Video Games for Health

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A guide for

game developers

How to begin making video games for health

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2 Introduction

1.1 Video Games for Health (VGFH)

Many people's first instinct is that video games embody negative aspects such as very violent scenes, wasting time, antisocial tendencies, etc.

Despite such disadvantages of video games existing to some degree, they still have their own particular positive aspects as well. For example, according to most actual research data, video games could be applied to diverse areas related to people's health. Researchers have conducted a long series of experiments designed to prove that video games can be a part of the world of health care.

The experiments fall into variant areas such as facilitating brain development, improving eyesight, making a fitness plan – and games could also generate beneficial influence in the cognitive area. In addition, video games incredibly can even be used in medicinal fields related to the mental aspect, amblyopia, rehabilitation, etc.[1]

Thus it can be seen, VGFH is an innovative method to serve the health field through its unique features for encouraging people's motivation of improving health problems.

Depending on the peculiarities of VGFH, the researchers have a keen interest in exploring this new field. Because there is a wide range of groups who can benefit from VGFH. Grosso modo, the target groups could be patients, children, young people, the elderly, etc. Every different target group has their own particular aspect where video games can provide assistance for their health.[2]

It would bring benefits to an increasing number of the people in the world to further research VGFH. It could even take the place of medicine to solve some issues which are correlative with mental stress relief, psychological diseases etc.

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[1] http://www.businessinsider.com/video-game-health-benefits-2014-9?op=1&IR=T

[2] http://theweek.com/articles/466852/7-health-benefits-playing-video-games

Since research into this area is well underway, the field seems ripe for first movers among small-scale suppliers on the private market. In the following, we will present an analysis of a data package collected about the state of the VGFH-field in Denmark during Spring 2016. Most of the data package is available for free download at http://idsu.dk/

This report will hopefully be of service as a roadmap for small to medium enterprises (SMEs) who wish to enter the field. It provides a wealth of data and help with organizing questions and projects – applying the data, getting the answers and identifying and running concrete projects is where your creativity will prevail.

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3   Getting the basics right

1.2 The demands for SMEs to create the new field – VG for Health

When a company wants to enter into a new field where they never have been contacted before, there are some appropriate methods that could be utilised. Primarily, market analysis should be the most important tool. Researching correlative information of the industry can show what preparations you have to do, the tendency of the field, maybe some competitors in the market, etc.

Besides, you need to know which categories of customers could be your target group. Analyzing the reason why they need video games to improve their health problems is the key point for how you promote your products. Building on knowledge of users trends, you can produce your games accordingly.

Moreover, joining in on a new field also feeds the demand for relevant knowledge and experience. The best way to settle out the problem for a company is building some partnerships in the initial stage. Through the cooperation with the partners, you can gain the professional knowledge which you are not in possession of. They also could share some related experiences of the industry to you as well. Creating a partnership can reduce your cost of research and increase the efficient working time. This is the suitable pathway for a startup company at the beginning.

1.3 The several health care adaptive categories of VG for SMEs

There are certain genres of video games that can work particularly well for small to medium enterprises looking to enter the VGFH field.

- Brain games. The game could increase people's memory, multitasking ability, etc.
- Training games. It could for example be related to improving people's vision. Examples of trainable afflictions in this areas are the contrast sensitivity problem, amblyopia improvement, etc.
- Mental games. This type of games could relieve people's stress in working, living, etc. efficiently. Especially for anxiety remission. Through playing mental games, people can learn to alternatively relax and concentrate attention during a period.
- Physical activity games. Most people play some physical activity games to achieve the goal for improving their health or losing weight. Games could

enhance the interest of people who want to keep some practices in the long-term.

2. MARKET SIZE ANALYSIS

In this section, we are going to discuss the market size of VGFH. This is the first and most important step to understand how large the scope of opportunity of business is on the market.[3]

As mentioned above, the field has an extensive range of application. According to research in 2014, the serious games amount of sales approximately was $2 to $5 billion. The categories divided by performance improvement, education and training. In the same year, exercise games' revenue was reaching on $6 to $7 billion, including interactive physical motion and fitness games. Hence, the total global estimated direct-to-market size of VGFH was up to $11 to $12 billion.[4]

According to the data, the potential on this field is vast - both for academic study and business ventures.

