

Zava: the future of online Medicine?

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1. Executive Summary

Zava is an online healthcare provider based in London, UK, that currently operates in six European countries: The United Kingdom, the Republic of Ireland, Germany, Austria, Switzerland and France. After raising a generous \$32m (£20m) from investors, Zava is now planning its expansion in other European Countries and beyond for the next 5 years.

This report aims to understand which environmental factors have influenced, both positively and negatively, Zava's development and could have an impact on Zava's expansion plans for the near future.

An environmental analysis based on the PESTEL framework is performed considering written literature, internet sources and the insider perspective of a former employee. The major points emerging from the environmental analysis are then discussed using the SWOT framework.

We conclude that, due to the complex socio-political and economic situation as well as the fierce international competition, in order to succeed, Zava will need to be able to offer even more innovative services to an increasingly aging population and make sustainability a part of its business.

2. Introduction

Zava is one of Europe's largest digital healthcare companies and is headquartered in Angel, London, United Kingdom. It is run by a Limited Company registered in England under the name Health Bridge Ltd. and it offers an online doctor service and an online pharmacy, easily accessible by clients on their laptops, smartphones or tablets.

Since its launch in 2011, Zava has now been offering its services in six European Countries and in three different languages: the UK, the Republic of Ireland, France, Germany, Switzerland and Austria. Zava has provided 3 million paid consultations since its launch.

Zava offers diagnosis by a doctor using telemedicine as well as prescription-only medications, which can be delivered using either its own online pharmacy (Zavamed.com) or partner pharmacies across Europe.

Zava relies on patients filling in a detailed online medical questionnaire and provide additional information in form of photographs or other medical records, which are then reviewed by a UK GMC-registered medical Doctor who is fluent in the patient's language. The doctor then provides medical consultation based on the given information and can, if necessary, prescribe the necessary medications. (1)

2.1. History

Health Bridge Ltd. was established in 2010 by London-based German and British entrepreneurs and best friends David Meinertz and Amit Khutti.

The start-up, which received an initial funding of about £ 50K from a German investor, started its operations under the name *DrEd* in 2011 and initially only employed 2 part-time doctors, one of whom was Amit Khutti's fiancé at the time. Its first website (*DrEd.com*) was launched in November 2011 in the UK and Germany. The first services launched by DrEd included prescriptions for various medications against erectile dysfunction (ED), including Viagra and Sildenafil.

In 2012, the company raised an angel round of \$1.4 million. In April 2012, DrEd opened in Austria and launched an emergency contraception delivery service in the UK. In June 2012, DrEd was launched in Switzerland and in December 2014 in France. In early 2014, the business became profitable.

In December 2014, DrEd was launched in the Republic of Ireland, offering consultations and prescriptions for various conditions. In June 2016, the service launched in France under the new brand Zava (derived from the French *Ça va?* - "*How are you?*"). In September 2018, Zava became the official brand name in all its markets. At this point, Zava had over 150 employees operating in 3 different languages: English, German and French.

In less than a decade, Zava has become one of the largest digital healthcare companies in Europe having served more than 2 million patients online.

2.2. Current Challenges

In June 2019, Health Bridge Ltd., which owns Zava, raised \$32m (£20m) in a series A round of venture capital financing. (2)

Zava is now planning to expand its services to other European and non-European Countries.

This report aims at understanding which environmental factors could influence, both positively and negatively, Zava's expansion plans over the next 5 years.

3. Methodology

An environmental analysis inspired by the PESTEL framework, which is a tool used to analyse and monitor the macro-environmental factors that have an impact on an organisation, will be performed using both written literature, online sources (i.e. company website) and the insider perspective of a former employee.

The results of this analysis will then be used to identify threats and weaknesses, strengths and opportunities, which will be discussed in the following paragraph within a SWOT framework.

The author of this report has been working at Zava as a part-time Online Doctor for a about a year, from May 2018 until April 2019.

4. Environmental Analysis

An environmental Analysis using the PESTEL framework will be performed considering six different factors that has contributed to the success of Zava so far and that will shape its future expansion plans. These factors comprise political factors, economic factors, socio-cultural factors, technological factors, environmental and legal factors.

4.1. Political Factors

Three political factors have deeply influenced the operations of Zava so far and will continue to shape the company's future: government policies and restrictions in the field of online medicine, tax policies and labour laws.

The influence of Brexit and the Brexit negotiations on the company's activities will also be discussed, as it will play a major role in the decade to come.

