First Edition

The Doctorpreneurs Startup Guide

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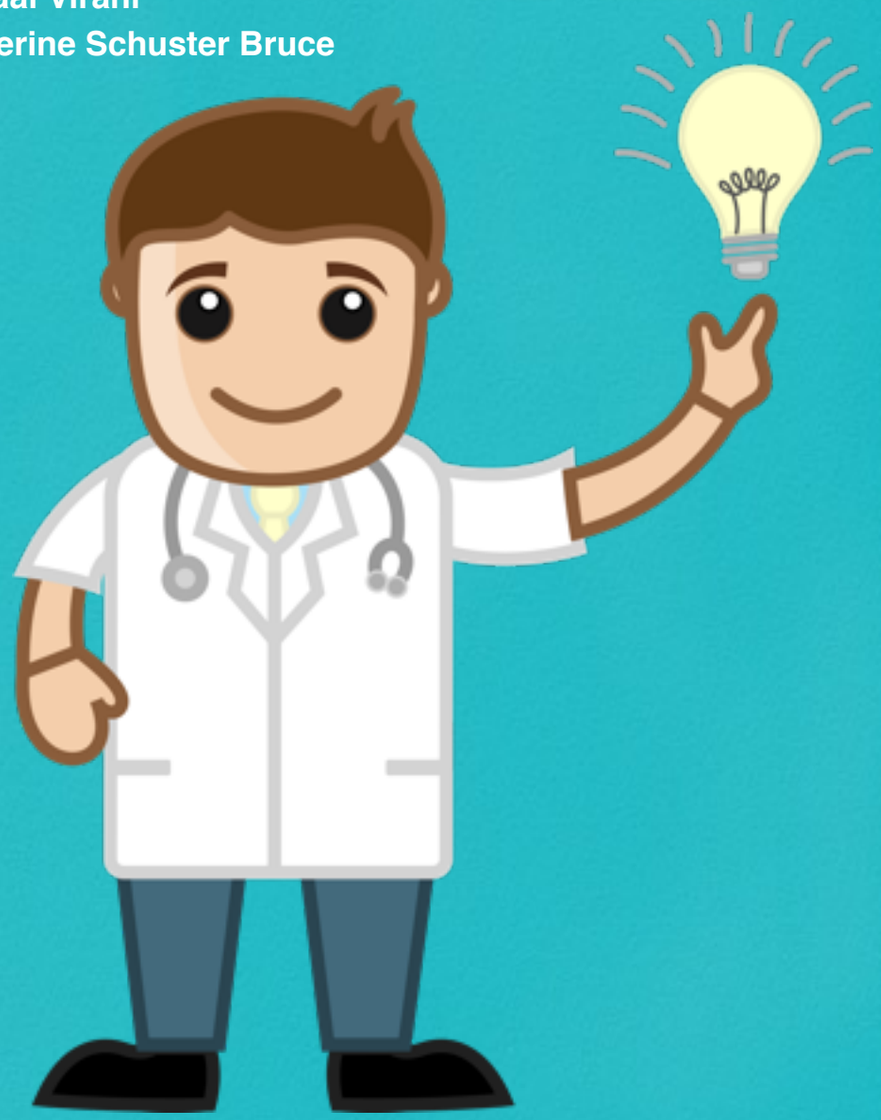

Introduction

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“I always feel that if I’m still doing the same thing next year (let alone in ten years time) as I’m doing now, then I’m not evolving and that my specialty/business/ work is not evolving either.”

Mr Manoj Ramachandran, Co-founder Viz.ai

Introduction

By Dr Nick Dragolea

Welcome

The Doctorpreneurs team has created this handbook as an overview of the key issues that may confront you, the aspiring entrepreneur. We may not have all the answers, but we do have insight and experience. Members of the team have both started their own businesses and interviewed other successful doctorpreneurs who were once at the same stage as you.

Over the past five years we have built an extensive network of doctors, medical students and other individuals. Whatever their background, they share the common goal to alter the status quo and make a difference in healthcare through leading innovation and improvement.

Why you, why now!

