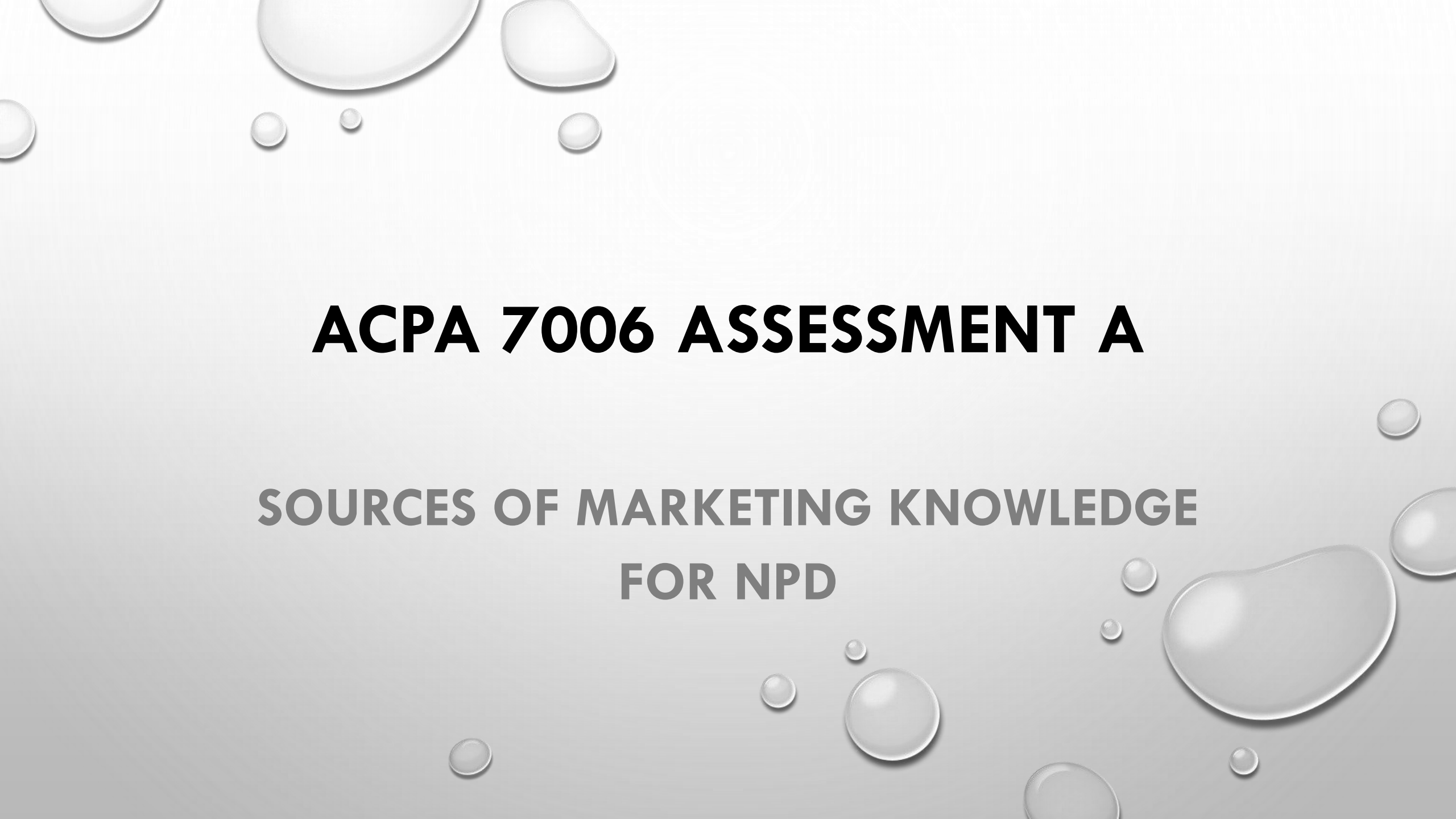


The background is a light gray gradient. It is decorated with numerous water droplets of various sizes, some with highlights and shadows, giving them a 3D appearance. In the upper center, there is a faint, circular logo or watermark that is not clearly legible.

