

Emerging ASX Technology Sector

19 October 2015

Web 3.0 and the Growth of Mobile Technology



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Company Information

ASX Code	RAP
Last Price (\$)	\$0.03
12 month share low	\$0.02
12 month share high	\$0.03
Shares on Issue (m)	249
Market Capitalisation (\$m)	8
Daily Volume	5.5m

Bloomberg, DJC Research

Business Description

ResApp Health Ltd. is engaged in the research and commercial development of drugs. It develops smart phone medical applications for the diagnosis and management of respiratory disease. The technology is based on a machine learning algorithm that uses sound alone without the need for additional hardware to diagnose and measure the severity of a respiratory condition. The algorithm has been successfully tested for pneumonia and asthma diagnosis in a clinical proof of concept study. The company is also engaged in mineral exploration. The company was founded on September 13, 2000 by John Majewski and is headquartered in Perth, Australia.

Factset, DJC Research

Directors

Roger Aston	Non-Exec. Chairman
Tony Keating	CEO/MD/Director
Adam Sierakowski	Non-Exec. Director
Chris Ntoumenopoulos	Non-Exec. Director
Robert Ramsay	Non-Exec. Director

Major Shareholders

Uniquist Pty Ltd	7%
Freeman Road	5%
Peterson Superfund	4%
Brian Leedman	3%

Performance

Source: Iress

Analyst Details

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ResApp Health (RAP)

Calling the Doctor on my Smartphone

ResApp is an Australian based medical diagnostic technology development company that is developing health care solutions that can have a positive impact on patients and healthcare costs,

Key Points

- RAP has developed a disease diagnostic tool that runs on a smart phone:** RAP has developed an application that runs on a smartphone that “listens” to patients cough and determines an appropriate diagnosis using algorithms from the sound signature of the cough. The system was originally developed by researchers at the University of Queensland using funds from the Bill and Melinda Gates Foundation. The system can be likened to a digital stethoscope but its real value besides the diagnostic ability is that it can be used to perform a remote diagnosis, which makes this an ideal tool for the telemedicine market.
- RAP is undertaking a clinical trial with encouraging early results:** RAP is currently conducting a trial at two hospitals in Perth: Joondalup Health Campus and Princess Margaret Children’s Hospital. Preliminary results from the study have been very encouraging with a 95% accuracy for distinguishing patients with asthma from healthy subjects and a 96% accuracy for distinguishing patients with viral pneumonia.
- Telemedicine is a growing sector:** Healthcare costs have far outstripped inflation over the years and if the trend continues healthcare will dominate all other areas of public spending. Some observers say that if the trajectory in healthcare costs in Australia is extrapolated into the future the entire Federal and State budget will be spent in this area. This means there will be no money for defence, social programs, education etc. It is believed that increasing the use of telemedicine is a way of containing spiralling costs. Helping to drive the move to telemedicine is that it is expected that there will be an uptake in digital health largely, which will be driven by increasing use of smartphones and miniaturisation of health care sensors.
- Full market development of a telemedicine app is low cost relative to other medical interventions:** RAP is in the process of carrying out clinical trials but these trials are low cost in comparison to drug trials, which can cost billions and take many years to complete. RAP has started to prepare for FDA trials as the ultimate target market is the United States.
- Multiple potential revenue streams:** RAP intends to partner with telehealth providers and charge per consultation, and then move to a consumer distribution model and ultimately partner with device manufacturers and telecommunication providers.

Investment Points

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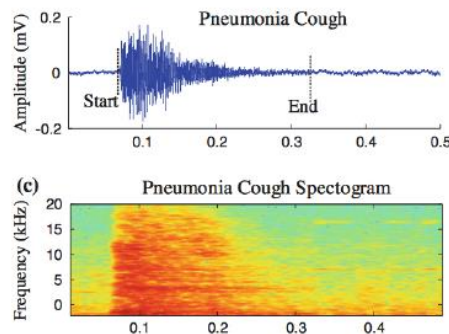


Figure 29: Digital signature of a cough

Source: RAP

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According to Deloitte there were 75 million telehealth consultations in 2014 and telehealth consultations have been growing by 56% per year, which represents a \$12 to \$16 billion market opportunity. Large US companies such as the pharmacy group Walgreens are entering this space as they see this as the future of affordable healthcare. RAP’s remote diagnostic tool for respiratory illnesses is very important as these disease make up a large portion of presentations to doctors and hospitals.