Below, we will elaborate on the categories or genres of VGFH that make the most sense as projects for SMEs. Simultaneously, this will demonstrate how widely video games could be applied to the health care world.

3.1 Brain games

Brain games are for improving memory, focus and multitasking ability. According to research from the journal Nature, a driving game could efficiently enhance people's short-term memory and long-term focus especially in older adults, simultaneously strengthening their multitasking. The consequence is illustrated by the experiment where a test group played a game called NeuroRacer for more than 12hr. per month.

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[3] http://www.insight-mea.com/market-sizing-in-market-entry-studies.php#.VskFP3r0GYY

[4] http://www.appliedclinicaltrialsonline.com/transforming-cognitive-health-conditions-through-clinical-games

The older adults' short-term memory competence, multitasking skill and concentration strength are much better after 6 months.[5]

3.2 Training games

In this area, first of all we look at how video games can improve people's vision. Furthermore, video games could also be used for other training such as healthy eating for children. Most fields where training a task to imprint a habit coud benefit from video game assistance.

3.2.1 Improving vision

When you look at the heading, maybe you will feel curious about this section. As a general rule, playing video games frequently is seen to be damaging to people's eyesight. But in fact, through the right method video games can instead improve eyesight.

To understand how, we first need a little knowledge regarding vision. A key concept in this context is contrast sensitivity. So, what is contrast sensitivity? It is a visual ability that lets people see objects even when the outline is not clear or not highlighted from the background. The ability declines with age. With descent of contrast sensitivity, people's vision ability will generate some difficulties as:

· Cannot distinguish traffic lights or cars at night

· Inability to focus on small or detailed points.

· Misunderstand facial gestures

· Needing a great volume of light for read

· Feeling tired while watching television[6]

In light of the above, it is effortless to see that a good contrast sensitivity is a significant factor in people's quality of life.

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[5] http://www.businessinsider.com/video-game-health-benefits-2014-9?op=1&IR=T

[6] http://www.visionrx.com/library/enc/enc_contrast.asp

To counteract this decline of ability, a distinct method, which could enhance contrast sensitivity, has emerged – video games, especially action video games.

According to the research of the University of Rochester [7], a regular training programme of action video games can provide a long-term increase in visual ability. During the process, action video games train the brain to deal with the current visual information more efficiently. The improvement will continue some months until the patients stop playing the game.

As the data shows, an action video game may be a helpful supplement to eye-correction techniques because of its training devices. It facilitates the brain's visual cortex to process the information which is received from the outside world better.

Furthermore, a new study indicates that action video games could boost the player's vision ability to see the objectives in a cluttered space accurately. The new study is by Daphne Bavelier, a professor of brain and cognitive sciences at the University of Rochester.

She made a test of the contrast sensitivity function of 22 students, and then segmented them in two groups: One group played action video games such as "Unreal Tournament" and "Call of Duty"; another group played "The Sims", a game with more sanguine visuals and low requirements for visual-motor coordination. The experiment lasted 50 hr. during 9 weeks. Then Bavelier tested the students' vision again.

The result displays that the students who played action video game had increased an average 43% improvement of their vision ability, especially to recognize close shades of gray. But the Sims players did not show any improvement.

Continuing the test experiment, the consequence shows that the people who played action video games routinely for more than 6 months have a 58% improvement of vision.

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[7] http://www.rochester.edu/news/show.php?id=3342

Thus it can be seen that improving contrast sensitivity could be achieved through some simple training with action video games. The theory is that the video identifies objectives visually that focuses on certain parts of the game world, and the brain adapts to this quickly, training the ability to focus-that is impaired by low contrast sensitivity. The effect is positive and incredible, it even could remain two years after the training was completed.[8]

Video games also improve some other visual skills such as the competence to track several purposes simultaneously and paying attention for a series of fast movements.[9]

3.2.2 Healthy eating games

This type of games are usually designed for children to impart nutrition knowledge and weight management behavior on them. The games' objective in general is to help children make reasonable and optimized choices of food based on nutritional aspects.[10]

The games usually include companion exercises and more knowledge-based educational content, such as information on various food sources.[11]

3.3 Mental games

According to some studies, puzzle games could efficiently relieve stress, anxiety and help improve your general mood. The causal puzzle games like Bejeweled or Peggle can help with those symptoms because when people playing them is becomes easier for them to reduce distractions. Then people will feel less anxious.

