

# The types of revenue model and which to pursue: A literature-based assessment on an AI DJ startup 'Awaves'

Author: Matthias Louman te Braake  
University of Twente  
P.O. Box 217, 7500 AE Enschede  
The Netherlands

## ABSTRACT

The concept of revenue models has existed for more than a decade now, with multiple definitions. In an effort to clarify what revenue models exist and which one a company should pursue this paper establishes a revenue model typology on which all complex revenue models are built. This is followed by a small-scale empirical investigation on the typology and applied to the case study 'Awaves' in order to theorize on what factors determine a good revenue model choice. These factors combined with the preferences from relevant stakeholders then resulted in the recommendation for Awaves to pursue a subscription model for both the B2B and B2C markets.

## Graduation Committee members:

**dr. R. Harms**

**dr. M.R. Stienstra**

## Keywords

revenue model, business model, AI, software company, startup

## 1. INTRODUCTION

There has been a massive increase in the number of startups, out of the 100 million startups created every year a large portion of them fail, about 9 out of 10 currently. (*State of the Global Startup Economy 2019*, 2019). Of these startups, the ones based on technologies like Artificial Intelligence 'AI' tend to have the highest failure rate (*Startup Failure Rate*, 2021).

In order for these companies to become real established businesses and potentially reach the scale-up stage (Fowler, 2018) they need to not only just create a compelling value proposition (Carvalho, 2014). Additionally, they find out how to create the right circumstances around that value proposition so that the business can sustainably deliver this value to its market.

This phenomenon might explain the rise in popularity of the 'business model' since its formal introduction (International Accounting Standards Board, 2009). It seems to be a very helpful tool to conceptualize the processes that enable the company to exist and could be used to find a way for the business to thrive.

However, there is no strong link between the theory and practice of business models yet (Lambert, 2013). One of the potential reasons of the lack of academic support is the sheer rate at which these business models are created and evolve. The time period needed for a business model to be validated is likely to be far greater than the time needed for new business models to be introduced in the market, this could probably cause the delay in evidence and thus academic support.

Another reason for a lack of strong links between startups and their business models is that businesses and the landscape surrounding them are very complex and contain a large amount of potentially relevant variables which can affect the outcome of a certain managerial decision. These multivariable relationships could largely explain the lack of generalization in business model research and it is perhaps the innovation in the business model itself which is the requirement of success. There are a lot of unique situations which make it hard for researchers to determine the relevant factors and variables for finding a fit.

Due to the lack of easily accessible and known theories, managers of startups are left with relying on their business intuition and the examples of successful implementations of business model elements. In this study, the different types of revenue models and their strengths and weaknesses within the business model literature were assessed. Data was then collected from all stakeholders of the startup Awaves in order to make an effort to try and validate if there is stakeholder consensus on the different types of revenue models and on which one Awaves should pursue.

## 2. PROBLEM STATEMENT

This study focuses on the University of Twente startup 'Awaves'. They are currently dealing with a major issue, namely, not being able to find and choose a suitable revenue model for their product/service. This revenue model needs to be chosen based on several yet unknown factors. Being an AI DJ software startup, it should also fit the particular business landscape they find themselves in and their target market.

Nowadays, there are many different successful revenue models currently in use by all kinds of businesses. There are the common ones like one-time payments (*phone, laptop*), subscriptions (*Netflix, Spotify*) and advertising (*Google, YouTube*) and plenty more. However, it is often unclear with the more intricate ones if they are a unique revenue model, a combination of multiple other revenue models or confused with types of whole business models.

The problem is finding a suitable revenue model which does not require a large amount of time and resources to be spent on it but still has a high chance of being profitable in a sustainable way.

## 3. RESEARCH QUESTION

Finding a revenue model is a challenging task, an overview of the process can help researchers and entrepreneurs in giving structure to their efforts. Therefore the research questions are made in order to get a clear view on the process of finding a revenue model, first by examining all the different types of revenue models to choose from and afterward conducting a small-scale empirical study on the stakeholders of the study's main case: Awaves.