Now is the best time to be a healthcare entrepreneur. The wealth of talent within the system is key to driving radical change and generating a paradigm shift in healthcare over the next 5-10 years. This, coupled with current uncertainties in healthcare, means that now, more than ever, networking between doctors, patients, engineers, investors, designers and managers is crucial if you want to build your connections, your brand and your career aspirations.

Change is already happening. Antiquated workflows and habits of both doctors and patients are massively shifting to a modern alternative in the form of new technologies and the internet of things (IOT). The potential of big data analytics is also slowly shaping up .

As a clinician, your impact is no longer limited to history taking and physical examination of patients. Technologies such as sensors, diagnostics software and other medical devices mean that your influence can be far more wide-reaching.

Now is the time to decide whether you want to be be a doctorpreneur, involved in the paradigm shift and dictating the future of healthcare, or whether you would rather step back and watch change happen from the sideline.

Define your craft

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“You need to be passionate about what you are doing. Every single successful physician who I have met was also passionate, and able to defend an idea!”

Dr Jessica Mann, Co-founder TrialReach

Define Your Craft

By Dr Nick Dragolea

Key Contents

1. Why start your own business?
2. Set your goals
3. What are your most profitable skills?
4. Following your passion

1. Why start your own business?

Having your own business means freedom: you set your own working hours; you choose your own team; you implement your own ideas and you have the ability to make a positive impact in an area that you are passionate about.

Other benefits include:

- Learning a whole new range of skills.

> *Approach business as if you're starting a new specialism. You have to go into it with the mind-set "I need to learn this", not "I already know this" - Dr Felix Jackson, Founder of medDigital*

- Scope to combine clinical work with a business, providing you with a more varied and stimulating work life.
- Potential to follow your passion and turn work into a hobby.

2. Set your goals

> *Setting goals is the first step in turning the invisible into the visible - Tony Robbins*

It is impossible to know how to get somewhere if you don't know where you are going. Every entrepreneur we have met, to date, has had their own specific goal or vision of where they are headed.

There are **two types of goals**:

1. Long term/ Ultimate goals
2. Short term/ Day-day goals.

Short term/day-day goals are goals that will help you achieve your ultimate goal.

The first step is to write down your goals. It is best for goals to be SMART: Specific, Measurable, Attainable, Relevant and Timely.

>**What are you *passionate* about?** (This could be in medicine or elsewhere)

>What is your mission in life?

>What will be your legacy and lasting contribution?

>**What would you do if you could do *anything*?**

>**"Why"** do you want to achieve these goals.

It is vital to have clarity on what you want to achieve and why you want to achieve it *before* you start your business. Without this initial step, you are more likely to quit at the first hint of a setback.

Goal	WHY	Time Frame

People don't buy what you do; they buy why you do it. And what you do simply proves what you believe - Simon Senek, Start with Why

3. What are your most profitable skills?

In order to hone in on your current skills, it is useful to look back and identify your past achievements. These can be anything from organising a successful event to speaking at a conference, designing a webpage or conducting clinical research. Take the time to think now. What are your main achievements from the past 2-5 years? Note them down and annotate alongside the skills you developed.

4. Following your passion

In an interview with us, Dr Jessica Mann from TrialReach, emphasised that there are two important considerations or 'parts' when starting something new:

1) **Personal part:** The importance of being passionate about what you are doing i.e. only start something that you are really passionate about.
2) **Practical part:** You are passionate about your idea, but do you *also* have the vision of where this passion could take you? Is there a market in the medical community, or better yet, can you create a market?

You need to be passionate about what you are doing. Every single successful physician who I have met was also passionate, and able to defend an idea! - Dr Jessica Mann, Co-founder TrialReach

What I would say to people is find ways to find out what else you're interested in or what else you could be good at, and don't undervalue the skills that you have, because they are valuable. - Dr David Cox, Chief Medical Officer Headspace

Idea Generation, Validation & MVP

3

“I think the biggest skill set missing from healthcare industry innovation in the UK is around commercialisation – building a go-to-market strategy, navigating investment, pricing and regulation.”