Mental games also display unique efficiency with regards to reducing depression. They can help you to feel less alone and better understood.[12]

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[8] http://www.livescience.com/5360-action-video-games-improve-vision.html

[9] http://news.nationalgeographic.com/news/2009/03/090329-video-game-vision.html

[10] http://www.physicventures.com/files/news/pdf/Health%20e-Games%20Market%20Report%202008%2009.pdf

[11] http://www.healthyeating.org/Healthy-Kids/Kids-Games-Activities.aspx

[12] http://geekandsundry.com/how-video-games-can-help-with-depression-and-anxiety/

3.4 Video games encourage physical activity

Video games related to exercise could get people who are less inclined to exercise to start moving. It is demonstrated by experiments which show that playing games on a Nintendo Wii will urge people to get up and move for about 20 minutes. It creates a more interesting alternative than the traditional aerobic exercise. Another study in the journal Pediatrics found that video games such as Dance Dance Revolution were efficient in managing intensity in exercise for kids.[13]

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[13] http://www.businessinsider.com/video-game-health-benefits-2014-9?op=1&IR=T

4 Users Group

The user groups relevant to VGFH with small companies tend to be children, health care patients and adults.

- Children. Playing video games may help children to develop their problem-solving skills. As one report goes, more teens would like to choose types of games that involves strategic gameplay. According to a long-term study published in 2013, video games could enhance children's creativity as well, even violent games can cultivate problem-solving skills that are non-violent. And some simple video games represent an easy way to make people be in a happy mood, thus, they can be an efficient tool for children to learn resilience in the face of failure.[14]

- Adults. Playing video games can relieve stress, reduce depression, and make people feel better. Improvement in mental health could be achieved by adding a bit of game-playing time in your schedule. The point is proved by plenty of evidence. Also in current society, according to the Entertainment Software Association, women display an upward tendency for playing video games, which means that both genders are valid for targeting.[15]

- Patients. Video games could apply to diverse area in the medical field for patients. For instance, the type of video games which utilise virtual reality have proven to reduce pain and anxiety effectively. The study found by the American Pain Society's annual scientific meeting in 2010.[16] And video games also could be used in other medical aspects.[17]

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[14] http://www.apa.org/monitor/2014/02/video-game.aspx

[15] http://www.makeuseof.com/tag/video-game-stress-reduction-need-start-playing-right-now/

[16] http://americanpainsociety.org/uploads/about/2010-annual-report.pdf

[17] http://www.huffingtonpost.com/2013/11/07/video-games-good-for-us_n_4164723.html

5 Possible Partners

Armed with a basic understanding of the size and nature of the market we can now turn to a short run-through of the most suitable potential partners for a budding SME in the VGFH field. Since specialized knowledge is required, hospitals and organizations, which could offer professional knowledge of health are interesting possible partners. Similarily, companies which have worked with the health area and design can offer valuable insights and possible advice.

The most attractive possible partners located in Denmark are detailed below. You can find further contact information and many more suggestions for partners in the annex to this report, an excel spreadsheet containing IDSU's research on VGFH companies and institutions in Denmark and Sweden, which is available for free on http://idsu.dk/.

Hospitals

1. National hospital (Rigshospitalet)

A hospital which merged with Glostrup Hospital in 2015, they cover all medical specialist aspects except few areas.

Research: National hospital focus areas are nationally and internationally recognized research environments.