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Multiple potential revenue streams: RAP intends to partner with telehealth providers and charge per consultation, and then move to a consumer distribution model and ultimately partner with device manufacturers and telecommunication providers.

Corporate Summary

RAP is developing digital healthcare solutions to assist doctors and empower patients to diagnose and manage respiratory disease. The company is creating easy to use, affordable, clinically-validated and regulatory-approved diagnostic tools that only require a smartphone. The solutions are designed to be easily integrated into existing telehealth solutions and RAP is also working on apps to provide respiratory disease diagnosis and management directly to consumers and healthcare providers.

Directors and management

Dr Roger Aston - Non-Executive Chairman

Dr Roger Aston, BSc (Hons) PhD is currently the Executive Chairman of OncoSil Medical. He has had extensive experience on boards of many pharmaceutical companies, and has been Chief Executive Officer of Pitney Pharmaceuticals Ltd, PSIMedica, pSiOncology Pte Ltd, Peptech and Cambridge Antibody Technology.

In 2001, Dr Aston co-founded pSivida Limited. He served as the Chief Executive Officer of Mayne Pharma Group Limited until 15 February 2012. During his career, Dr Aston has been closely involved in start-up companies and major pharmaceutical companies. Aspects of his experience include FDA and EU product registration, clinical trials, global licensing agreements, fundraising through private placements, and a network of contacts within the pharmaceutical, banking and stock broking sectors.

Dr Aston is both a scientist and a seasoned biotechnology entrepreneur, with a successful track record in both fields. He currently has several executive and non-executive board positions with prominent biotechnology companies.

Dr Tony Keating - Chief Executive Officer and Managing Director

Dr Tony Keating has over 9 years' experience in commercialising technology. Dr Keating created the initial business strategy for ResApp and has led the commercialization of ResApp's technology to date. Previously, Dr Keating was Director, Commercial Engagement at UniQuest Pty Ltd, one of the global leaders in commercialisation of university technology. While at UniQuest, Dr Keating held roles as interim Chief Executive Officer and Non-Executive Director for a number of privately-held, venture-capital funded start-up companies. Prior to joining UniQuest Dr Keating held business development and engineering management roles at Exa Corporation, a US-based software company that is now listed on the NASDAQ.

Dr Keating holds a Bachelor of Engineering, a Master of Engineering Science and a Doctor of Philosophy (Mechanical Engineering) from The University of Queensland. Dr Keating also has an Executive Certificate of Management and Leadership from the MIT Sloan School of Management, and is a Graduate Member of the Australian Institute of Company Directors.

Mr Adam - Sierakowski Non-Executive Director

Adam Sierakowski is a lawyer and founding director of the legal firm Price Sierakowski. He has over 20 years' experience in legal practice, much of which he has spent as a corporate lawyer consulting and advising on a range of transactions to a variety of large private and listed public entities. He is the co-founder and director of Perth based corporate advisory business, Trident Capital, where he has for years advised a variety of large private and public companies on structuring their transactions and coordinating fundraising both domestically and overseas.

Mr Sierakowski has held a number of board positions with ASX listed companies and is currently a member of the Australian Institute of Company Directors and the Association of Mining and Exploration Companies.

Mr Chris Ntoumenopoulos - Non-Executive Director

Mr Ntoumenopoulos is a partner at CPS Capital, a WA based Stockbroking and Corporate Advisory firm. He has worked in financial markets for the past 12 years, focusing on Capital Raisings, Portfolio Management and Corporate Advisory. Mr Ntoumenopoulos has advised and funded numerous ASX companies from early stage venture capital, through to IPO. He is an executive director of various private companies which span across finance, technology and medical sectors. Mr Ntoumenopoulos has a Bachelor of Commerce degree from the University of WA, majoring in Money and Banking, Investment Finance and Electronic Commerce

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SPECULATIVE BUY – 10% out-performance, but high risk
 BUY – 10% or more out-performance
 ACCUMULATE – 10% or more out-performance, buy on share price weakness
 REDUCE - 10% or more under-performance, sell on share price strength
 HOLD – 10% underperformance to 10% over performance
 SELL – 10% or more underperformance

Period: During the forthcoming 12 months, at any time during that period and not necessarily just at the end of those 12 months.