4.1.1 Government Policies regarding Online Medicine

The provision of online medical services to patients is a heavily regulated field and policies on this regard differ from country to country. Offering medical consultations and / or delivery of prescription-only medications over the internet has been illegal in many countries, including the UK, until a few years ago.

The United Kingdom, following a change to NHS (National Health Service) pharmacy regulations in 2005 that made it legal for pharmacies to fill NHS prescriptions over the internet, (3) has been one of the first countries in Europe to open up to online medicine. Since then, doctors in the UK are legally allowed to offer medical consultations and provide prescriptions to patients over the internet, i.e. without ever meeting a patient face to face.

Under UK regulations, the company employing "online doctors" must be registered with the Care Quality Commission (CQC), an executive non-departmental public body of the Department of Health and Social Care of the United Kingdom, that regulates and inspect health and social care services in England. Each doctor offering medical services online must also be registered with the General Medical Council (GMC) of the UK and hold an active license to practice medicine in the UK.

In other European Countries, like Germany, Austria, the Republic of Ireland and France, it is still not allowed for medical professionals to offer consultations and prescriptions online. So, how has Zara circumvented regulations to provide similar services in these countries?

Under European Union regulations (Directive 2011/24/EC), patients can choose to be treated by a doctor based in any other European country. (4) This means, for instance, that a German patient can consult a UK-based General Practitioner (GP) or specialist, who can provide consultations and prescriptions under UK law.

Through Zava's website, patients based in Germany, France, Austria and the Republic of Ireland can easily get in contact with UK-registered doctors and use their services. Of course, foreign patients tend to opt for a UK based doctor for services that are not offered for free by the National Health Service of their country of origin. For example, female patients from Germany often contact Zava's doctors for the contraceptive pills, while male patients use Zava's services to access erectile dysfunction treatments: both services that are not covered by the German Health Service.

Zava's success so far has relied on circumventing restrictive national regulatory frameworks by benefiting from favourable EU regulations.

4.1.2 Tax Policy and Labour Law

Health Bridge Limited has been a company registered in England and Wales since its foundation in 2010.

Operating from the UK has been a strategic decision, not only because of more progressive online medicine regulations, but also because of the favourable tax policy and labour law.

The corporate taxation in the UK is one of the lowest in Western European countries, currently at 19% and is set to decrease at 18 % from 1st April 2020. (5)

The UK also offers a highly skilled and flexible workforce with fluent knowledge of multiple foreign languages with much lower salaries compared to countries like Germany or

Switzerland. This, together with a labour law that usually favours employers, also contributed to the successful development of Zava.

4.1.3 Brexit

Zava has benefited from the UK's membership to the EU, and in particular as it pertains to the free movement of workforce and medical supplies within the EU.

How the situation will change after the UK plans to exit the single market is currently unknown and accounts for a lot of uncertainty in the planning of the service expansion over the next years. (6)

As a result, Zava will probably not be able to manage all its business from the London headquarters and will possibly need to open at least an operating office in an EU-country. This will incur additional costs and requires a detailed understanding and evaluation on local online medicine policies, tax and labour laws.

A country that comes into consideration is Germany, where Zava has already been treating over 400.000 patients so far, due to its extensive potential market (more than 80 million potential customers) and promising changes in online medicine policies over the next couple of years. (7) (8)

4.2. Economic Factors

So far, irrespective of their restrictive policies and regulatory frameworks, Zava has chosen to expand to European countries with stable economies, like Germany, France, the Republic of Ireland, Austria and Switzerland, which GDP is one of the highest in the region. More in general, economic factors influencing Zava can be divided into two categories: macro-economic factors and micro-economic factors.

4.2.1 Macroeconomic factors

Macro-economic factors include a range of national and international indicators that help to understand the past performance and predict the future performance of Zava. These include, but are not limited to: GDP, real GDP growth and unemployment rate.

4.2.1.1 Real GDP growth

The real economic growth, or real GDP (gross domestic product) growth rate, measures economic growth of a country from one period to another, adjusted for inflation. The real economic growth rate is expressed as a percentage that shows the rate of change in a country's GDP, typically, from one year to the next.

Table 1 shows a summary of GDP growth rate for each of the 6 countries where Zava currently operates, ranging from the lowest GDP growth rate in 2018 (United Kingdom) to the highest GDP growth rate (Republic of Ireland). (9) As the table shows, Zava has chosen so far to invest in countries with a stable positive real GDP growth (+1.3 to +6.8).