Relevant projects of research:

- World-class brain research, 2014
- Concentrated research efforts yield results, 2012
- World-class cardiovascular research, 2012

Geographic location: Blegdamsvej 9   2100 Copenhagen ø

Contact person: Anne-Mette Bang (Project Manager)

Phone: +45 3545 3545

E-mail: RIGSHOSPITALET@RH.REGIONH.DK

Website: https://www.rigshospitalet.dk/english/about-us/Pages/default.aspx

Organizations

2. *The Health Innovation Centre of Southern Denmark (Syddansk Sundhedsinnovation)*

An organization which both provides innovative solutions for health to the clinicians and citizens and facilitating professional innovation processes. They focus on user-centered design and prototyping. They mention specifically on their website that they are looking for partners. They also could find funding opportunities for the cooperators.

Experiences (list of products/projects):

- Renewing Health-better solutions for citizens with chronic conditions
- SmartCare-better care for citizens in their own home
- Innovative telemedicine solutions
- Best practice for Active Living solutions in the EU
- A new bed for Mental Health Services Developed by the Users

Geographic location: Forskerparken 10G 5230 Odense M

Contact person: Anne Bach Stisen (Unit leader)

Phone: +45 20598951

E-mail: Anne.B.Stisen@rsyd.dk

Website: http://www.syddansksundhedsinnovation.dk/

3. *Alexandra Instituttet*

The institute mission is to help organizations both in the public and private sector in their development of innovation through IT-based products and services based on high-tech IT research. This is a non-profit company. They apply their competence in software with innovation methods and technological solutions to assist the enterprises which need to urge their business. They have not worked specifically with VGFH before, but it falls well within their scope.

Research & Innovation: application-oriented research based on state-of-the-art knowledge via IT research environments

Geographic location: Aabogade 34, 8200 Aarhus N

Contact person: Rasmus Vedel (Business development manager)

Phone: +45 30956535

E-mail: rasmus.vedel@alexandra.dk

Website: http://alexandra.dk/dk

4. Monsenso

A platform which is working in the field of mobile for health. It concentrates upon innovative technology and offering the solutions to assist mental disorder problems. The method of solution is through a specific overview of the patient's mental health state which including the behavioural data and self-monitoring.

Research: Clinical studies, RCT (randomized clinical trial)

Geographic location: Rued Langgaards Vej 7, 2300 Copenhagen S.

Contact person: Thomas Lethenborg (CEO)

Phone: +45 21298827

E-mail: info@monsenso.dk

Website: http://www.monsenso.com/

Companies

5. MindMakers ApS

It is a company which provides consulting services with high availability in educational area, the solutions through the method which as a communication work for continuing education, in-service training and spreading information. It including E-learning courses, Video based courses and Analysis assignments.

Efforts: Collaboration with Danish Medical Association – developing and producing the E-learning programs to the target group which are the practicing doctors. The prime themes are investigation and treatment of dementia, therapy of impaired cognition, etc.

Geographic location: Klasagervej 32, 8230 Aarhus

Contact person: Holger Dalgaard (designer)

Phone: +45 86199820

E-mail: info@mindmakers.dk

Website: http://www.mindmakers.dk/index.php?id=39

6. Nordic Brain

The company focus on new technologies, change, implementation and mind-sets. They deliver the solutions which are related with intellectually stimulating cognitive processes through digital technology . The mission of the company is that to boost the training field for health, wellness and rehabilitation.

Method of products working: it is based on fun and attractive experiences for the end-users to start trying the new tools which are from Nordic Brain Company.

Establishment Year: 2010

Geographic location: c/o Center for Hjerneskade   Amagerfælledvej 56A   2300 Copenhagen S

Contact person: Carl-Fredrik Vogel (Innovation consultant)

Website: http://nordicbrain.com/index.html

7. Mediafarm

Mediafarm company specializes in the complex knowledge regarding visual communication. Their services in an extensive scope, involving design services, visualization, video production and app development for the pharmaceutical industry, education, cultural establishments, etc. The key focus points are healthcare and natural sciences areas.

Experiences of healthcare: Medical Illustration, MOA Animations, E-Detailing and Instructional Videos.