RQ: What type of revenue model should Awaves pursue?

The main research question is general and will result in practical advice which can be used by Awaves and other aspiring startups to integrate into their decision-making regarding their business model.

RQ1: What are the possible types of revenue models?

There are many different types of revenue models, before trying to examine and validate them it is evident that first a fully exhaustive list of them should be made and then investigated, mainly through reviewing pre-existing literature. All the relevant literature related to revenue models is reviewed in search of the most supported revenue models.

RQ2: Which revenue model do stakeholders think Awaves should pursue?

A single-case multiple-respondent study is done on the company Awaves, interviews are done with relevant stakeholders and questioned on their evaluation and argumentation behind what revenue model they think Awaves should pursue.

## 4. THEORETICAL FRAMEWORK

### 4.1 Business Models

Revenue models have become increasingly important to get right in the current business landscape, both theoretically and practically (Casadesus-Masanell & Zhu, 2011). A revenue model is an underlying element of the broader term 'business model'. Business models are being used more and more as a practical tool for managers, business owners and investors to aid in visualizing the internal and external processes of a company. Although being used frequently in practice, the theory behind the business model is lacking scientific support. Even the definition of 'business model' itself is widely discussed. (George and Bock, 2011: 83).

It also seems like the term 'business model' is connected with new tech-based companies since the business models of more traditional and 'simple' businesses are so clear and obvious that it does not need a model for people to understand how they create and monetize value. (Novak, 2014)

On the other hand, in the business model literature the lack of progress can be attributed to the large amounts of different conceptualizations of the 'business model' (Zott et al, 2011; Novak, 2014). Depending on the paper it can mean parts of business model, types of business model or particular real-world implementations of a certain business model (Osterwalder et al, 2005). A potential cause for these multiple approaches to business models is the existence of three different 'silos' in business model research: e-business, with a focus on exploiting information technology; the strategic approach, with

notions like value creation and competitive advantage; and the innovation and technology management side (Zott et al, 2011).

Although these different viewpoints with different aims in their research differ a lot in their definitions, there are several points on which they overlap. Firstly, the business model is a separate unit that is different from the parts it consists of, and although the business model is centered around the business, it is not limited by the firm’s boundaries (Zott et al, 2011). Secondly, business models explain ‘how firms do business’ but in a system-level wide holistic approach (Zott et al, 2011). Thirdly, the activities of the focal firm are usually the most important part of the various proposed conceptualizations of business models. Finally, it seems like business models always try to explain both the value creation and value capture processes of the business (Zott et al, 2011; Sjödin et al., 2020).

The business model is therefore also seen as a mechanism that connects the firm’s (possibly new and innovative) technology to customer needs. The model is then located in between the firm’s input resources and market outcomes and is seen as the organizational and financial ‘architecture’ of the business (Novak, 2014). One of the assumptions of offering a new or innovative product or service is that this automatically leads to higher profits and the process of working out the interdependencies between technology effectiveness and business model choice and design. The choice of the business model determines how well the business model will perform in combination with the technology, a poor choice can lead to lower profits and a good choice to superior profits (Novak, 2014).

It seems like business models are most valuable in practical terms since their theoretical impact has been lower in comparison due to several factors, like limited amounts of empirical data, which have been limiting progress (Novak, 2014). As can be seen by the commentary from an accounting researcher who has called for more research into how company management perceives the companies business model, value creation and strategy. The researcher suggests that this research should be consisting of survey studies combined with case studies to gather the relevant information (Bukh, 2002).

Due to the aforementioned lack of theoretical relevance we can advocate for a Theory-in-Use (TIU) approach. This approach is based on phenomenon-driven research with the goal of constructing ‘new knowledge’ instead of extending an existing theory. To develop construct clarity in the business and revenue model domains one can develop an interview to explore this business model phenomenon (Prescott, 2020). After some clarity is established this paper can then point towards promising research directions to advance the theoretical relevance of business models and revenue model research as a whole.