Peter Hames, Co-Founder Sleepio

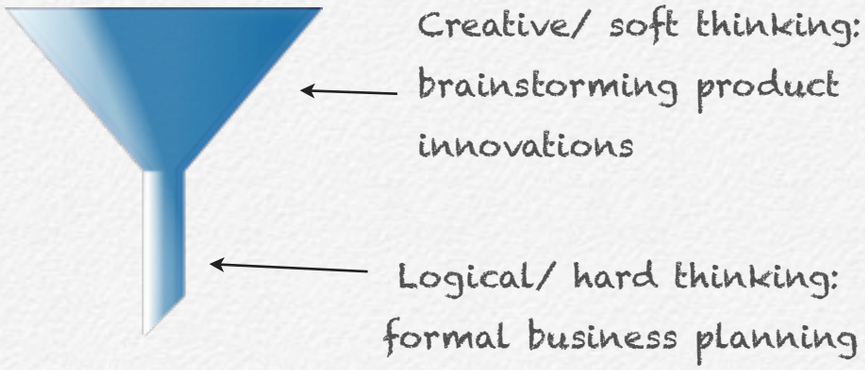
Brainstorming & Idea Validation

By Dr Nick Dragolea

Key Contents

1. Idea Generation

People have written whole books on idea brainstorming alone but we'll aim to keep it brief.

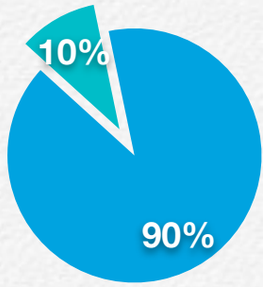


Brainstorming requires creative thinking. A good place to start is by taking a piece of paper / clipboard / open a new note in Onenote, and labelling it "My Ideas". From now on, every time you think of something worthwhile, make an entry.

Try to get into the habit of being a problem solver! It is always better to identify a solution rather than just the problem!

Components of Business Ideas

1. **Subject**: Who are you targeting? Who is benefiting from your product/ service? What groups of people? Try to hone down to a specific group e.g. patients / relatives / doctors. Never target 'everyone'.



2. **The 'Pain Point'**: What is the problem / pain you are trying to solve? 90% of business ideas are problem-based.

3. **Business model**: How you address the pain / problem you have identified (the solution) is the business model. Business model examples include: product purchase outright and subscription models - more on this later on!

Subject + Pain point + Business Model = Complete Business Idea

Complete idea

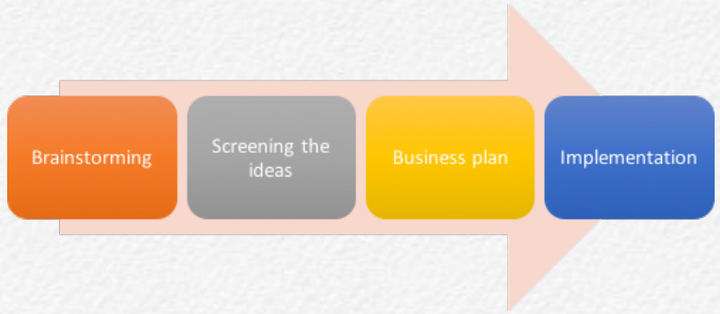
I'm renting this flat in San Francisco and my rent is too expensive. What if I could rent out some air mattresses on the floor at very competitive prices and serve people breakfast? I would make some money which would help me pay for the rent. I'm going to make a website and advertise online.