ACPA 7006 ASSESSMENT A

**SOURCES OF MARKETING KNOWLEDGE
FOR NPD**

DETERMINE WHAT MARKETING KNOWLEDGE IS LIKELY TO BE REQUIRED FOR THE NPD

- **THE MARKETING KNOWLEDGE REQUIRED FOR THE NPD OF A COVID CHEMICAL DETECTOR SYSTEM INCLUDES:**
- **UNDERSTANDING THE TARGET MARKET:** UNDERSTANDING THE TARGET MARKET IS CRUCIAL FOR MARKETING CAMPAIGNS, INCLUDING THEIR NEEDS, WANTS, AND PAIN POINTS, SUCH AS A COVID CHEMICAL DETECTOR SYSTEM TARGETING BUSINESSES, GOVERNMENT AGENCIES, OR INDIVIDUALS.
- **DEFINING THE PRODUCT POSITIONING:** DEFINE PRODUCT POSITIONING AFTER UNDERSTANDING THE TARGET MARKET, FOCUSING ON DIFFERENTIATION FROM COMPETITORS. FOR COVID CHEMICAL DETECTOR SYSTEMS, IT COULD BE BASED ON ACCURACY, SPEED, OR EASE OF USE.
- **CREATING A MARKETING STRATEGY:** THE MARKETING STRATEGY SHOULD OUTLINE THE PRODUCT'S TARGET MARKET, INCLUDING CHANNELS, MESSAGING, AND BUDGET ALLOCATION FOR EFFECTIVE MARKETING.
- **EXECUTING THE MARKETING CAMPAIGN:** EXECUTE MARKETING CAMPAIGNS CONSISTENT WITH STRATEGY, TRACKING RESULTS AND MAKING ADJUSTMENTS AS NEEDED, ENSURING SUCCESSFUL EXECUTION.



IN ADDITION TO THESE GENERAL MARKETING CONCEPTS, THERE ARE ALSO SOME SPECIFIC MARKETING CONSIDERATIONS FOR COVID CHEMICAL DETECTOR SYSTEMS. THESE INCLUDE:

- THE IMPORTANCE OF SAFETY: EMPHASISE SAFETY FEATURES IN COVID CHEMICAL DETECTOR SYSTEMS, AS THEY ARE CRUCIAL IN HAZARDOUS ENVIRONMENTS.
 - THE NEED FOR REGULATORY COMPLIANCE: COVID CHEMICAL DETECTOR SYSTEMS MUST ADHERE TO VARIOUS REGULATIONS, MAKING COMPLIANCE CRUCIAL.
 - THE IMPORTANCE OF EDUCATION: EDUCATE POTENTIAL CUSTOMERS ON COVID CHEMICAL DETECTOR SYSTEMS' BENEFITS TO INCREASE AWARENESS AND UNDERSTANDING.
- 

What Business are we in?

In 1967, the British Government introduced the Road Safety Act. This defined the maximum level of alcohol a person could have in his or her body while driving. It also introduced the roadside 'breathalyser' screening test to justify the arrest of a motorist on suspicion of driving with excess alcohol, before then taking a blood or urine specimen from them back at the police station. The company's first factory was a converted garage in Cardiff, where some 15,000 Alcolyser[®] tubes were made each day and then used by the police in the UK and various other countries around the world. But the Alcolyser[®] was a relatively crude device, and so in 1972 Lion commenced a research program at the University of Cardiff into the possible use of a fuel cell alcohol sensor as the basis of a hand-held electronic screening instrument for police use. These early lion alcolmeter[®] products were used by the police in various countries and then further developed during the 1970s, until, in 1979, the Lion alcolmeter[®] S-L2 was approved for police use in Great Britain. In 1980 Lion's pioneering work in breath alcohol analysis using the fuel cell sensor, and the significant export sales, resulted in our winning the Queen's Award for Technological Achievement.



Current Detector Range

- Rapid screening – a non-contact, indication of alcohol from “blowing” across the instrument
- Screening – blow into tube instrument, Bluetooth & GPS integrated, approved for Police use
- Interlock – connects the technology of the breathalyser to the vehicle immobiliser
- Evidential – Highly accurate, exceeds current demands of today’s evidential breath testing programs

(Lion Laboratories, n.d.)



What Business could we be in?