The business model concept is currently a very wide and undefined field with lots of different views on what it exactly entails and a multitude of definitions on certain concepts (Zott, 2011). It therefore is advisable to not start with the business model as a whole but just a sub-section or part of the business model. It is generally accepted that the ‘revenue model’ is an interconnected part of the business model, perhaps even the most important part (Zott, 2011; Gaedicke, 2012). Establishing a definition of revenue models and exploring how they can be of practical use in a managerial setting is perhaps how this field will become more academically relevant as a research field.

#### 4.2 Revenue Models

As stated, revenue models are a part of business models. Revenue models can be defined as: ‘the monetization approach

by which a firm earns revenues from the sales of its products and services.’ (Tidhar & Eisenhardt, 2018, pg.1). The difference between business and revenue models being mainly that revenue models only focus on the value capturing process whereas business models should in theory cover more aspects. Firstly all value processes, from value creation to value delivery, but also the cost structure, environment and every other element which is present in the business model. Examples of these components include but are not limited to value proposition, target market, competencies, pricing, competition, resources, assets, activities, suppliers, information flows and cost structure (Gaedicke, 2012).

Although these business model components can be evaluated separately, it is advised to consider their high interconnectedness within the company. By neglecting this link of the revenue model to the general business model the business might fail to maintain the connection between value creation and value capture, which is at the heart of all successful business models (Tidhar & Eisenhardt, 2018; Sjödin et al., 2020). For evidence of this one can look at the events in October 2002, when the stock prices of many new internet companies with high market caps crashed almost 80% after the public realized their revenue models were defective (Teece, 2010).

In order to prevent these situations where the chosen revenue model does not fit the business one can investigate the links between the revenue model and business characteristics. In the data-driven service sector for example there are certain characteristics which ‘correspond’ to different types of models (Schüritz, 2017). See the figure below for an overview of the results from an analysis on data-driven startups.

Revenue model	Characteristics of data-driven service
<b>Subscription</b>	Continuous data collection and/ or analysis through data-driven service
	Customer perceives value during period of service usage
	Data needs to be kept up-to-date, since it outdates after a given period of time
	Continuous collection of data can be used to improve service across customers
	Types of data: <ul style="list-style-type: none"> <li>▪ Data on individual business performance → <i>apply volume-restriction</i></li> <li>▪ General information or data → <i>apply access-restriction</i></li> </ul>
<b>Usage fee</b>	Perceived value for customer increases with every additional service usage
	Data needs to be kept up-to-date, since it outdates after a given period of time
<b>Gain sharing</b>	Results of service are measurable and can be associated with service execution
	Application of the service to enhances an existing process of the customer

Figure 1: Data-driven revenue models and their corresponding characteristics (Schüritz, 2017)

#### 4.3 Types of Revenue Model

When looking at the types of revenue models, there seem to be many different models that companies use. And indeed, there are many different combinations of revenue models. All these different variations are exactly that, variations on a few foundational models on which all higher-level models are built. We will now shortly discuss these basic models.

The first type of revenue model is the ‘one-time payment’ model, also called ‘asset sale’, ‘paid product’ or simply just a ‘purchase’ (Osterwalder, 2010; Schüritz, 2017). This model is the most traditional and common, although the model has not

been researched thoroughly as a type of revenue model, there are large bodies of knowledge on quantitative pricing and revenue management, focusing more on how high the products' prices should be to optimize the revenues generated from the customers. Examples of these techniques are markup, tiered, bulk, individual and complementary pricing. These techniques are all used to maximize the value captured from the value which was created in a single transaction.

Secondly, there is the subscription revenue model, the definition being that a customer pays a fee for a certain period (usually a month) in order to continually get access to a particular service or product during that period (Wang et al., 2005; Osterwalder, 2010; Schüritz, 2017). It seems like this particular type of revenue model has been performing very well over the last decade, particularly due to the rise of new online offerings (McCann, 2016). One of the likely factors playing a role in the effectiveness of the subscription model are the tools that can be used by companies to lure people into paying monthly for a particular (online) service. Tools like the 'freemium model' or 'trials periods' are very effective in attracting new potential customers and after some time enticing them to shift to the 'premium' version of the product/service (Wang et al., 2005).