Establishment Year: 2002

Geographic location: Dronning Margrethes Vej 4D, 4000 Roskilde

Contact person: Niels Østergaard (Creative Director)

Phone: +45 32134609

E-mail: CONTACT@MEDIAFARM.DK

Website: http://mediafarm.dk/en/

8. Welfare Tech

Welfare Tech helps businesses by making optimized conditions to execute their innovation, testing and evaluating the new products for healthcare and homecare.

There are five areas Welfare Tech focus on:

- Preventive Health Innovation
- Hospital & Health Innovation
- Rehabilitation Innovation
- Social Service Innovation
- Health Ageing Innovation

Geographic location: Forskerparken 10H, DK 5230 Odense M

Contact person: Jeannette Eis (Development Consultant)

Phone: +45 33379989

E-mail: info@welfaretech.dk

Website: http://en.welfaretech.dk/

9. *The Feel Good Game*

A game company that through smartphones create their game products which will maintain good habits for a healthy life. The game's 10 levels afford some courses, the concentrating on incorporating and maintaining healthy habits to be achieved one by one. For instance, sleep.

Geographic location: Pilekrogen 16, Troense, 5700 Svendborg

Contact person: Sanne Olesen (Entrepreneur and games designer)

Phone: +45 40190880

E-mail: sanne@thefeelgoodgame.com

Website: http://www.thefeelgoodgame.com/en

10. *SAS*

SAS – not to be confused with Scandinavian Airlines – helps companies to collect and make sense of data especially in business analysis for software and services. They can switch the data become to an original perspective for companies' business. To enable the business working and fix the stuffs which are unoperated.

Sector: Health care – It could cover all relevant clinical and nonclinical data for real time decisions to create a complete view of patient care. Through to improving patient outcomes with analytics software and data solutions for health care industry. It comprises by readmissions, health outcomes, patient safety.

Establishment Year: 1976

Worldwide employees: 13,697

Geographic location: Købmagergade 7-9, DK-1150 Copenhagen K

Contact person: Peter Mortensen (Business development director)

Phone: **+45 70282991**

E-mail: info@sdk.sas.com

Website: http://www.sas.com/da_dk/home.html

6 Constructing a business model for a VGFH company

In a general sense, video game companies operate within one of four business models, either **premium**, **freemium/free to play**, **work for hire,** or **advertising**.

Premium consist of developing a product and then selling that product directly to either consumers or a range of businesses. This is the classical business model for most companies that work with production. If you work with this model within VGFH, you should make it clear to yourself whether you intend to sell your game directly to consumers or business to business. That is to say: are you trying to convince people that your game will help their health, or are you trying to convince other businesses that your game will help them achieve *their* goals. Examples of VGFH products suitable for this model might be healthy eating games that are marketed to parents to help them educate their children – targeting the consumer directly – while you might develop a physical training game that is sold to nursing homes as part of their offering to their clientele – targeting businesses. Either way, you are selling a copy of your product to someone, and they pay up front.

Freemium/free to play is based on the idea that people are more willing to pay for something once they've tried it. You essentially develop two different games – one that works and is fun, and one that works even better, is more fun and – crucially – *seems* more fun. The players can play the first one for free, and once it is proven to them that the game actually is fun, they can expand it with the full version. In practice, this model often splits up the full version in a series of micro-payments, essentially allowing players to incrementally buy the full game as their need arises. Examples of this model in VGFH could be mental training games, where you gain access to a select set of exercises and then buy access to further excercises as you complete the free ones. Another example might be an eyesight-focused game that lets you diagnose contrast sensitivity defects for free, and then offers a paid version where you can train contrast sensitivity. The point is to make something that is useful and fun, and imagining an even more useful and fun version as the revenue generating product.

Work for hire essentially means that you offer up your services to deliver a product that someone else then owns. You work with a client to uncover and describe a need the client has, then you develop and deliver a game that fills this need. Finally, you hand over the game and documentation and then you're on your merry way. Examples of this in VGFH might be working with a school district to develop healthy eating games that will be used throughout the district's schools, or constructing an eyesight training game to be used by army trainers. The upside of this model is that it is revenue-sure – you get paid what you agree to in the contract and that's it. The downside is that

you don't own the product, and it will likely generate little to no passive income for you.

