

Development of a Chemical Detector System (CDS)

Assessment A- Yr Dwfor Tri Tim Ltd

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Determine what marketing knowledge is likely to be required for the development of our new product.



Survey & Market testing
in specific groups
(Hospitals/Ambulance
and Care homes)

Scanning existing
knowledge, academic
research papers, similar
devices on market.

Customer behaviours.

Competitive Analysis

Positioning and
targeting

Marketing mix
(product, price, place
and
promotion)(Palmer.
2004)

Launch and promotion

Customer relationship
management (CRM)

- Kotler, P., & Keller, K. L. (2016). Marketing management (15th ed.). Pearson.
- Armstrong, G., & Kotler, P. (2015). Marketing: An introduction (12th ed.). Pearson.
- Trott, P. (2012). Innovation management and new product development (5th ed.). Pearson Education Limited.

Present your findings from your sources of marketing knowledge, and apply this practice to the business to ascertain;

- 2. what business are we in?
 - The manufacture and supply of alcohol breathalysers
 - Law enforcement (police forces, stations)
 - Product distribution
 - Compliance and Certification: Ensuring the breathalysers comply with industry standards and regulations and obtaining necessary certifications.
 - Software and Data Analysis: Developing software solutions to store, analyse, and manage the data collected from breathalyser tests, assisting law enforcement agencies in tracking and evaluating alcohol-related incidents.
 - We know the breathalyser business very well and have been supplying customers for over 15 years



Present your findings from your sources of marketing knowledge, and apply this practice to the business to ascertain;

○ **3. What business(es) could we be in? (1 of 2)**



- Healthcare – Hospitals, GP Surgeries, ambulances, care homes.
- Provide initial diagnosis of various viral infections by a simple breath test, results available within minutes
- Rapid test will ensure customers can be treated before illness becomes more serious
- COVID-19 detection in breath samples have been developed, our product will be able to detect more than one infection
- Current tests and times:
 - Blood tests – results take between a day and up to few weeks
 - Urine tests – results take between a day and up to a week
 - Faeces tests – results take between 1-3 days (specific PCR test)
 - Sputum (saliva) test – results take between 1-3 days
 - Antibody tests – results available same day, special equipment needed and is being tested against a known infection
 - All of the samples are also tested using agar plates and incubation, which takes between 48hr – 96hrs

What business could we be in? continued..

2 of 2



- a. A change in business strategy
- b. A significant shift in resources (Paul Trott)
- c. Yr Dwfor Tri Tim Ltd are delighted to launch a brand new personal virus detection device which offers very high accuracy.
- d. Yr Dwfor Tri Tim device VDD – will detect volatile organics in the breath
- e. The addition of this new and exciting device makes Yr Dwfor Tri Tim Ltd the only company in the UK selling purely fuel cell based a dedicated virus checking device.
- f. It is hoped the VDD range will be adaptable for all organic based virial disease the initial scope is to target the top seven prevalent viruses in the world:
 - i. Covid.
 - ii. Ebola.
 - lii, H1N1 Influenza.
 - lv. Measles.
 - v, Poliomyelitis
 - Vi. Monkeypox.
 - Vii. Smallpox
- g. There is much confusion about the use calibration of Virial Detection Devices (VDD) with several companies that will simply sell you a product, we take our time in sourcing the right product for our customer whilst offering a full after sales advice service.
- h. Fuel cell powered devices available in selected devices offer superior accuracy and reliability compared to the older style semi-conductor types that have dominated the market for so long. Semi-conductor sensors are very unreliable compared to the fuel cell powered
- i. Our VDD range devices 12 – 15 can be used anywhere in the World and will comply with World Health Guidelines or Individual Country specifications as required. (Detection limits need to be confirmed at the time of placing orders)

Sourcing Marketing Knowledge for the development of a CDS (Chemical Detector System)

S

Established Reputation: The company already has a strong reputation and expertise in developing and manufacturing breath analysers, which can be leveraged to build credibility in the new market.

Technical Expertise: The company possesses technical knowledge and experience in developing accurate and reliable analytical devices, which can be applied to the development of virus detection analysers.

Existing Distribution Network: The company likely has an established distribution network for its breath analysers, which can be utilized to efficiently distribute and market the virus detection analysers.

Strength

Manufacturing Capabilities: The company has manufacturing capabilities in place, which can be adapted to produce the virus detection analysers, potentially reducing production costs and time.

W

Limited Knowledge of Virus Detection: The company may have limited experience and knowledge in the field of virus detection, which could pose challenges during the transition.