Another revenue model is the 'pay-per-use' model, also called 'usage fee' (Schüritz, 2017). This model captures value by determining a fixed price per unit and then charging the customer periodically based on the amount of units used. The measured unit can be time, number of transactions, or calls to a particular subroutine (Ojala, 2013) but one can think of any form of a unit, as long as it is measurable. This fact makes price differentiation possible, customers who could not afford or want to pay a subscription fee now have the possibility of paying just for what generates value for them. This enlarges the potential group of customers which would otherwise have turned to other, potentially less effective solutions, thereby increasing economic efficiency and product usage (Gallaughier et al., 2001).

The fourth revenue model 'advertising' is based on fees paid in order to advertise and promote products, services or brands (Osterwalder, 2010; Schüritz, 2017). Although it has been and still is very present in the forms of TV, radio and billboards in the past, it has risen in popularity as a revenue model for internet companies, accounting for a major portion of their income. The advertising revenue model is usually most effective in cases where either ad-aversion or product quality is low and the advertising rate (due to high conversion rates or values) is high. For the purposes of this paper, affiliate programs and fees for customer leads are grouped under the same type of revenue model since the main goal of the activity is similar, to entice or persuade people into considering a purchase or activity which ultimately generates revenue for the party paying for the advertisement, lead or affiliate link.

The 'licensing' revenue model is based on the process of giving customers the permission and ability to use (usually protected) intellectual property for a licensing fee (Osterwalder, 2010; Schüritz, 2017). This allows rightsholders to generate revenue from their creation without having to commercialize a product or service (Osterwalder, 2010). The licensing revenue model is common in both the media and technology industries (Osterwalder, 2010), likely due to the nature of the intellectual property (e.g. computer code or certain media) being easily duplicated so that licensees can exploit the value.

Lastly there are the 'lending and renting' and 'commission/brokerage fee' models. The lending and renting model is similar to the licensing model but instead of paying for the right to use intellectual property one pays for the right to use

an asset for a fixed period (Osterwalder, 2010; Schüritz, 2017). Examples of this model can be seen in car rental companies like 'zipcar.com'. The commission fee revenue model is based on the intermediation services provided for or on behalf of two or more parties. The most common example are brokers or real estate agents, who usually get a commission based on a percentage of the sale value (Osterwalder, 2010; Schüritz, 2017). Another example of a company using a popular commission fee model is 'Airbnb'. Similar to a brokerage they bring demand and supply together, in this case a renter and lender of an accommodation. In this way, part of the added value from the successful transaction can be captured by the third party.

## 5. METHODS & RESEARCH DESIGN

### 5.1 Why a Case Study

After a thorough investigation and description of these concepts, an empirical investigation is done using a single case multiple respondents study on the startup Awaves. Case studies are designed fundamentally to discover the 'how' and 'why' questions of a complex social problem (Zucker, 2009) and its contextual conditions (Yin, 1994).

Especially the focus on "exploring unknown phenomena to prepare ground for future research instead of theory testing" (Zucker, 2009) is very helpful in the context of this study. In addition them usually being multi-perspective can help in finding the perspectives of all the relevant actors (Zucker, 2009) which is used to get a better overview of the interrelated factors involved in the process of revenue modelling. (Tellis, 1997)

It is exactly the goal of this paper to focus on exploring new possible bases from different perspectives in order to build theories. The researcher being one of the founders, thus being in the 'midst of the business model' having easy access to all these different perspectives therefore is very welcome. An additional reason for conducting the case study in comparison to other ways of gathering empirical data is that they are often applied for studying innovation-related issues (Yin, Bateman & Moore, 1985), which is definitely at play in the case of Awaves since the current goal is developing an AI DJ. In addition it is especially useful for investigating phenomena that can be observed in small companies (Harney & Dundon, 2006), another point which applies to Awaves since the effective amount of full-time employees is approximately four.