Subject: Me (a lot of business ideas were born from trying to solve personal problems)

Pain point: Expensive rent

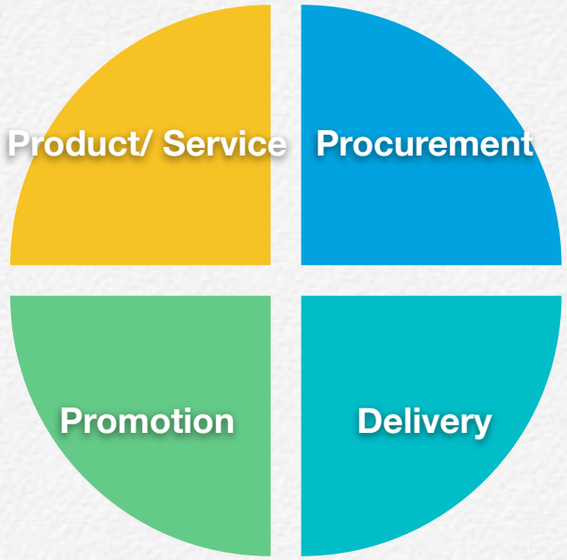
Business model: Hire out my floor space, make money and use it to pay rent. I can do this myself by building a website and advertising online - minimum startup costs.

Does this ring a bell? That's how AirB started when the co-founders couldn't afford their rent in san Francisco



2. Areas to target

Business ideas are directed at trying to improve something or allowing someone to do something that they couldn't previously do.
There are four different sections of the 'value chain' that business ideas most commonly target.



#1 Product / Service: Selling to a customer e.g. tastier pizza.
#2 Procurement: Where does the product / service come from? Think about everything from the point where nothing exists to the point of creating a product e.g. Where do they get the ingredients for the pizza? Who delivers the ingredients / components?
#3 Delivery: How / who delivers the final product / service? e.g. pizza delivery / store pick-up.
#4 Promotion: What advertising channels are used? e.g. TV adverts, digital marketing, print media.

These four areas are the areas with the most potential for innovation and the space to create a successful business.

3. Five types of innovation

#1 Price: Can you make your product cheaper than anyone else? This may be achieved by simplifying the process of product and/or service creation, or fusing two or more products into one. Conversely, you may choose to increase the price of a product if you add more perceived value.

#2 Convenience: Lowering friction for every single action that is required for a customer to do something removes steps for the customer, thus making it more convenient for them to purchase your goods e.g. Uber requesting a car via an app vs having to call the cab company to book it in advance.

#3 Speed: Increasing delivery of your products or services e.g. Amazon offering Prime delivery on the majority of its top goods.

#4 Quality: Tricky term but in this case referring to the various individual characteristics that people use to subjectively judge whether a product and/ or service is better or worse e.g. more comfortable or better designed T-shirts, RFID blocking wallets.

#5 Self Expression: Characteristics that make a person feel better after purchasing a product compared to the competition, even if inferior e.g. GoPro cameras are no better than the competition but it is branded as a cool lifestyle product. If you have the opportunity, sell a lifestyle, not just a product.

Early stage validation

- **Google Search**: Stick your idea into Google to see if it already exists. Even if it does, do not give up too hastily. There are always ways to improve the existing product.

- **Google Keyword Planner** is a tool that has been around for years. Once you put your keyword in, it will show you the number of people searching for the same keyword on Google in a given month.
- **Google Trends** is another powerful tool provided by Google that will show you the trend for a specific keyword or phrase over the past months and years.
- Seek feedback from others. Don't be paranoid about it getting stolen. Now is the time for some brutal honest feedback.

> *Ideas are cheap, execution is everything - Chris Sacca, Investor in Twitter & Uber*

> *Get feedback on your idea and see if it actually works in the real world - Dr Felix Jackson, Founder of medDigital*

- Build an MVP (Minimum Viable Product)
- Build your brand (logo, website, products, etc.)

4. Matching fit and validating your idea

A surefire route to business failure is making something that no-one needs or wants. If you have more than one business idea, pursue the one you think might have most potential. Put the others on hold.

Ask yourself: "**Could I do this every single day without losing interest?"** This is where the importance of being passionate about your idea really comes in. Founding a business is a long journey and you shouldn't embark on it if you don't think you can persevere through the inevitable tough times.

