

Just what the doctor ordered

19 December 2019

DocDoc is an innovative business with considerable growth potential plus early mover/competitive advantages. We believe it is disruptive in ways that benefit its key industry stakeholders: patients, medical practitioners and insurers. We recently met DocDoc's CEO Cole Sirucek to discuss the company's business model and growth strategy and regard Singapore-based DocDoc as a prime example of the potential of ADAM's investment template.

DocDoc: doctor discovery engine

DocDoc matches patients with medical providers (doctors and hospitals) best suited to carry out specific procedures. That is more complex than it sounds. Its bespoke database is at the core of the world's first 'AI-powered doctor discover engine'. It can distill relevant data regarding all practitioners' skills, experience and outcomes, filter them according to criteria including expense, and give individual patients the kind of decision-making power that is currently unavailable from any other source.

We briefly explore DocDoc's potential in this update. However, its ability to steer patients to the right medical practitioner is already reducing complications and readmissions, patient anxiety and stress, and generating significant cost savings that, according to its data, range from USD 2,000 to USD 10,000 per case.

In addition to the appeal of such a service to Asia's rapidly growing millennial base, it enables medical insurers to access a new digital business model, add value and build competitive advantages. That is a significant shift and opportunity for an industry that can be opaque and commoditised – and thus vulnerable to disintermediation – and which relies on efficient distribution, marketing, and inertia to limit customer churn.

ADAM: positive update on Future Metal Holdings

ADAM has also provided an update on its largest portfolio investment Future Metal Holdings (FMH), which owns a large dolomite magnesium limestone mine in Shanxi province in China. On 12 November ADAM reported that completion of necessary works to prepare the quarry **to restart production this year are approaching completion**, with a test production run scheduled for December 2019.

The anticipated metrics for full-scale production at the quarry announced in September included an encouraging new independent market study, with this update confirming **'considerable demand'** locally for the quarry's output. FMH already been awarded various permits and licences that enable production to restart.

Prospects

ADAM will continue to focus on establishing the viability and value of its legacy portfolio and the stake in FMH represents the single most significant component of NAV. It plans to attract further investment that will provide a short-term boost to cash revenues to cover overheads, enable it to commence distributions and underpins long-term NAV growth.

Its shares are at a surprising 68% discount to our pro forma NAV of 74 p/share.

Company Data

EPIC	ADAM
Price (last close)	18.0
52 week Hi/Lo	61/18
Market cap	£19.2m
ED Proforma NAV/share	74p

Description

Adamas Finance Asia (ADAM) aims to be the leading London-quoted pan-Asian focused diversified SME investment holding vehicle. It targets above average income and capital growth, with a stated objective to provide shareholders with unique access to a diversified portfolio with access to high-growth Asian economies.

ADAM appointed a new Investment Manager, Harmony Capital Investors Limited in May 2017. Harmony Capital has a dedicated Asian focus and is based in London, Hong Kong and Singapore.

ADAM shares are listed on the AIM in London,

Roger Leboff (Analyst)

0207 065 2690
roger@equitydevelopment.co.uk

Hannah Crowe

0207 065 2692
hannah@equitydevelopment.co.uk

DocDoc - Patient Intelligence

Radical template for doctor discovery

DocDoc was conceived as a response to its founders’ negative experience of the search for treatment for emergency procedures. An arbitrary process required patients to rely on recommendations from GPs or insurers based on personal networks or referral systems.

There was, however, no way to test the veracity of any referral. All evidence of a practitioner’s record was anecdotal, with no access to detailed data. That scenario can leave patients feeling disempowered and had serious implications including poorer treatment outcomes, stress, frustration and unnecessary expense.

DocDoc’s research consistently reveals that, without data-driven recommendations, the selected practitioners are often not ideal fits for policyholders’ unique needs. Patients cannot identify suitable providers and costs can be excessive, even when treatment outcomes are satisfactory.

It therefore sought to create a solution which can find and engage the appropriate physician for each problem at the right time. **Its ambition was to create the world’s largest scalable doctor discovery product, which empowered patients to make data-driven healthcare decisions which are safe, transparent and fair.**

HOPE: the world’s first scalable doctor discovery engine

DocDoc launched its AI-powered doctor discovery engine, HOPE in 2012. It is the world’s first scalable doctor discovery engine and has served over 13m patients.

HOPE transforms the patient’s buying experience

Empowers patients by providing them with the knowledge to make informed decisions

	Without doctor discovery	With DocDoc
Outcome	Unpredictable, highly variable and near impossible to gauge prior to treatment	Medically relevant intermediate markers quantified, compared and explained in digestible format
Price	Variable price by patient and episode unrelated to quality	Price measured, compared and guaranteed
Experience	Uncurated reviews, often limited procedure/condition information provided	Curated reviews provided with context and a personalised explanation

Source: DocDoc presentation

HOPE (heuristic for outcome, price, and experience) will select the top three recommended physicians based on a patient's unique needs. It scores each selection, based on healthcare quality pertinent to the patient's unique needs at a condition and/or procedure level of granularity. Healthcare quality is defined as a function of:

Outcome	The doctor’s expertise at performing a procedure or treating a condition
Price	Prices compared to doctors performing similar procedures in the region
Experience	How the doctor and healthcare system made the patient feel

HOPE incorporates Asia’s largest doctor network and its primary markets - Singapore, Malaysia, Thailand and India. Its detailed database covers c 23,000 doctors and c 800 hospital/clinics collated from over 500 data points. All data has been collected by DocDoc via direct contact with all individuals and institutions.