Advertising, finally, consists of attracting a large enough potential or actual user base that someone would want to put their message in front of your users. They then pay you to advertise in your game. There are a number of advertising networks that specialize in geographic regions or specific platforms, making this a viable model especially in web-based or mobile gaming. VGFH furthermore provides the opportunity for allying with interested parties already working with health care to make games that more directly incorporate advertising. If you are making a game about healthy eating, for example, you might directly contact dietary supplement manufacturers, while an exercise game may attract advertisers from fitness centres or sports clubs. The main focus of this modl is how to integrate advertising in a way that is non-intrusive, but still catches the attention enough to make it worth the advertisers' while.

If you are interested in learning about these models in more detail, as well as advice on how to strategically position your company as a serious game company and how to secure funding, you can find this is the free publication The Business of Making Games, which is available from IDSU's website.[18]

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[18] http://idsu.dk/publication/the-business-of-making-games-3/

7 10 things to do before you enter into a new industry

What kind of research do you need? Is it the best strategy for your company to join in the health care industry? Will your venture become profitable in the future? There is plenty of questions to ask of your business to prepare you to enter into a new industry. Now, we are going to discuss some early steps for building a start-up, and how they apply to a research-heavy industry such as health care.

7.1 Ponder your industry

This is the first and important step for you enter into a new industry. There are many details you have to consider for your business. Seeking out counselors and speaking to industry veterans is a good idea when you start honing in on a specialty area. The internet will be an efficient tool for the early market research, as well, but you can probably not rely entirely on desk research. Through these useful methods, you can obtain the relevant industry's information regarding the industry market perspective, size, target users, etc. Another approach is approaching local business schools in your area to see if one of their marketing classes will take on your business as a test project. This could help you get valuable market research at little to no cost.

7.2 Competition evaluation

Undoubtedly, how large the proportion of competitors there are in the industry is always a factor, which is worth deep consideration. For companies, usually the main goal is creating and maximizing product revenue. Competition is a crucial element when determining revenue. Assessing the existing competitors in the industry is therefore necessary to do. Fagan Finder,[19] an easy but very useful research site, is a good place to start. Put the key words into the search box, you will be able to learn quickly. It could reveal alliances, networks, suppliers and customers. You will understand more regarding what your competition is doing after researching with this tool - allowing you to do it better.

7.3 Find a mentor or some useful partners

Finding a mentor is very powerful pathway to assist your business in any new industry. They will provide specific knowledge, insight, and strategies to grow your own business, and you also could learn from their mistakes to avoid some market risks. Or,

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[19] http://www.faganfinder.com/

if you are a new hand in the industry, then making a collaboration with some useful partners which have already done related efforts in the industry is an appropriate idea for starting a new field. Partners willing to work with you, are usually interested in sharing their experiences to you and offering more help.[20]

7.4 Attend the relevant trade conferences

A helpful trade conference or a show is a crucial tach in the successful business operation. You gain access to educational opportunities about the industry and you have the chance to learn the lay of the land. A conference can expose some new pathways for conducting your business and assist you in how to be more productive. Besides, attending a trade conference also could create the opportunity to encounter new vendors, suppliers and potential partners for starting your business. Furthermore, being in business should be rewarding and fun. Never underestimate that the power of a little fun mixed within the conference. All work without play will get old fast. You can add a layer of enjoyment to managing your career growth through mixing a social aspect in the industry conferences.[21]

7.5 The business plan

Writing a business plan is certainly helpful to any enterprise preparing their business for entering into a new industry. The value comes from the process of researching and thinking about your business in a systematic way. It will reduce the cost of launching a new business if you do commit to in-depth preparation. And the action of planning also helps you to think things through thoroughly, study and research if you are not sure of the facts and look at your ideas critically.[22] Finally, the business plan can be a way to present the business to potential partners and mentors.