The easiest solution is to relate your business idea to your hobbies or a passion. If it is only related to some industry you are experienced and are skilled in, but not passionate about it at all, this may not be enough to keep you going. **Monetary benefit is not a strong enough reason to keep you powering through the hard times.**

There's plenty of opportunity to innovate but be prepared to work extremely hard. You need to be passionate about what you want to create as this gets you through the tricky times. - Dr Kartik Modha, Co-Founder of myHealthSpecialist.com

Focus on what you really like in life and you can really achieve great things. - Dr Rupert Dunbar-Rees, Co-founder of Outcomes Based Healthcare

5. Building your Minimal Viable Product (MVP)

If you have successfully validated your idea by following the steps above, it is now time to build a prototype with the minimum amount of features, just enough to define what your product does. This will vary according to the nature of your business idea.

Landing Pages / Websites: Business ideas may be services instead of fully fledged products, but the same concept applies. You may test your service idea by having a core offering e.g. a website offering a mattress and breakfast in a flat in San Francisco.

Videos: Before Dropbox launched, their MVP was a 3-minute video explaining how the service works. This got them 5K subscribers before they wrote a single line of code! Whiteboard videos such as the ones you can make in Videoscribe have become very popular nowadays. Try a visit to Fiverr.com where experts will make your video for as little as $5.

Basic Prototype: If you have a technological idea, such as a smartphone app, you can either learn how to code a basic version yourself or hire a freelancer to do the work for you. Elancer.com and Fiverr.com are both great places to start. You may also contact an offline app development agency but these are often more costly.

Crowdfund: Sell it before you build it. Websites such as kickstarter.com are full of business ideas and projects that are explained in a video. You can often raise more than what's required to develop a service or product before you start putting any effort into it. It is also a brilliant way of gauging your customer's interest.

Raising Funds

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“Try to prove you have a solution to the problem discovered before going to access funding or entrepreneurial advice.”

Dr Michael Urdang, Co-Founder Figure 8

Raising Funds

By Dr Catherine Schuster Bruce

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1. Introduction

Raising funds is a common challenge that is faced by most start-ups.

The first test is finding the funding.

Another is working out how much you are willing to sacrifice to secure financial support - how much of your company, and decision-making capabilities are you willing to share? The balance between total control of the company and giving up equity to raise the funds required to take your business to the next level can be one that is hard to strike.

When reading this chapter remember that every business is an adventure in its own right. No adventure, including the funding aspect, will be the same. The chapter will focus on the most common routes to raise those all-important funds.

2. Useful Definitions

Crowdfunding	A method of funding a business whereby investors from all backgrounds, including investment professionals, venture capital firms and everyday investors like you and I can come together and invest as much or as little as they like. This is typically run through an online platform.

Angel Investor (a.k.a angel funder; private investor; seed investor; business angel)	An individual who invests in start up company or entrepreneur. This may be a one-off payment to help a company to get going or an on-going instillation of funds to get a start up through the early stages. Angel investors use their own money, and often are the first source of external funding for a startup.

Venture Capitalist (VC)	A company with a portfolio of investments in start-up companies. The funding stages include: seed funding, series A, B and C.
Seed Funding	The initial capital when starting a business. Typically provided for early stage operations such as market research, product development and / or prototype production.
Series A	The first significant round of VC funding, usually to optimise the company / product.
Series B	Funding to take the business past the initial development stage. This includes improving business development and marketing strategies.
Series C	Funds to scale the business.

Startup Loans	Usually government schemes that provide funding and support to small businesses.

Incubators	Support early stage companies through initial development stages until the company has sufficient financial, human and physical resources to function alone. There are some independent incubator firms, but they can also be run or sponsored by VC firms, large corporations and government bodies.
Idea Lab, Rock Health, StartUp Health and Blueprint Health.	

Accelerators	Accelerate growth and scale an existing company. Usually an accelerator firm provides mentorship to a company for a specified length of time. For some, this includes funding. Usually comes after the incubator stage.
Y Combinator, Techstars, Brandery and Dotforge.	

3. Common Funding Sources

The most common funding sources are: crowdfunding, Venture Capital (VC) and self-funding. The choice is yours and the path you choose will be for a reason unique to your business

A. CROWDFUNDING

Kickstarter, Indiegogo, RocketHub, Crowdcube, Fundrazr are all popular online crowdfunding platforms.