United Kingdom	1.3
Germany	1.4
France	1.5
Switzerland	2.5
Austria	2.7
Ireland	6.8

Table 1 - GDP growth rate 2018 (9)

Understanding which European and Extra-European countries over the next 5 years will be experiencing a real GDP Growth could help Zava target new markets. This should though not be the only way to choose a new market; local governmental policies and restrictions in the field of online medicine should also be accurately considered, as explained in the previous paragraph.

4.2.1.2 Unemployment Rate

The unemployment rate is defined by the percentage of unemployed workers in the total labour force. As Table 2 shows, Zava has choose so far to offer its services in European countries with a lower than average unemployment rate, except for France. (10) France has

an above EU-average unemployment rate of 8.5 % and is also, so far, the only country where Zava is operating with lower than expected financial returns.

When planning in which countries to expand next, Zava should therefore also consider the unemployment rate of its workforce as a meaningful indicator.

United Kingdom	3.8
Germany	3.1
France	8.5
Switzerland	4.8
Austria	4.5
Ireland	5.2
EU (average)	6.2

Table 2 - Unemployment rates in 6 European countries (10)

4.2.2 Microeconomic Factors

Micro-economic factors are the ones that constitute and influence the micro-environment where the company operates and include, among others, the presence or absence of competitors and suppliers, the target customers' behaviour, the presence or scarcity of workforce and their unions etc.

The most important micro-economic factors that contributed to Zava's success story so far include the scarcity of competitors and the understanding of customer's behaviour in the different European countries.

4.2.2.1 Competitors

When Zava was launched in 2011 under the trading name *DrEd*, the company had only one competitor in the UK, namely an online pharmacy and doctor service called *Dr Thom*, now operating under the brand Lloyds Pharmacy Online Doctor. (11)

As of April 2016, there were 46 registered online pharmacies in England, most of them associated with an online doctor service. This increase in competition contributed to the decrease in price of the services offered by Zava in the UK.

In the German-speaking countries, with the exception of Switzerland, there still is no real competitor for Zava offering an equal range of services. In these countries, Zava can therefore charge much more for the same services offered in the UK. As an example, 4 Tablets of original Viagra can be bought on Zava UK website for about 20 £; the same number of original tablets can be bought on Zava's German website for about 81.5 EUR (=69 £), almost 3.5 times the UK price.

In summary, except for recent competitors in the UK, which only serve the UK market, Zava's development has been mostly undisturbed for most of the last decade.

4.2.2.2 Customers' behaviour and Price Elasticity of Demand

The presence or absence of competitors is one of the main drivers for customers' behaviour in the countries where Zava operates.

In the UK, given the high number of competitors, to increase revenue, Zava continuously needs to provide sales and discounts on their products, as the demand for Zava's services is relatively elastic. In Germany, however, due to the lack of competitors, the demand for Zava's services is relatively inelastic. (12) As the decrease in price would not be associated with an increase in the total revenue, Zava hardly offers sales or promotions in German-speaking countries.

In summary, from a micro-economic point of view, Zava has been able to understand the Price Elasticity of Demand in the different countries where it operates and to flexibly adapt its market strategy to the various markets, customers' behaviours and competitors. This has been another key factor in the company's success so far.

Currently, similar companies are appearing on the German market using a very similar business model and may constitute a severe threat for Zava in the near future. Additionally, the number of competitors in the UK is exponentially increasing, making the company under pressure to continuously develop new innovative services and acquire more customers.

4.3. Socio-cultural Factors

Multiple socio-cultural and technological factors have contributed to Zava's success in the last decade. As many other online and tech companies, Zava services target primarily a young and dynamic audience, who is steadily on the move and has little time nor willingness to book a doctor's appointment, be put on a waiting list and take time off work (or study) to visit the doctor's office at an inconvenient time of the day. These customers prefer to consult their doctor online from anywhere in the world at the time that best suits them, have 24/7 access to their medical records online and receive their medications at their doorstep, like their Amazon parcels. Zava has successfully filled this existing gap and managed so far to become the *Amazon of online medicine*.