Although there are many advantages to conducting a case study in this particular situation, there could be severe biases at play which should be addressed here so that the researcher and the reader can process the information in the correct context. The first and more general bias is that the researcher can consciously or subconsciously make decisions in the research process which tend to confirm the researcher's own pre-existing beliefs and assumptions on a certain topic or theory. This so-called 'confirmation bias' can have a negative impact on the results and conclusion, resulting in a lower scientific addition to the body of knowledge.

A secondary bias that both the researcher and reader should be aware of is that since the researcher is also a founder of the case study's subject a bias could exist towards searching and finding results which might prove useful or valuable to the company instead of the research. Although this effect should be minimal since an assumption could be made that good research should be beneficial to both Awaves and the potential reader but the position of Awaves as an AI DJ software company should be taken into consideration.

## 5.2 Data Collection at Awaves

The collected data will help validate which revenue model Awaves should pursue in the form of a semi-structured interview. Semi-structured interviews are good for ‘why’ questions instead of ‘how many’ and ‘how much’ (Fiona, 2005).

The interview sample was designed to be a mixture of founders, entrepreneurs, employees, investors and end users. The backgrounds of the participants varied from business and design to computer science and mathematics. This mixture was chosen to guarantee a multi-stakeholder analysis and approach the theories from as many different but relevant perspectives. An additional benefit for choosing these groups is that they were relatively easy to reach which helped scheduling the interviews in an efficient manner.

The minimum amount of interviewees per category was set at three, first of all due to the limitation that there are only three other founders and secondly because it was assumed that for most of the categories the information extracted would be relatively saturated. If however the interviewer noticed that after three or more interviews there still was new and untapped information then the limit was heightened. In total eight semi-structured interviews were conducted.

The interview is designed to be divided into two parts, corresponding to the two different research questions of this paper. Firstly we focus on the definition, meaning and types of ‘revenue model’, this is to evaluate the term but also to confirm the interviewer and interviewee are on the same page when discussing the types of revenue models.

In the second part of the interview the interviewee is asked about their preferred revenue model and their argumentation for or against certain models, first specifically about Awaves and then in general. Questions like: “Which revenue model do you think Awaves should pursue?” and “Which factors do you consider when thinking about which revenue model a company should pursue?” formed the basis of this part of the interview. Depending on the answers given, improvised follow-up questions were posed to try and explore the underlying thought processes of the interviewee. Please refer to *appendix 1* for the full exhaustive list of base questions.

During and after the interviews the process of theorycrafting, based on the theory-in-use model ‘TIU’, starts (Prescott, 2020). Due to the underlying thought processes of finding a revenue model being based on so many variables it is likely that a quantitative approach will not be as effective, hence a more qualitative approach. The goal theorycrafting in this paper is finding one or more ideas on what the process looks like, which can then later be further examined or proven untrue.

## 6. RESULTS

### 6.1 Types of revenue models

After a literature assessment of the existing revenue models it appears that research has been done on several revenue models. These models are then discussed thoroughly in certain papers. However, it became apparent that there was no clear overview of the different types of revenue models. In addition, also outside of the bounds of scientific research it seems like the line between business models and revenue models was vague and inconsistent. This resulted in figures with parts business model and parts revenue model examples.

Therefore, in order to clarify the notion of revenue model a revenue model typology was constructed. This typology was made after researching the relevant topics by searching for relevant keywords in multiple research paper search engines.

### Typical product/service models



### Temporary usage



### Multiple parties



Figure 2: Revenue Model Typology

These eight revenue models were chosen and structured in this way because these seemed to be the most basic monetization building blocks on which all other more complex revenue models are made (Schüritz, 2017; Osterwalder, 2010). All of these types have one or more different properties which makes them unique.

In the interviews the definition of what the term ‘revenue model’ means was generally quite clear. All definitions were close to the one as defined before, ‘the approach or process of how a firm earns revenues from the sales of its products and services’. There were minor differences in levels of conceptualization, some taking a more theoretical and some a more practical approach. Another noteworthy point was that some decided to include the value proposition and link it to the revenue streams in their conceptualization of the revenue model.