Pros:

• Broad range of investors.

• Good way to build a brand and form a community around the company.

> *I thought crowdfunding was about the money but it turned out to be about building a community. The real yield was a committed tribe of nearly 600 people passionate about caring for people completing life comfortably. - Michael Fratkin, Founder of ResolutionCare.*

Cons:

• To attract crowdfunding investors, you must have an attractive marketing campaign including a business pitch. It can be a lot of work to get it right. It is, however, useful to remember that there is no such thing the 'perfect pitch'.

> *There is not a way to win everyone over but the best you can do is to make sure the main bases are covered well, and the business is presented in a way that's true to you* - James Gupta, Founder of Synap

B. VENTURE CAPITAL

Benchmark Capital, First Round Capital, Sequoia Capital, Balderton Capital, Sapphire Ventures, Index Ventures, Mercia Technologies

Pros:

- Deep pockets - average investment is usually between £500K - £5M.
- Can bring skills and networks to strengthen your business since they are equally as interested in your success as you are!

Cons:

• Often have a very short run time, and if you don't take off... you crash. (It is okay to fail though!)

• Need to be able to prove potential for much higher financial return on investment than other investors.

• Typically want to be a director and hold equity, and will push for fast growth. Giving a VC firm too much of your equity may result in losing overall control of your company.

C. SELF FUNDING

Pros

• Usually common in the initial, prototype stages of business development.

• Most suitable for older entrepreneurs that have saved up some money or have had prior successful ventures.

• Allows you to retain full equity and control over how you develop your business.

Cons

• Risk on yourself and your friends / family.

• Can be a struggle if other bills to pay or relationships to maintain.

The further you have got under your own steam (product and market validation, initial paying customers), the more attractive you will be to investors, so don't wait for [external] funding to get started - Peter Hames, co-founder of Sleepio

4. Top Fundraising Tips

1. Be prepared. Both angel and VC investors commonly take into account three things.

a) You and your team

b) Your idea

c) Market Potential

a) **You and your team.** Do you have star quality? Are you driven to make your idea a success against all odds? Are you likable, someone that will make a 'good' business partner? Do you have the skills in your team to take the product to market? Investing your own money is one way to show you are committed to the cause.

There were a few awkward moments where I was asked by high profile investors why I had "only" invested a few thousand pounds, and had to answer "It's all I have!" - Stephanie Eltz, Founder of Doctify

b) **Your idea.** Is the idea scalable? Will it make money? Is the idea innovative? Make sure you know your customer and the scale of the opportunity.

c) **Market Potential.** Is there a need / problem to be fixed? Does your idea have a sustainable advantage over competitors? Does it fit in with the investor's own vision for the future in that field? Is there a large potential market size?

Securing funding can be made easier if you take these three aspects into account when brainstorming at the initial stages of idea development (Section 1). Have the evidence ready and be prepared for questions!

2. Pick the right investor for you. Check that your business profile and theirs match!

Understanding your investor is critical, you need the right investor for your business model - Jamie Wilson, Founder of Home Touch

3. Rise to the challenge.

Determination and grit gets it done, like [with] anything in life - Sean Duffy, Co-Founder Omada Health

Balancing Clinical Work With A Startup

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“... continuing to practice medicine is very important to me, both personally and professionally. I practice two weeks per month, so I essentially split my time between Figure 1 and the hospital.”