Project Summary

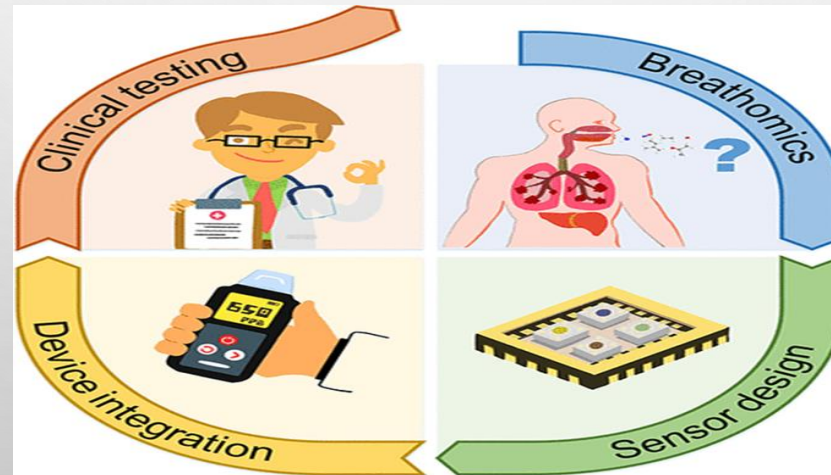
The company has identified commercial opportunities for a chemical alcohol detector system to detect organic materials, including those generated by virus infections. They have prototyped the electronic and mechanical systems and will specify and source the electronics and mechanical elements from Eastern Europe or Asia. The company will engage a London-based company to design the physical envelope and appearance of the new Virus Detect. Final assembly, testing, packing, and shipping will be managed at the Welshpool factory. The company is approaching the development of this potential CDS (Chemical Detector System) in an 'Open Innovation' manner, with small concurrent R&D projects being undertaken in-house and in collaboration with the local university.



(SOCIETY, 2020)

The potential target market for COVID chemical detector systems is wide and includes:

- Healthcare facilities: Healthcare facilities are likely to be early adopters of COVID chemical detector systems, monitoring air quality and detecting COVID-19 presence in hospitals and clinics.
- Businesses: Businesses in high-risk environments, like airports, schools, and manufacturing facilities, may benefit from COVID chemical detector systems to protect employees and customers.
- Government agencies: Government agencies like CDC and WHO may be interested in COVID chemical detector systems to monitor the virus's spread and track public health measures' effectiveness.
- Individuals: Individuals concerned about COVID-19 exposure can use COVID chemical detector systems to monitor air quality in homes, offices, and public spaces.



Interpretation of marketing sensing capabilities and market understanding

Two key ideas in marketing are market awareness and marketing sensing abilities. A company's capacity to recognise and understand market trends and possibilities is known as marketing sensing capabilities. A company's understanding of its target market, including its needs, is referred to as market understanding.

To enhance marketing sensing capabilities, companies can conduct market research to identify trends, and opportunities, and understand target market needs. Staying up-to-date on industry trends through reading publications, attending events, and networking with professionals can also enhance marketing sensing capabilities.

Improve market knowledge through the use of customer surveys and analysing customer data, to understand target market needs and wants. These methods help companies understand customer experiences with products and services, ultimately leading to better marketing strategies.

Improved marketing sensing capabilities and market understanding are crucial for companies to identify new opportunities and tap into them effectively in today's competitive marketplace.



What are the advantages of using the Value Proposition Canvas?

- Understanding the customer, with their needs and expectations;
- Developing a product in accordance with what your customer need and want;
- Comparing a product you already have with the user's need;
- Finding your product-market fit;
- Avoiding producing something nobody wants,
- Saving time and money.

(PEREIRA, 2023)