Additionally, when inquired about the importance of the revenue model these seven types of revenue models as displayed in *figure 1* were not commonly disputed. There were however a few suggestions on possible additional revenue and/or value streams, examples include donations, investments, subsidies and cryptocurrency appreciation.

When asked about the personal preference of revenue models the respondents gave an interesting look into the perceptions of customers. Generally speaking the preference was one-time payment, but only if the price was within the direct spending power. The opinions of subscription models were more mixed. For example, when a service is perceived to fit a subscription model like a gym membership or the likes of Spotify and Netflix then a subscription is preferred, one of the reasons given is the lower initial payment, which reduces risk of not using a product or service in the future and the idea of being able to cancel at any moment seems to be appealing to most of the participants.

### 6.2 Which revenue model should Awaves pursue?

When asked about which revenue model Awaves should pursue the answers do tend to favour the subscription model. What is interesting is that the interviewees themselves started differentiating between revenue models based on the intended market. More than half of the respondents based their answer of if Awaves was going to be a business to consumer ‘B2C’ or business to business ‘B2B’ company, for which they then automatically adapted their revenue model choice.

For the B2C market the preferred revenue model was again split based on the frequency of usage and usage profiles of the

customers. When frequency of use was low, for example if the software will only be used on organised parties, a fee per party was suggested, so towards the direction of a one-time payment, similar to arranging a DJ for your party. When the frequency of use was high, for example even used by customers while not at a party, then the subscription model seemed to be the preferred choice for a B2C market, argumentation being mostly based on convenience, being able to cancel anytime and not having to think about overspending.

For the B2B market, which consists of serving cafes and clubs for example, the choice of revenue model is very different compared to the B2C direction. When pursuing a B2B business model the three preferred revenue models are subscription, pay-per-use and licensing. The reasons given for subscription were again mainly based on ease of use and convenience. For pay-per-use being able to save in costs was a big factor and being able to compare the rates to the alternatives, like hiring a human DJ for example.

The answers from the interviewees were very different for each participant about what they think the most important factors in determining which revenue model to pursue are. The most common answers contained a notion of value proposition, convenience and the usage profile. For the value proposition it was said that the link between the revenue model and the proposition was especially important, it did seem like they were unconsciously referring to value creation and value capture.

The convenience argument returned a few times as well in the case of smaller clients. The subscription model was often said to be successful because of its convenience, not having to pay upfront in combination with not having to keep track of and adapt your usage of said product or service seems to be perceived as a noteworthy amount of added value for customers.

The usage profile argument is related to previous point, it seems like there is a tendency in the thought process of the interviewees to choose a revenue model based on the usage or consumption profile of the customer. An example of this is the is Netflix, since you continuously use Netflix during the month you also pay monthly. In contrast, when arranging a DJ for a party there is only one instance of value creation and hence a one-time singular fee attached. This idea of always trying to link value creation and value capture was almost universally present in the interviews.

## 7. CONCLUSION & DISCUSSION

Revenue models are and will be a very important element of business models. This paper adds value in a practical way by gathering and organising all unique revenue models and translating those into a revenue model typology. This will hopefully further clarify what the definition of a revenue model is. In addition the typology was constructed with a detailed explanation of each of the unique models. This will enable more research opportunities on the types of revenue models, revenue models in general and the link between revenue and business models, perhaps with a more quantitative approach.

One of the major problems in the business model literature research is the lack of connection between the theory and practice. This study tried to establish a link between the pre-existing literature and a real-world implementation in order to validate the practical usefulness of the theories.

Although this study examined revenue models as a fully separate unit of analysis, several studies have stated that all of the components of the business model are interconnected and it should definitely be taken into consideration that one should take the whole business model and strategy into consideration

when making managerial decisions. Even though individual choices on a per business model component basis can be 'optimal, in the end business performance is linked to the alignment of business processes and resources.