Dr Joshua Landy, Co-founder Figure 1

Balancing Clinical Work With A Startup

By Dr Vishaal Virani

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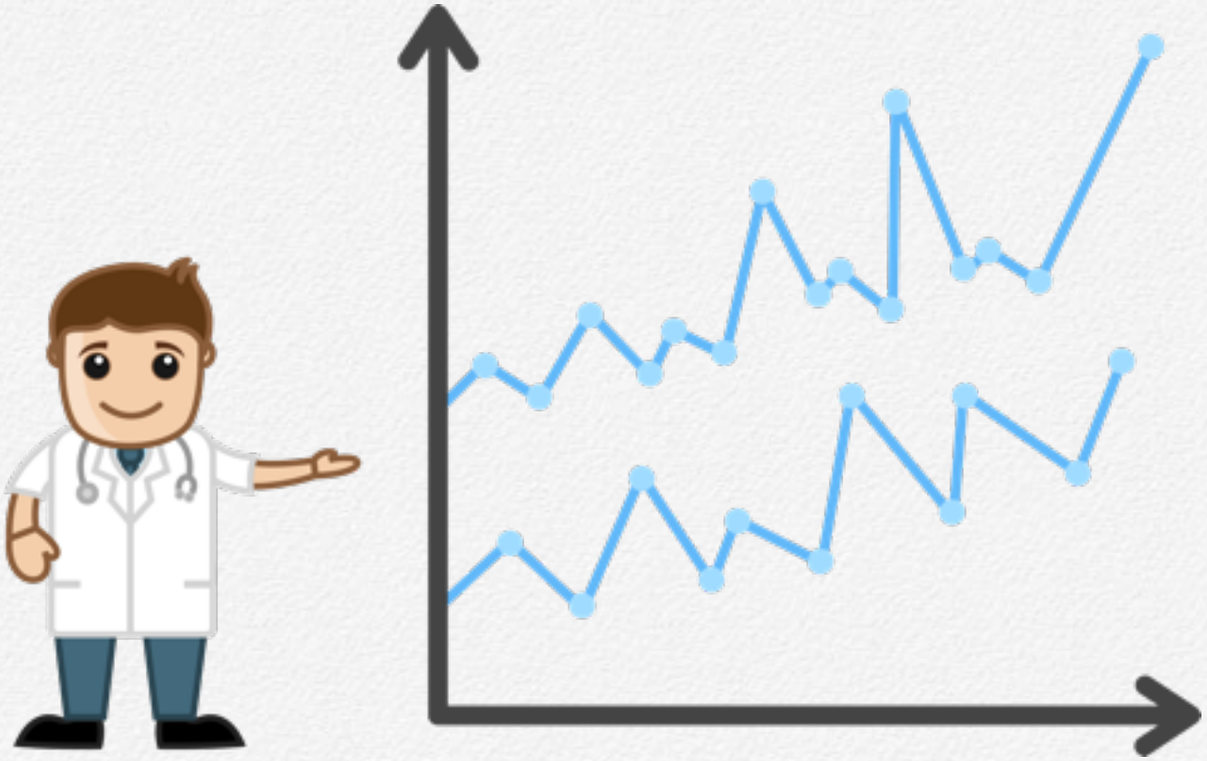
1. If and when
2. Key insights from experienced doctorpreneurs



1. If and when

Medical students and doctors typically plan their career timelines as meticulously as Big Ben chimes on the hour. However, given the increasingly attractive health startup market perhaps it is time for entrepreneurial medical professionals to take some time out to re-think their broader career goals.

Deciding if and when to quit clinical medicine to pursue your healthcare startup ambitions is one of the biggest dilemmas that entrepreneurial doctors and medical students face. Some doctors get the entrepreneurial bug and immediately swap the scrubs for sweatshirts and their stethoscope for software programming. Some doctors get the bug and react by gradually building their startup whilst clutching reassuringly to the financial safety net of clinical work. Others still stoically ignore the bug, and focus wholeheartedly on their first love of medicine, trying to fend off the philandering advances of this so-called entrepreneurial bug.

The reality is that there is no universal, one-size-fits-all answer to the big question of if and when to quit your clinical career to focus on a healthcare startup. The comforting truth, however, is that there are a number of successfully proven approaches to tackling this dilemma that is facing an increasing number of doctors and medical students. The common thread in all the stories below is that if you get the entrepreneurial bug, you will succumb to it. The real question is whether you succumb full-time or part-time.