Additionally, Zava has been able to offer consultations and treatment for many conditions that often cause embarrassment in many patients, like erectile dysfunction, emergency contraception, sexually transmitted infections, including HIV and genital warts. Patients are usually too embarrassed and therefore unwilling to address these topics during a face to face consultation with their GP, hence preferring a more discreet online setting, where photographs can be shown instead of naked body parts. Over the internet, patients are more open to discuss topics related to sexual health, unwanted pregnancies, etc. (13)

Although young customers and millennials have been the principal target audience of Zava since its launch, many elderly patients have progressively shown an increasing interest in the services offered. The main examples include both elderly male and female patients (up to the age of ninety) willing to be sexually active despite their age and presence of comorbidities. This audience is interested in online consultations on available options suitable for them, including hormonal replacement therapy for women and erectile dysfunction treatment for men.

Considering that the world population is aging and that the next generations of elderly patients will be increasingly more digitally literate, it is easy to predict that Zava will need to increase their services to specifically target the older customers. To understand the needs of this audience, further market research needs to be urgently carried out.

4.4. Technological Factors

Technology is the one factor that has most contributed to Zava's success over the last decade. Neither Zava nor online medicine generally would exist without technology.

Technology, including the widespread of internet, artificial intelligence, online medical records etc., has mainly contributed to the development of Zava both by generating brand-new services and communicating with target markets in foreign countries.

Zava uses its own software to allow communication between online doctors and patients. Thanks to an innovative online interface that makes use of semi-automated medical questionnaires, each doctor at Zava can provide up to 1000 consultations and prescriptions per day (where one day corresponding to 8 working hours), assuring efficiency and cost reduction.

Additionally, technology has helped Zava enter new markets, while continuing operations from its London office. Thanks to special software, Zava is now able, for example, to send electronically signed prescriptions to the other side of the world, saving both time and costs.

While technology already plays a major role in the provision of consultations and delivery of prescriptions, there is still a lot of room for improvement. Over the next decade, Zava will need to concentrate on how to improve the distribution step of its goods (see also Environmental factors below). In fact, medication still needs to be manually packaged and delivered to patients' homes. This last step, if even partially automated through technology, would be able to save further costs and even reduce inevitable human errors.

4.5. Environmental Factors

As any other rapidly growing company in the twenty-first century, Zava needs to be aware of its environmental impact and comply with national and international regulations on this matter.

As an online company offering most of its services over the internet, the environmental impact may seem minor at a first glance. But with a high percentage of clients requiring

medications delivered to their doorstep, this implies major environmental concerns, including packaging and deliveries.

Packing of medical products still takes place mostly in sealed plastic bags, which are disposable and not currently recyclable. Additionally, the delivery of parcels to clients' homes often implies the use of fuel-vehicles with high CO₂ emission rates resulting in air pollution.

Consumers are increasingly aware of the environmental impact of their purchases and request greater transparency about how product are sourced, transformed and delivered. As a result, Zava needs to adapt its way of operating if it wishes to satisfy its customers and consider new markets, as concerned have been expressed by customers about existing practices.

4.6. Legal Factors

Legal factors have had a significant negative impact on Zava's development so far. Since its launch, Zava had to take part in long legal fights with various stakeholders in every single country it operates in. The high number of legal issues the organisation had to deal with so far is the result of the perceived illegality of its transnational services. (14)

In the UK, Zava and its online doctors have so far received hundreds of written complaints from fellow medical practitioners assuming Zava's work was not legal. A number of these complaints have progressed to the General Medical Council and / or to court, causing unnecessary burden on the involved doctors and slowing down the productivity of the organization.

In Germany, an increasing number of pharmacists started to refuse Zava's prescriptions arguing that Zava Doctors do not have a face a to face consultation with their patient and therefore are not able to diagnose and treat them correctly. As a consequence, in June 2013, the newly elected federal government changed the law, demanding a direct doctor-patient consultation for the initial prescription of medicines. (15) In a similar effort to discourage the use of online medical services, in May 2014, Bavarian Health Minister Melanie Huml demanded the Federal government to clarify that online prescriptions made outside of Germany were not valid. (16)

To deal with the rising amount of legal issues, halfway through the last decade, Zava employed its own in-house legal team, with members coming from the various countries where the organisation operates. Despite many legal issues, Zava has so far managed to survive and continue its development. Legal issues, however, have cost the organisation a significant amount of resources.

Legal issues for an organisation operating in multiple countries on a controversial legal ground are far from over, especially considering existing plans to expand to new markets. Given that each country has its own set of rules and regulations, values and beliefs, especially with regards to medical practice, it is hard to predict what the future will reserve for Zava's legal team.