VALUE PROPOSITION CANVAS

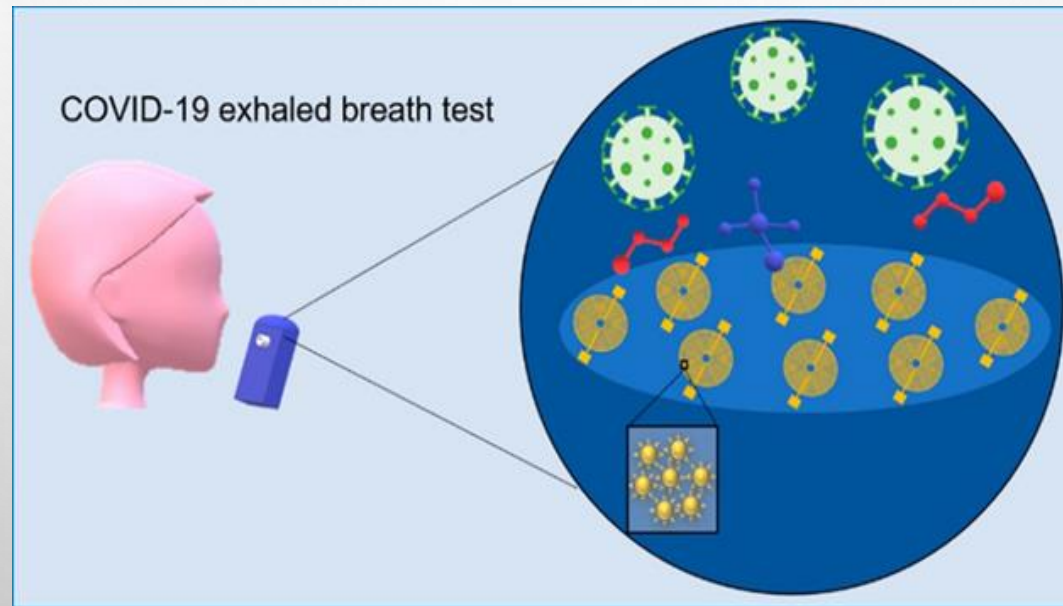
PRODUCT | CUSTOMER



Design Brief for a Covid Chemical Detector System

The Company has partnered with a university to explore commercial opportunities for a chemical alcohol detector system to detect organic materials, including those generated by virus infections in breath.

(Benjie Shan, 2020)



There are a number of factors that need consideration within the design brief for a NPD.

The importance of safety:

COVID chemical detector systems are used in hazardous environments, so it is important to emphasize the safety features of the product.

The need for regulatory compliance:

COVID chemical detector systems must comply with a variety of regulations, so it is important to be aware of these requirements.

The importance of education:

Potential customers may not be familiar with COVID chemical detector systems, so it is important to educate them about the benefits of the product. Operation of this product should be straight forward and simple to operate.

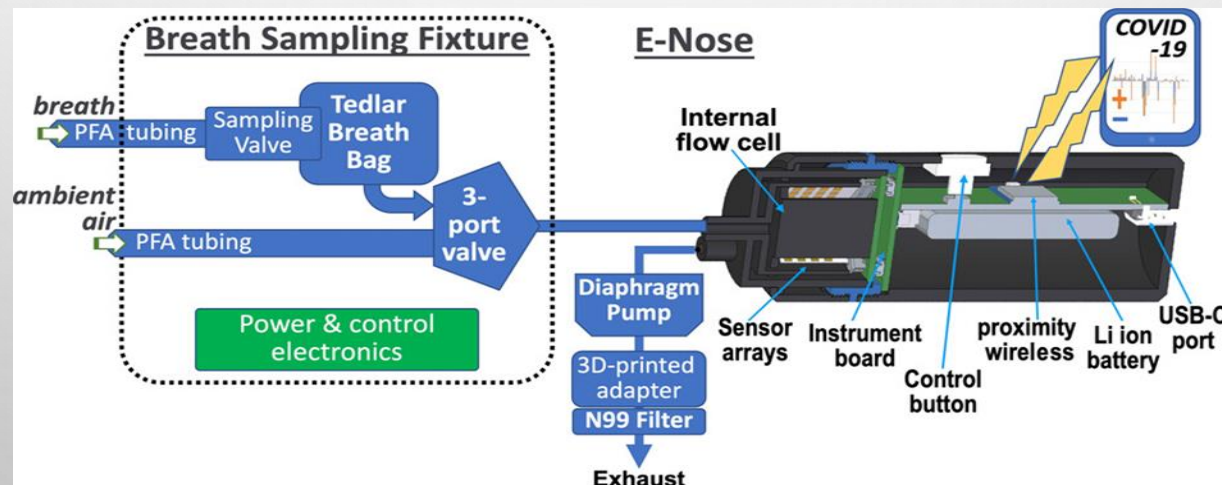
Design Requirements:

Handheld CDS system, easy to operate and built on a similar design to a handheld alcohol detection system used by law enforcement. Self-calibrating, Simple Red positive, Green negative output, Bluetooth capable to link with a mobile app for recording purposes, system to be able to report to healthcare hub through wireless tech if not used through mobile app, or ability to connect to a printer for results. USB Type C charging, or AA battery power source, IP68 to withstand brutal conditions, and shockproof, Able to operate in certain temperature ranges.

be able to report to healthcare hub through wireless tech if not used through mobile app, or ability to connect to a printer for results. USB Type C charging, or AA battery power source, IP68 to withstand brutal conditions, and shockproof, Able to operate in certain temperature ranges.