Additionally, research which can help find a revenue model will be useful for those firms unsure which model fits their business best. However, for businesses and startups that are on or near the innovation frontier it is inevitable that the theory will in some cases be of no use since a new technology, product or service might require a new innovation or implementation of a revenue model which is totally new to the market or industry. Take the startup 'Swapfiets' for example, they innovated a new bike rental service which in itself changed their revenue model to a monthly subscription. The combination of this new service and a revenue model is likely to be the first successful implementation in the bike market. Due to the nature of these types of innovations, it is not very likely that this could be predicted by theory. This could mean that even if we can find a great model to predict a revenue model for a company, in the cases where the revenue model is the most uncertain, the predictions made by the theory will perform the worst.

The results of the semi-structured interviews show a tendency towards the one-time payment and subscription models when dealing with a business to consumer market. When dealing with a business to business market the preferred models are subscription, pay-per-use and licensing.

The factors determining the choice of the interviewees' revenue model were a combination of the company's value proposition, how convenient it would be for the customer and the usage times and frequency of the service or product.

The main limitation of this study is on the lack of number of participants who were interviewed, this reduced the amount of effective data which could be gathered and introduced a bias since all of the interviewees were gathered from the researchers network. Apart from this limitation there could be additional approaches to researching the field of revenue models, perhaps more effective for the task at hand.

Revenue models can for example be researched from the perspective of utility theory since the answers of the respondents seemed to indicate that they were indeed trying to maximize customer utility. The thought process had the goal of maximizing the overlap between value creation and value capture while taking into account costs for measuring usage of a service or product. This in itself can be seen as price differentiation, thereby resulting in a higher customer and producer surplus.

Additionally the wider 'systems thinking' stream might be an interesting approach to take to research business and revenue models. Instead of being more component-focused this type of analysis is targeting the system as a 'whole', where the interactions between components are the key to achieving system level outcomes (think of company profit). Especially in this field one cannot simply change one component and expect the rest of the system to behave the same (Ng, 2010).

Lastly, on the theoretical as well as the practical side there obviously is still plenty of opportunity to develop more rigorous and grounded theories on business and revenue models and back those up with more quantitative evidence from multiple sources. Especially with companies seeming to become more and more complex every year, with the biggest multinationals having revenues that are in the range of whole nations' gross domestic products, there are reasons to believe conceptualisations like business and revenue models are here to stay.

## 8. APPENDIX

### Appendix 1: Interview questions / interview schedule

<i>When introducing yourself, the protocol should include statements of confidentiality, consent, options to withdraw, and use and scope of the results.</i>		
<b>Question</b>	<b>Source</b>	<b>Desired type of answer</b>
Can you explain in your own words what you think a revenue model is? <i>Revenue model explanation if needed</i>	(Kallio, 2016)  (Fiona, 2005)	To see if there are large differences in the stakeholders' definition of revenue models
Do you think a company's revenue model is important? <i>Why?</i>	(Kallio, 2016)  (Fiona, 2005)	To get the stakeholders' thoughts and argumentation on the importance of revenue model choice
<b>Show revenue model typology</b>		
Do you think this figure contains all types of revenue models? <i>If not, explain which one is redundant or missing</i>	(Kallio, 2016)  (Fiona, 2005)	
Do you yourself have a certain preference for revenue model? If yes, why? <i>Do you like paying for something once or monthly? Like car leasing vs. buying?</i>	(Kallio, 2016)  (Fiona, 2005)	To get the stakeholders' own inherent preference of revenue model and the reasoning behind it
Which revenue model do you think Awaves should pursue? <i>Introduce Awaves if needed</i>	(Kallio, 2016)  (Fiona, 2005)	To get to know the stakeholders' preferred revenue model
Why do you think so? <i>Explain your argumentation for this revenue model / against the other models</i>	(Kallio, 2016)  (Fiona, 2005)	To get the stakeholders' argumentation behind their preferred revenue model
Which factors do you consider when thinking about which revenue model a company should pursue? <i>Giving target market, cost structure, technology, value proposition, company culture as examples</i>	(Kallio, 2016)  (Fiona, 2005)	To get the stakeholders' idea of the factors behind their preferred revenue model