7.6 Seeking advice

Seeking advice from your mentors or your friends can be a boon to an entrepreneur in a broad range of scenarios if you are starting up in an unfamiliar industry. Do not presume that you know the correct answers - there is always new knowledge. The most suitable pathway is talking to as many people in the industry as possible, asking lots of questions to your mentors or someone else, get to know the key players and

[20] http://www.inc.com/young-entrepreneur-council/13-pieces-of-advice-for-starting-up-in-a-new-industry.html

[21] http://www.mastercardbiz.com/blog/2013/06/19/5-reasons-you-should-attend-a-conference-in-your-field/

[22] http://www.entrepreneur.com/article/223732

connectors and immerse in the new knowledge. But first of all you have to be sure what you are looking for from the arrangement when seeking out advice. What can the advice help you clarify or accomplish? The most crucial step in the beginning is to determine which type of resource you need. Making a list of possible advisors is a good way to start. The optimized scenario is that you may find advisors with some qualities such as being a good listener, someone well connected, and someone with expertise in analysing the industry or marketing. After you select the qualities which you are looking for in an advisor, divide that list into wants and needs. The seeking range could be within the business community, academic community, your friends, etc.[23]

7.7 Reconsider and refine your concept of the industry

Reconsidering and refining your concept of the industry is key when you get a little further on in setting up your entry into a new field. A successful business always works with the details in improving the company's service and quality of products. Some small points in your conception of the industry could be the key factor which leads the enterprise to smooth operation and great development. For instance, a game company which is producing games relevant with improving people's vision could offer a particular service for their customers – sight test. It implies that the customers would know the effort of their sight by playing video games after some days. Or a moving company could reconsider and refine their business to specialize in transporting seniors and their beloved pets into nursing homes, providing such value-add services as packaging, house cleaning, room reassembly, estate sales, etc.

7.8 Get a grasp on marketing strategies

Before entering into a new industry, to build an accompanying marketing strategy is necessary. You need to know who will be your consumers clearly, because you don't have any time to waste on marketing to those who aren't. It is a big challenge to determine the target group for selling before entering into a new industry, since you will be dealing both with different target groups and most likely different distribution channels. The most efficient method is to interview and test potential clients in the initial stage of a company, in order to be able to build the relationship. Creating joint-venture marketing could make selling easier. Furthermore, another important method could be getting your name out into the market via some social media to be sure your potential consumers to familiarize your company with utilize SEO. The most important thing for a social media entry into a new industry is to understand how that industry

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[23] http://www.inc.com/guides/2010/08/10-things-to-do-before-you-start-your-start-up.html

uses social media. What channels are they using? How is the tone of the communication? How do they see people moving into their area of the web?

7.9 Do a little test-run

You can use surveys, polls and focus groups to gain insight into attitudes about your business idea. The goal is to get to know your customers by getting your product in front of them and listening to their impressions of it. What attracts them to buy? What causes them to tune out? The reasons people have for their consuming behavior are crucial for your business development in the near future. There are many people they like the products but don't buy. Hence, a little test-run can provide the relevant assist to company. And depending on the feedback of the test-run, the company will gain valuable insight into the challenges of operation. Then they have plenty time to improve or fix the issues before the real launch day.

7.10 Start searching for future talent

It is seems little early to do before the company is in real operation, but don't forget that your business is supposed to grow someday, and hopefully rapidly. Therefore, searching out the talents who might fit into your organization is in favor of your business. Don't forget to consider the advisors you seek out as potential future employees, investors or partners.[24]

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[24] http://www.inc.com/guides/2010/08/10-things-to-do-before-you-start-your-start-up.html

8 CONCLUSION

Moving into an applied games or serious games field is a big step. Where an entertainment game company is firmly rooted in the creative industries, working with applied games means moving into providing not entertainment or art, but solutions. That is not to say that you forget about fun, though. It means you enlist fun and art to deliver something else than the pure enjoyment of this, and this can be difficult.

As a game developer you have great understanding of what makes something fun. Through partnering with health care professionals, carefully choosing business models and doing effective, question-driven market research, you can chart out how to use fun to fuel the journey to solving problems and delivering solutions.

Hopefully, the data and advice in this report will help you take the step to improve not only your business, but hopefully the world.

We hope you have enjoyed this report.

For further information or any comments, please contact the Director of the Institute for Danish Game Development, Mikkel Lodahl, at milo@eadania.dk

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