Regulatory Requirements: The development and sale of virus detection analysers may require compliance with additional regulatory standards and certifications, which could add complexity and costs to the manufacturing and distribution processes.

Weakness

Market Familiarity: The company may need to invest in market research to understand the virus detection market, including customer needs, competition, and pricing dynamics.

O

Growing Demand for Virus Detection: The ongoing global health concerns and focus on infectious disease control create a significant market opportunity for virus detection analysers.

Diversification of Product Portfolio: By entering the virus detection market, the company can diversify its product portfolio and reduce dependence on a single product category, thereby mitigating risks associated with fluctuations in demand for breath analysers.

Opportunity

Potential Partnerships: Collaborations with research institutions, healthcare organizations, or government agencies can provide access to expertise, resources, and distribution channels in the virus detection market.

T

Intense Competition: The market for virus detection analysers may already have established competitors, including larger companies with more resources and market presence.

Rapid Technological Advancements: The field of virus detection is evolving rapidly, and advancements in technology may render current analyser models obsolete if not continually updated.

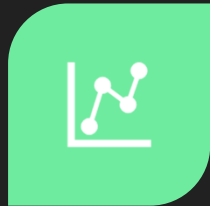
Price Sensitivity: Healthcare markets tend to be price-sensitive, so the company needs to carefully consider pricing strategies to remain competitive while maintaining profitability.

Threat

It is important for the company to address weaknesses and threats by investing in research and development, acquiring new expertise, and adapting their business strategies to capitalize on the identified opportunities. This will facilitate a successful transition into the virus detection analyser market and help the company maintain a competitive edge.

Sourcing Marketing Knowledge for the development of a CDS (Chemical Detector System)

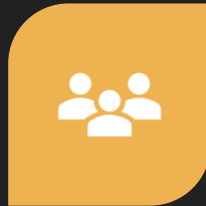
○ Netnography



THE USE OF NETOGRAPHY IS A GREAT WAY TO GAIN VALUABLE DATA QUICKLY FROM MANY DIFFERENT SOURCES. IT CAN BE USED TO CAPTURE QUALITATIVE AND QUANTITATIVE DATA.



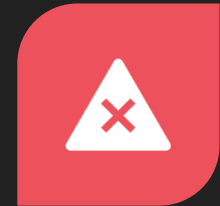
FIND AND JOIN ONLINE GROUPS AND DISCUSSIONS