## 9. REFERENCES

1. Baden-Fuller, C. (2013). Business Models and Technological Innovation.
2. Bukh, N. (2002). The relevance of intellectual capital disclosure: a paradox?
3. Carvalho, J. M.S. (2014). Creating a Balanced Value Proposition Exploring the Advanced Business Creation Model.
4. Casadesus-Masanell, R., & Zhu, F. (2011). Business Model Innovation and Competitive Imitation: The Case of Sponsor-Based Business Models. *Harvard Business School, 1*(1), 57.
5. Fiona, F. (2005). Semi-structured interviewing. *Oxford University Press*, 65-77.
6. Fowler, G. (2018). High-growth firms and scale-ups: a review and research agenda.
7. Gaedicke, J. C. (2012). The Business Model in Context of Business Strategy.
8. Gallagher, J. M., Auger, P., & Barnir, P. (2001). Revenue streams and digital content providers: an empirical investigation.
9. Gugu, C. (2007). Semi-structured interview protocol for constructing logic models.
10. Harney, B., & Dundon, T. (2006). Capturing complexity: developing an integrated approach to analysing HRM in SMEs.
11. Kallio, H. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide.
12. Lambert, S. C. (2013). Applications of the business model in studies of enterprise success, innovation and classification: An analysis of empirical research from 1996 to 2010.
13. McCann, D. (2016, December 16). *Will All Companies Go to a Subscription Model?* CFO.com.
14. Ng, I. C. (2010). The future of pricing and revenue models. *Journal of Revenue and Pricing Management*.
15. Novak, A. (2014). Business Model Literature Overview. *Financial Reporting*.
16. Ojala, A. (2013). Software-as-a-Service Revenue Models.
17. Osterwalder, A. (2005). CLARIFYING BUSINESS MODELS: ORIGINS, PRESENT, AND FUTURE OF THE CONCEPT.
18. Osterwalder, A. (2010). Business Model Generation.
19. Prescott, J. E. (2020). The Business Model Phenomenon: Towards Theoretical Relevance.
20. Schüritz, R. (2017). Capturing Value from Data: Revenue Models for Data-Driven Services. *Proceedings of the 50th Hawaii International Conference on System Sciences*.
21. Sjödin, D., Parida, V., Jovanovic, M., & Visnjic, I. (2020). Value Creation and Value Capture Alignment in Business Model Innovation: A Process View on Outcome-Based Business Models. *Journal of Product Innovation Management*.
22. *Startup Failure Rate*. (2021). Failory. <https://www.failory.com/blog/startup-failure-rate>
23. *State of the Global Startup Economy 2019*. (2019). Startup Genome. <https://startupgenome.com/reports/state-of-the-global-startup-economy-2019>
24. Teece, D. J. (2010, April). Business Models, Business Strategy and Innovation. *Long Range Planning*, 43, 172-194.
25. Tellis, W. (1997). Application of a Case Study Methodology.
26. Tidhar, R., & Eisenhardt, K. M. (2018). GET RICH OR DIE TRYING... UNPACKING REVENUE MODEL CHOICE USING MACHINE LEARNING AND MULTIPLE CASES. *Strategic Management Journal*, 1.
27. Wang, C. L., Zhang, Y., & Ye, L. R. (2005). SUBSCRIPTION TO FEE-BASED ONLINE SERVICES: WHAT MAKES CONSUMER PAY FOR ONLINE CONTENT?
28. Yin, R. K. (1985). Case Studies and Organizational Innovation: Strengthening the Connection.
29. Yin, R. K., Bateman, P. G., & Moore, G. B. (1994). Discovering the Future of the Case Study. Method in Evaluation Research.
30. Zott, C. (2011). The Business Model: Recent Developments and Future Research.
31. Zucker, D. M. (2009). How to Do Case Study Research.