5. Discussion

In the previous chapters, an analysis of the multiple environmental factors influencing the activity of Zava has been performed. In this chapter, the main findings of the above analysis will be discussed using the SWOT framework, which includes four points: Strengths, Weaknesses, Opportunities and Threats.

5.1. Strengths

Zava's strengths comprise all *internal factors* that have positively influenced its growth so far. These mainly include its workforce and its technology.

Thanks to a very open-minded, multicultural and flexible workforce, Zava was able to pioneer and succeed in the, until then, undiscovered field of online medicine. With clear and well defined processes and self-developed technologies, Zava managed to scale up in five other European countries, while steadily increasing the quantity of services available to patients.

5.2. Opportunities

Zava's opportunities comprise all *external factors* that have positively influenced the organisation so far.

Zava profited in first place from the change in UK policies, making online medical consultations legal. Additionally, it expanded to other European countries by taking advantage of the European Directive 2011/24/EC on cross-border healthcare, that states that, prescriptions written by a doctor registered in one EU member state are recognised in all other member states. Zava was smart enough to recognise the importance of these policies and use them in its favour.

Furthermore, Zava's success has also been aligned to the socio-cultural changes that took place in the "Amazon decade", with an increasing number of patients requesting their medications online. Last, competitors have not been either as smart, or as flexible as Zava, having only concentrated their efforts on fewer services and in a single country. Zava could therefore act undisturbed for almost a decade.

5.3. Weaknesses

Zava weaknesses comprise all internal factors that have or may have a negative influence on the organisation itself.

The biggest weakness that Zava has shown so far is the lack of environmental concerns, in particular as it regards the delivery of goods. Excessive packaging and deliveries by fuel-alimented vehicles are contributing to upset an increasing number of environmentally-conscious patients, who expect some innovative changes on this matter. Zava is aware of the challenge, but has neglected it so far.

5.4. Threats

Threats to Zava include external factors that have or may have a negative influence on the organisation.

As previously discussed, Zava has been confronted by many external threats in the first decade of its existence: from restrictive government policies to an increased number of competitors, especially in the UK, from legal problems to a period of recession involving all its markets.

Furthermore, Brexit and the future negotiations represent a major challenge to the development of Zava, ranging from the uncertainty over the regulatory frameworks, the access to a skilled labour force and access to resources.

6. Conclusions

Zava has been a pioneer in the field of online medicine. In less than decade, it has become the biggest provider of online medical services in Europe and is considered by many as the “Amazon” of digital health. Zava has convinced external investors and secured series A round funding of £ 20 million in 2019.

Despite the threat of Brexit, Zava has a bright future on the horizon, with new products and new markets coming up.

The main challenge will be to decide in which country to expand its services to. So far, the decisions on what country to operate in has been based on economic growth and political stability. Now that the richest European countries have already been involved in Zava’s healthcare revolution, the decision will not be as easy. Southern and western European countries, for instance, have a pretty high unemployment rate and an economy that is still suffering from the recent recession. Extra-European countries, which may look attractive at a first glance, have even more restrictive policies on online medicine and their markets are far from easy to enter.

Finally, the choice of new products needs to be guided by demographic changes: Zava’s initial focus on a younger audience needs to shift to include elderly and chronically ill patients too.

7. The effect of ageing populations and low productivity growth

As reported by the IMF in the World Economic Outlook report 2019, population aging is believed to challenge the expansion of the labour force and, as a result, labour productivity growth is estimated to remain low in the near future in advanced economies. (17)

It is difficult to predict what the impact of the aging population on a rapidly growing digital healthcare company like Zava will be. There are two possible scenarios that come to mind.

In the first scenario, the constrained workforce could translate into difficulty to find trained employees willing to work for Zava. As an example, Zava is already experiencing difficulties in the recruitment of German speaking GPs. This is due to the fact that in German speaking countries there is an abundance of vacant positions for GPs and their salaries are much higher than in the UK, making it therefore difficult to motivate a German GP to work for a UK-based organisation paying a lower salary. At the same time, it is extremely rare to find a UK-based GP who is fluent in German. Difficult recruitment of trained workforce is already a typical challenge for Zava and may get worst in the future.

In the other scenario, instead, an aging population with multiple comorbidities will be more likely to require medical help and due to the scarcity of medical practitioners (18), especially in rural areas, these patients could increasingly use Zava's services, for example in the online monitoring of complex medical conditions. This could even translate in an increased volume of revenues.

Which of the two above scenarios will take place is difficult to predict. In any case, Zava's revolution is just at the beginning.

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