INTEGRATE INTO THE GROUPS AND ASK QUESTIONS ANALYZE THE RESPONSES



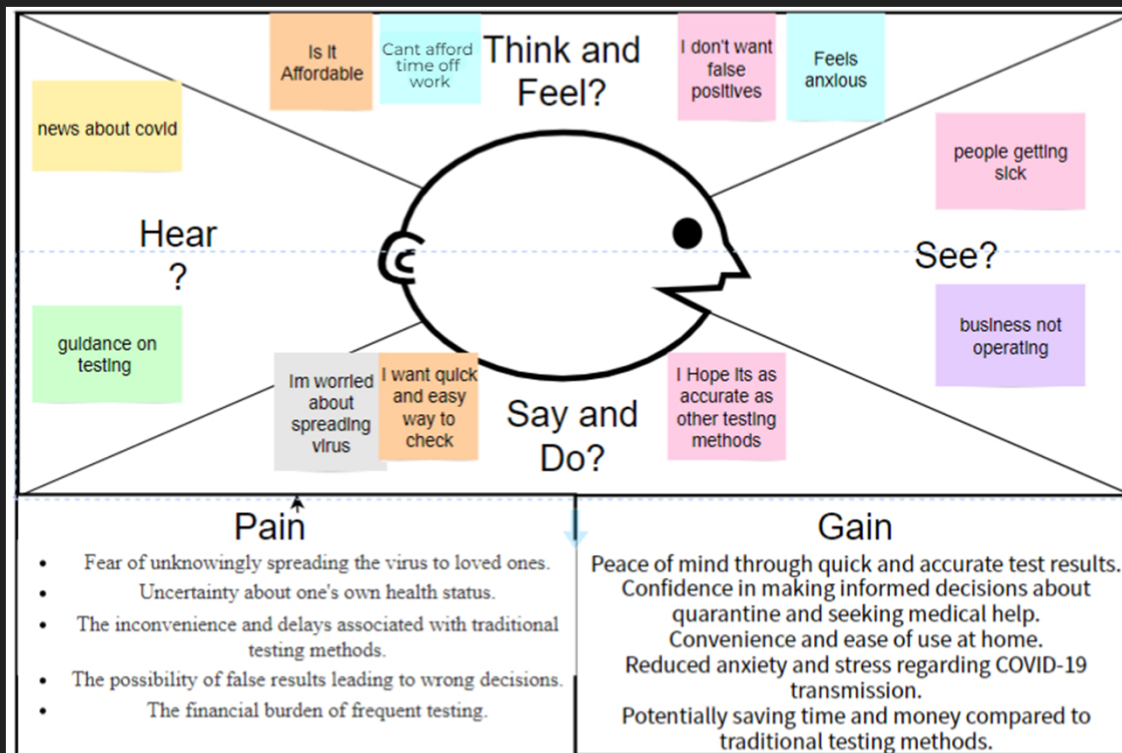
BE AWARE OF EMERGING TRENDS



ALWAYS BE ETHICALLY AWARE AND NEVER PUBLISH ANY FINDINGS WITHOUT ASKING PARTICIPANTS PERMISSION

Sourcing Marketing Knowledge for the development of a CDS (Chemical Detector System)

Empathy map – emic batat 2019



By using Batat empathy map we have conducted a value proposition canvas (next slide)

Value Proposition Canvas

Value Map



Customer Profile



Sourcing Marketing Knowledge for the development of a CDS (Chemical Detector System)

1. The first choice, product of choice, best on the market.
2. Competition, AI based cough detection using mobile APP
3. Predicting the future? "...prediction is very difficult, especially about the future" Niels Bohr 1885 - 1962
4. Analyse customer data
5. (Big Data Vast caches of data) (Small data small clues to uncover trends)
6. Monitor customer feedback
7. Existing customer base
8. We also offer full after sales advice and back up should you require this post sale.
9. A tailored advice to our customers ensuring that any products you buy from us is suitable for your needs
10. The continual accumulation of knowledge, not only in highly specialised areas where the company is currently operating, but also in areas that may prove to be of importance to the business in the future.
11. Potential market in the regions
12. Through identification of market opportunities or development of technology
13. Defend, support and expand existing business
14. Benchmarking against competitors
15. Product architecture
16. Market share % ?
17. Banked reserves
18. Consumables – mouth pieces ?

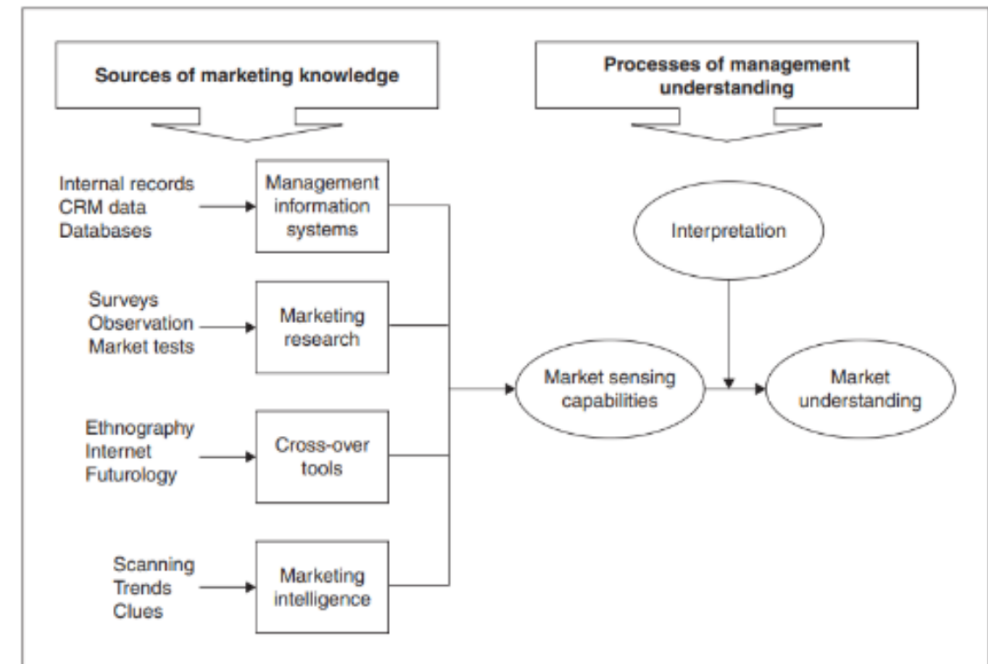
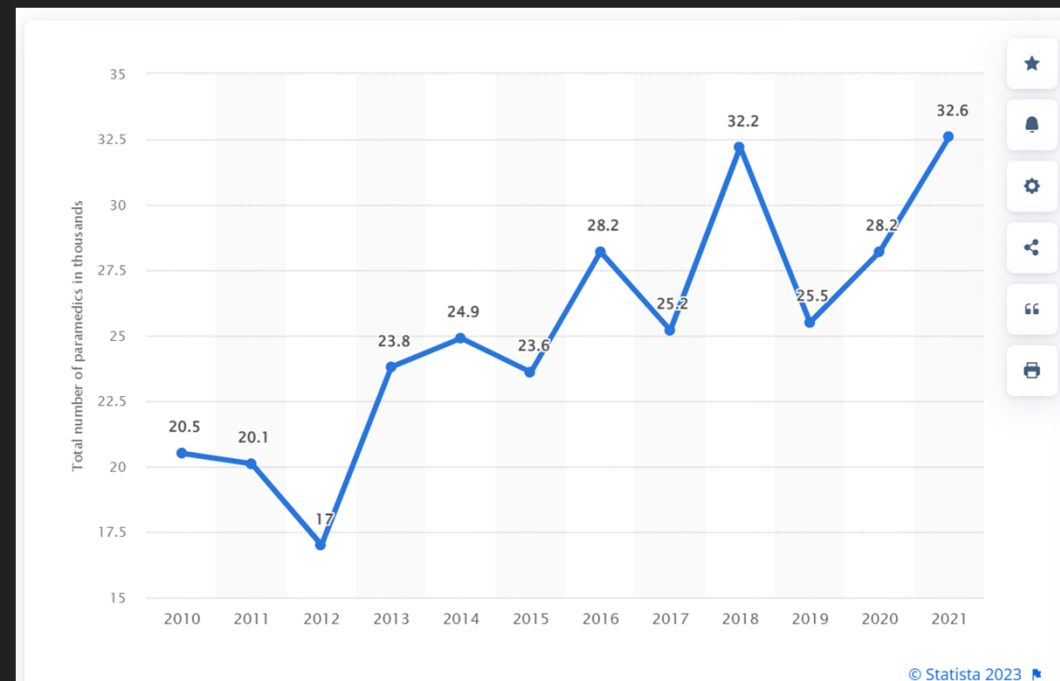