In order to exemplify the variety of career paths taken by doctorpreneurs, here are several case studies to satisfy the medical profession's desire for evidence-based decision making:

2. Key insights from experienced doctorpreneurs

Stephanie Eltz, Founder of Doctify, has managed to continue her work as an orthopaedic surgeon whilst running a startup

> *As a doctor, you have a duty towards your patients and your clinical work has to be prioritised above everything else. I would never compromise on that. I am 150% focused at the hospital. You have to be very organised and compromise on your life outside of work [to balance clinical and startup work]. Say goodbye to your friends and the pub.*

Jim Gray is an orthopaedic surgeon, Clinical Director of an NHS hospital, and Founder of Tuberosity.

Investors will be concerned when you talk about balancing a clinical career and driving your business. It's not unusual for med tech companies at all but you have to make sure your absence is covered and that you add as much value as your full-time startup colleagues.

> *The balance I have between my clinical, personal and my business life is complementary. I see the business as a hobby not a chore so I've got a healthy balance. I look forward to weekdays as Mondays bring emails about our startup [alongside a long list of patients and hospital management duties no doubt...]*

Jessica Mann, Co-Founder of TrialReach and ex-cardiologist, values her years in specialty medicine but now focuses exclusively on her startup

> *It depends on how much sleep you need...but I think if you have a passion for either of them [medicine or your startup], at one point you will need to make a choice. I do think that you should be putting in a few years of seeing patients in the specialty you like because that is going to make you able to empathise with patients' needs.*

Sean Duffy, Co-Founder of Omada Health, left medical school and went 'all-in' to his startup venture

> *So at first I paused my medical training, took a year off, and took another year off, and I had to make a choice. Everything worth doing in life is harder than you imagine it to be, once you get going. As an entrepreneur you're just fighting gravity each and every day, so it requires an all-in, full-in, dedicated approach I think.*

Rupert Dunbar Rees, Founder of Outcomes Based Healthcare, has technically left medicine but thinks founding a healthcare startup is *'still doing medicine, just of a different kind'*

> *A lot of us have been in that big dilemma around whether you leave medicine or not. I eventually did [after working in general practice for several years]. On the team I'm the only one who has got that far down the line to leave medicine. Would I say I've left medicine? Probably not. I'd argue that we are all still doing*

medicine, just of a different kind.
I got a long way down the track before I noticed that I was unhappy in my clinical medicine – I've done nearly every job in medicine. My biggest piece of advice is, that if you are having these feelings early, listen to them. There are lots of people who are very unhappy in medicine, and even though they are doing wonderful jobs I personally would listen to those feelings, because at the end of the day, you are not doing you or your patients any good.

Joshua Landy, Co-Founder of Figure 1, thinks his critical care job adds crucial credibility to his startup

Yes, continuing to practice medicine is very important to me, both personally and professionally. I practice two weeks per month, so I essentially split my time between Figure 1 and the hospital. Working side by side with an multidisciplinary team in the hospital, I learn how my colleagues work and what tools might be developed to help them. I definitely think that's beneficial for Figure 1. It provides an important dimension to my role as Chief Medical Officer.

Jamie Wilson, Founder of HomeTouch and ex-Psychiatrist, valued the financial safety net that part-time medical work offered in the early days of his startup career

If you give up your other job [as a doctor] and then start a new company, and you have problems raising money, and you're not bringing in sales, then you quickly arrive in a financially difficult position. My advice would be, if you possibly can, find some niche whereby you can continue earning some regular income, whether that's locuming [part-time clinical work] or doing other work such as advisory work, that gives you flexibility. Remember that most non-medics do not have this option, so you are giving yourself an advantage.

Thom van Every, serial healthcare entrepreneur and ex-obstetrician, advises seizing the moment whilst still practicing medicine. Carpe Diem!

There is rarely a perfect moment to launch your entrepreneurial idea and you never have perfect information. But we are so lucky that we can do locums [part-time medical work] and earn income while developing our plans. Don't delay!

Neil Bacon, ex-Nephrologist and Founder of iWantGreatCare, didn't want to merely 'dabble' with startups; he left medicine after practicing for several years to enter the startup world full-time

I'm not a believer in doing things on the side – in dabbling. From my perspective, you can't mess around if you really want to make something happen. If you want to really do something properly, change the way things are done, it takes all your time and effort. Half-measures won't cut it.

Resources & Authors

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