Potential Markets:

Healthcare providers, such as hospitals, clinics, and doctor's offices. Businesses that operate in high-risk environments, such as airports, schools, and manufacturing facilities. Government agencies, such as the Centres for Disease Control and Prevention (CDC) and the World Health Organization (WHO). Individuals who are concerned about their risk of exposure to COVID-19 could also use COVID chemical detector systems to monitor the air quality in their homes, offices, and other public spaces.



(Jing Li, 2023)

Customer value personas

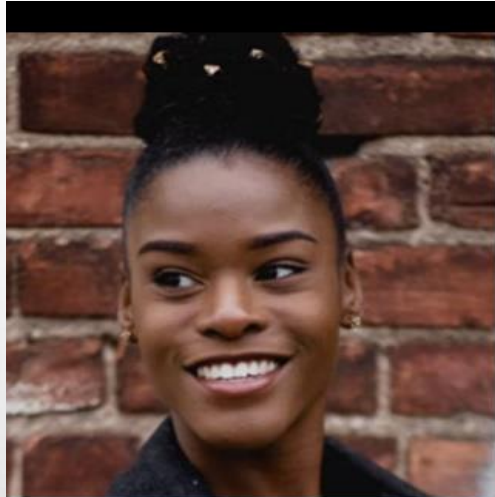
A customer value persona is a semi-fictional representation of your ideal customer, based on data and research, allowing you to understand their needs, wants, and pain points. Here are some of the benefits of using customer value personas:

- Customer value personas enhance understanding of target market by identifying needs, wants, pain points, motivations, and goals, enabling deeper understanding of their needs and desires.
- Customer value personas enhance marketing and sales efficiency by focusing on the most likely customers for products or services, enabling targeted efforts and increased focus on potential customers.
- Customer value personas aid in better decision-making, guiding product development, marketing, and sales in businesses, enhancing decision-making and enhancing customer satisfaction.

Persona 1, Production Manager, Manufacturing.

	Bio Keith is a 45-year-old manufacturing production manager living in Boston. He is married and enjoys the challenge of managing a production department.	Motivations Keith is motivated by his desire to keep the production department safe and ensure the quality of the products. He wants to keep all his employees safe and risk free when at their place of work.
Keith  Age/Gender 45/male  Location Boston  Occupation Manufacturing Production Manager  Family Status Married	Goals Keith wants to quickly and accurately detect harmful Viruses in the workplace and ensure the safety of his employees and production .department	Pains Keith finds it difficult to detect harmful Viruses in a timely manner and keep the production line running smoothly. Current testing can be inaccurate and timely process.
		Devices Keith uses an iPad Air
		Brand Affiliations Apple, Bose, The North Face

Persona 2, Nurse, Health Care.

	Bio Nia is a 32-year-old nurse living in Los Angeles. She is married and loves her work in the hospital.	Motivations Nia is motivated by her need to provide safe and effective care to her patients. She strives day to day to give provide her patients with the best care possible	Devices Nia uses an iPhone 12 Pro.
Nia  Age/Gender 32/female  Location Los Angeles  Occupation Nurse  Family Status Married	Goals Nia wants to be able to quickly and accurately detect COVID in her hospital to stop the spread of the virus.	Pains Nia finds it difficult to quickly and accurately detect COVID in her hospital through current testing methods.	Brand Affiliations Apple, Samsung, Johnson & Johnson



Summary

After conducting market research to identify trends, and opportunities, and understand target market needs for a handheld Covid Chemical Detector System, we have found through education and achieving the correct design requirements, this product even though outside the company's normal market sector, would be a commercially viable and a profitable product to take to market. There are many sectors that we could market the product to, but we should target the largest potential for sales, such as Health Care, Businesses, and Travel. These three markets we believe would generate the most revenue, and make the product successful.





ANY QUESTIONS?

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