Figure 6.1 Marketing research versus market sensing

Sourcing Marketing Knowledge for the development of a CDS (Chemical Detector System)

- There are 10 Ambulance trusts in England with circa 51,000 employees

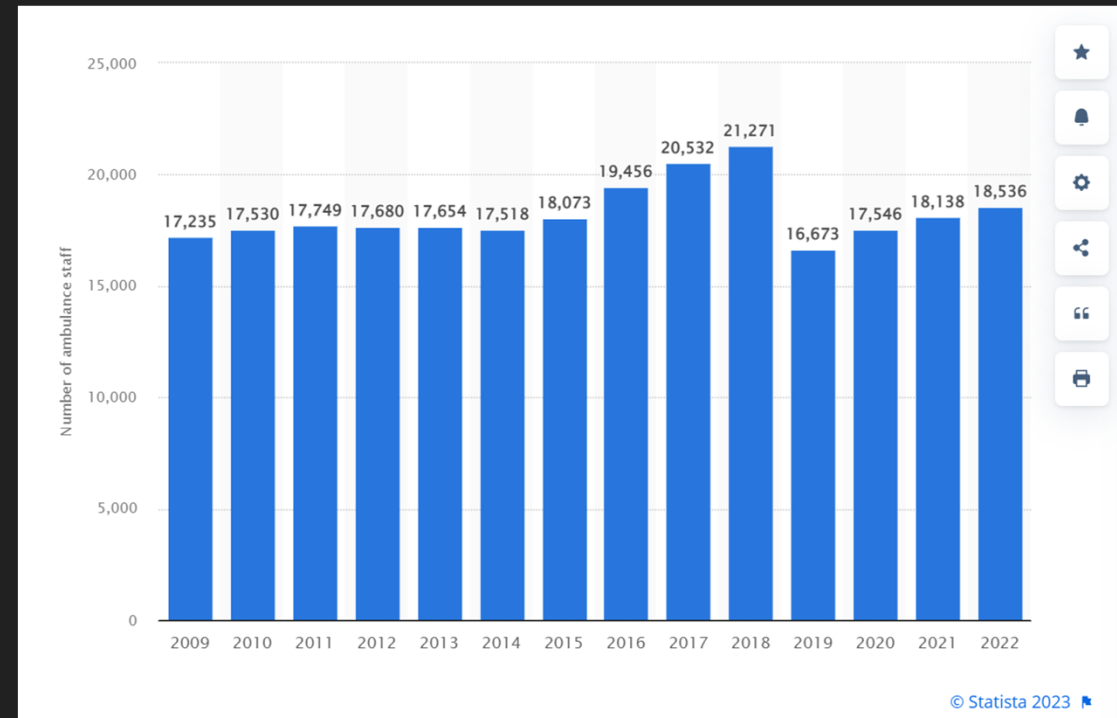
Annual number of paramedics in the United Kingdom (UK) from 2010 to 2021