Better treatment outcomes at reduced cost

DocDoc's proprietary data and Hong Kong's public data confirm that **significant cost savings** can be achieved by steering medical care based on quality at doctor and hospital levels.

The components include:

- Reduced complication/readmission rate by matching patients with high volume doctors
- Doctor discovery: second medical opinion first time around saves significant cost

Cost savings	
Via steerage	Via utilisation
Medical centre fees	Drug costs
Doctor fees	Emergency room care
Reduced complication and readmission rate	Hospital stay
Second opinion benefits the first time around	Cashless payment drives real time data which enables better steerage

DocDoc presentation and data

HOPE processes decisions for an extraordinarily wide range of patients, procedures, institutions and practitioners. The permutations are vast but DocDoc has identified average costs savings of c 48% based on discrete samples and procedures in Hong Kong. That outcome reflects HOPE's ability to steer patients from high cost/low relevance doctors to low cost/high relevance doctors.

That analysis does not incorporate notional cost savings from (a) improved outcomes and reduced complications rates or (b) the lower medical fees associated with that. DocDoc's detailed analysis also reveals little if any correlation between the quality of a doctor, and the price that that doctor charges.

New, differentiated business models for insurers

If initial demand for DocDoc's service is from patients and practitioners, the potential benefits for medical insurers are equally compelling and at the heart of its business model.

Competitive advantages inherent in insurance ecosystems

Initially, that appears counter intuitive, as insurers appear to be in the direct path of a highly disruptive product. If greater transparency results in better-informed consumers, purchasers of medical insurance will seek alternatives and demand lower premiums.

However, the lack of a data-driven decision engine for customers prevents analytically driven choices and limits customer loyalty to specific medical insurance providers or products. In a highly crowded, largely commoditised market, insurers focus on their distribution capability, marketing and brand awareness to attract new and retain existing customer. However, that leaves them highly exposed to disintermediation and disaggregation.

DocDoc provides insurers with a means to differentiate and build competitive advantage by adding value to their products to offset an otherwise crowded and commoditised market. That is the basis of a more robust business/financial model and improved margins, despite consumer empowerment.

Insurers can build trusted relationships with policyholders and potentially, sustained revenue growth via a shift to an 'ecosystem' perspective. That ecosystem can be defined as an interconnected set of services that allows users to fulfil a variety of needs in one integrated experience.

Business Case

DocDoc partnership with insurers generates positive Rol, builds trusted relationships with policyholders and offers a differentiated product in a crowded market.

Cost savings	Top line growth	Engagement
Steering based on quality & cost	Deliver superior value	Delight customers
Reduced upfront pay-out	Improve customer retention by improving loyalty	Improve net promoter score
Improved efficiency of care	Expand policyholder base by tapping on millennial population	Gain competitive edge with a high-touch model
Improved quality of care which reduces complication and readmission rates	Reduce price sensitivity and stronger customer attraction via ecosystem services	Empower agents to deliver exceptional customer support

DocDoc presentation

Examples of emerging consumer ecosystems cover such needs as travel, healthcare, or housing. Historically insurers have had a passive and limited relationship with their customers vulnerable to disintermediation, disaggregation and commoditisation. The highly regulated nature of the industry has also given insurers a competitive advantage i.e. via their regulatory skills and huge capital requirements.

Insurers increasingly acknowledge that their competitive advantages will not be determined solely by their organisation, but by **the strength of the partners and ecosystems they choose**. Adopting an ecosystem perspective requires alliances and partnerships with players both within and outside the industry.

DocDoc's ecosystem drives utilisation

DocDoc is a one-stop shop for a patient's healthcare needs:

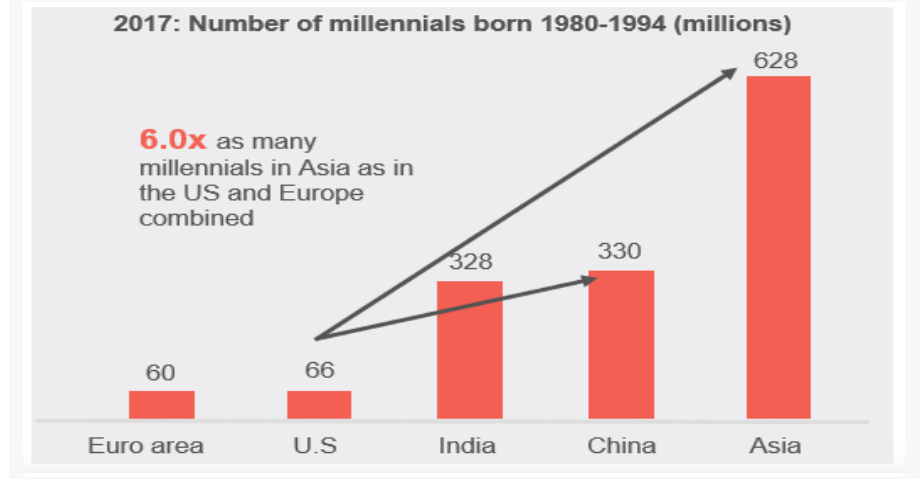
- Highly trained medical professionals provide personalised support and a clear framework to understand quality in healthcare via HOPE
- Network breadth (23,000 doctors), network depth (+78 specialties) and intimacy (+500 data points per doctor) provide patients with peace of mind
- Comprehensive discovery report. DocDoc's medical concierge follows up with the patient after every appointment and guides them through the continuum of care
- Telemedicine is integrated into the customer journey drives significant cost reduction, utilisation, and improves overall experience

In major markets, customers – **particularly millennials** - have shown a willing to switch to a provider with a more interesting ecosystem and an improved experience reduces price sensitivity. Ecosystems add value to those customers' experiences by (a) acting as gateways, reducing friction as they switch across related services, (b) harness network effects i.e. consolidating information across different services and networks that aid comparison and (c) integrating data across a series of services.

Millennial audience is prime target market

Approximately 50% of Southeast Asians are under the age of 30 and are thus yet to hit their peak in terms of spending capability. They have grown up with instant access to information, become accustomed to an on-demand lifestyle.

Proliferation of millennials in Asia



Source: TechnAsia - 9 ways millennials are driving Southeast Asia's tech boom

Insurers can reinvigorate their digital strategies by adopting an ecosystem perspective. A new business model pivots upon partnerships within and outside their industry to:

- Expand policyholder base. Appeal to fast-growing millennial population bases by providing access to on-demand, relevant, and personalised information
- Reduce price sensitivity. Attract new customers, reduce price sensitivity, and reduce exposure to disintermediation, disaggregation, commoditisation
- Focus on customer retention. DocDoc reported data that investment in customer retention is **five times as profitable** as that spent on new customer acquisition
- Improve policyholder experience to drive customer retention. DocDoc achieves industry leading customer experience levels

ADAM led funding round completed in August 2019

In 2018 ADAM invested USD2.0m in DocDoc via a Convertible Bond. At the end of December 2018 that had a carrying value of USD2.1m, including PIK interest accrued and cash interest receivable. In February 2019, the Hong Kong Cyberport Management Company Limited announced that its VC investment arm had invested in the Convertible Bond round.

On 6 August 2019, DocDoc completed a institutional capital raise, led by ADAM, which raised USD13.0m via a convertible note. To date, DocDoc has raised a total of USD24.6m.

In September 2019, DocDoc was highlighted in the *NASDAQ Spotlight* series in conjunction with its co-founders, Cole Sirucek and Grace Park, visiting the New York Stock Exchange. It was selected as the best startup for Plug & Play Singapore's 2019 Insurtech program.



Investor Access

Hannah Crowe

Direct: 0207 065 2692

Tel: 0207 065 2690

hannah@equitydevelopment.co.uk

Equity Development Limited is regulated by the Financial Conduct Authority

Equity Development Limited ('ED') is retained to act as financial adviser for various clients, some or all of whom may now or in the future have an interest in the contents of this document and/or in the Company. In the preparation of this report ED has taken professional efforts to ensure that the facts stated herein are clear, fair and not misleading, but make no guarantee as to the accuracy or completeness of the information or opinions contained herein.

This document has not been approved for the purposes of Section 21(2) of the Financial Services & Markets Act 2000 of the United Kingdom ('FSMA'). Any person who is not a relevant person under this section should not act or rely on this document or any of its contents. Research on its client companies produced and distributed by ED is normally commissioned and paid for by those companies themselves ('issuer financed research') and as such is not deemed to be independent, as defined by the FCA, but is 'objective' in that the authors are stating their own opinions. This document is prepared for clients under UK law. In the UK, companies quoted on AIM are subject to lighter due diligence than shares quoted on the main market and are therefore more likely to carry a higher degree of risk than main market companies.

This report is being provided to relevant persons by ED to provide background information about Adamas Finance Asia. This document does not constitute, nor form part of, and should not be construed as, any offer for sale or purchase of (or solicitation of, or invitation to make any offer to buy or sell) any Securities (which may rise and fall in value). Nor shall it, or any part of it, form the basis of, or be relied on in connection with, any contract or commitment whatsoever. Self-certification by investors can be completed free of charge at www.fisma.org

ED may in the future provide, or may have in the past provided, investment banking services to the Company. ED, its Directors or persons connected may have in the future, or have had in the past, a material investment in the Company.

More information is available on our website

www.equitydevelopment.co.uk

Equity Development, 15 Eldon Street, London, EC2M 7LD. Contact: info@equitydevelopment.co.uk 0207 065 2690