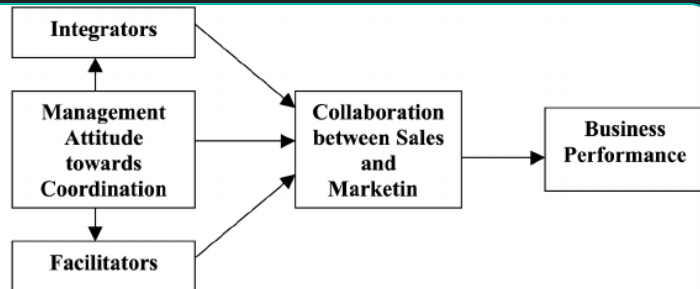
Sourcing Marketing Knowledge for the development of a CDS (Chemical Detector System)

1. Households: The number of households is estimated at 28.2 million in the UK 2022 (source National office of statistics census 2021)
2. UK population: estimated at 67 million mid 2021 (source National office of statistics census 2021)

Number of Ambulance staff 2009 -2022



Important Interdepartmental interactions for success



Explanation of Factors affecting Collaboration between Sales and Marketing

Integrators	Management attitudes to coordination	Facilitators
Communication	<i>Collective factors</i>	Rewards
Organisational Learning	<i>Align Goals</i>	Cross-functional Training
Market Intelligence	<i>Foster Mutual Understanding</i>	Integration Mechanisms
Conflict of Interests	<i>Establish Esprit de Corp</i>	(e.g. job rotation, project groups)
Marketing Planning	<i>Share Resources</i>	
	<i>Create a Common Vision</i>	

- Through our research we have highlighted three types of factors influencing collaboration between sales and marketing: integrators, facilitators, and management attitudes towards coordination. There appears to be an established relationship between the level of collaboration between sales and marketing and business performance. Further, the attitude of senior managers to improving coordination is critical to influencing collaboration between sales and marketing

Secondary research

- The previous slides have concentrated on primary research. We have also considered secondary research within this study.



Secondary research will allow us to gather data on technical issues, the time requirement V knowledge received can be swayed in our flavour by utilizing the following-



Educational Institutions (Tie in with the university)



Government Departments (To find out the latest laws and rules on Covid)



Social Media Sites (reactions and interactions)

Do we give our customers what they want or encourage our customers to want what we have?

- Those who argue that technology drives innovation will cite Henry Ford or Steve Jobs—two guys with a lot of credibility. Ford once said, “If I asked customers what they wanted they’d have said faster horses.” And Steve Jobs was famous for saying, “It isn’t the customer’s job to know what they want.”
- But who are our customers? What motivates them? What pains do they suffer? We explore three persona types in the following slides..



Personas

	Bio Bradley is a 45-year-old Doctor living in London. He is married and loves working to help people.	Motivations Bradley is motivated by his desire to help people and to provide the best care possible. Keeping himself his family and his patience safe.
Bradley  Age/Gender 45/Male  Location London  Occupation Doctor  Family Status Married	Goals Bradley wants to have an easy and reliable way of detecting virus infections in his patients.	Devices Bradley uses a laptop and a tablet. Brand Affiliations Apple, Microsoft, Samsung

Personas



Felicia



Age/Gender
60/Female



Location
Harrogate



Occupation
Physiotherapist



Family Status
Married

Bio

Felicia is a 60 year old physiotherapist practice owner, living in Harrogate. She is married and has an elderly mother in care.

Goals

Felicia wants to have an accurate and invasive way of testing herself prior to visiting her Mother.

Motivations

Felicia is motivated by her desire to keep her mother safe, as she comes into contact with many people in one day her risk of passing a potentially fatal virus on to her only living relative is high.

Pains

Inconvenience of swab testing (oral and nasal) prior to entry to the nursing home.
Inaccuracy of tests, availability and storage of

Devices

Felicia uses a laptop & mobile phone.

Brand Affiliations

Apple, Microsoft, Samsung, Android

Personas



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Final thoughts

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