Making Frogshark:
Participant observation of 'indie' game development cultures

Alexey Botkov

2015
Colab

1. ABSTRACT

The democratization of project 'greenlighting' and funding allocation over the last decade (Irwin, 2008) has given rise to an 'indie movement' in the burgeoning game development industry.

Within this ever changing 'indie game dev' culture, entrepreneurial strategy knowledge is often shared in the form of granular, specialized and ephemeral advice collected by a method of trial and error, disseminated through online game information hubs notorious for their 'noisiness' and lack of vetted content or cross-references.

This presentation brings together documentation from a Masters in Creative Technology thesis focusing on entrepreneurial strategies within the culture of the independent development of a game product.

Immersed in complete participation of independent game development within this 'indie game dev' culture I have engaged in a qualitative ethnographic study of this culture.

Starting initially by collating, analyzing and synthesizing the wealth of game studio start-up acumen from online resources – such as postmortems, this research employs a broad contextual canvassing and critical reflection model to interpret and formalize existing theories around independent game development.

Using elements of a produced game as the centerpiece, this presentation will showcase a collection of reflections gathered through production of artifacts, informal interviews and general culture observations and will discuss the strategies employed to develop them.

2. CONTENTS

3. LIST OF FIGURES

4. ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed:_____

Alexey Botkov

5. ACKNOWLEDGEMENTS

6. LITERATURE REVIEW

This section talks about knowledge acquisition attitudes as a "warning label" in regards to approaching game development sources. Categories of sources from which knowledge has been drawn throughout development of Frogshark and this research are described, with primary members and their functions relevant to acquisition of literature is presented where a more granular review is relevant.

Common sources for business and product design advice in the ever changing landscape of contemporary game development usually comes from non-academic sources such as online community forums. Although these sources are useful at best, they are damaging at worst. The value this research project brings is a discussion on ways to navigate such sources in order to identify and distill useful knowledge.

Although academic sources are used occasionally throughout the project, due to the scope of this project, and my industry background, this project focuses on the analysis of these non-academic sources using a commercial game project as a case study and hence this literature review reads as an introduction to the data set, which is in this case, the literature found in these common sources.

Some experience in the industry helps somewhat to filter out the "waffle" in articles from online blogs and "read between the lines" during conference presentations where the presenter may omit information for various reasons. Benjamin Bratton offers criticism on intellectual viability and rhetoric of *TED*[1] which exposes fallacies in mechanisms of bite-sized knowledge dispersion I find relevant to the broader topic of game development acumen:

> *"…we need to raise the level of general understanding to the level of complexity of the systems in which we are embedded and which are embedded in us. This is not about "personal stories of inspiration," it's about the difficult and uncertain work of de-mystification and re-conceptualization…"*
> *(Bratton, 2013)*

Startup entrepreneurs with little or no practical experience of the reality of game development required to navigate this material at the start of their career are faced with a dense wall of data to analyze and interpret. These sources are discussed below.

6.1. ON USED SOURCES

Game development knowledge is very young compared to other art forms. What distinguishes this knowledge however, is that it was born into the internet age where it is often mass distributed, put to test and critiqued in large volumes over short periods of time by a large public community. While the same applies for all other art forms post-internet, game development doesn't have centuries-old body of knowledge to rely on that would constitute an established foundation of the art. Many resources, although recent in general research terms, are outdated in indie game dev terms (Michael, 2003) due to the culture's rapid growth and transformation.

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[1] *TED* (*Technology, Entertainment, Design*) is a global set of non-profit conferences.

Technology and processing power moving forward brought us new communication and distribution paradigms, payment methods, web streaming and cloud computing, influencing markets and industries, game development included. A lot of knowledge becomes less relevant and inapplicable in the process along with this shift.

The rapidly fluctuating forces that affect the games industry aren't immediately apparent, making new knowledge and conclusions harder to understand and analyze. It's important to understand the landscape of where and how such knowledge gets presented online and be able to navigate the platforms where it is hosted with due diligence.

Navigating this knowledge requires broader digital literacy and understanding of the greater landscape of online communications, technologies and culture. The open nature of the internet allows anyone with a connection to build a blog or a website for free. It can be difficult to distinguish reputable sources from those that are not.

6.2. THE ONLINE COLLECTIVE

Social media is comprised of people that join one service or another. Every such service, like a country, has its own demographics, set of rules, culture and mode of information exchange. These things influence the ways and kinds of knowledge exchanged. An important factor that distinguishes this group from curated sources is that content is unfiltered most of the time and sometimes anonymous. It can be hard or impossible to validate the experience and truthfulness of the authors and information they present.

Jaron Lanier critiques the rise of what he calls the "new online collectivism" in his essay Digital Maoism (Lanier, 2006) arguing that the collective hive mind is much less intelligent than we give it credit for:

> *"What we are witnessing today is the alarming rise of the fallacy of the infallible collective."*

He views the rapid expansion of phenomenon like *Wikipedia* and open source software as lacking human individuality through dilution of intelligent opinion and knowledge through a process that favors aggregation over content creation.

> *"It's safer to be the aggregator of the collective. You get to include all sorts of material without committing to anything. You can be superficially interesting without having to worry about the possibility of being wrong."*

This critique sheds light on certain aspects of online communities, game development not excluded. As new information trickles down from the likes of GDC[2] talks, successful game post mortems and other game development knowledge that gets put on a pedestal, online communities aggregate this information and pass it around in a giant "echo chamber" of social media often without context or due discourse.

Lanier further reaffirms that:

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[2] GDC (Game Developers Conference) is the biggest game developer conference in the world held in San Fransisco. ("About GDC," 2015).

> *"Without an independent press, composed of heroic voices, the collective becomes stupid and unreliable…"*

There is truth to what he says comparing well-articulated "timeless" writing that requires intelligent paid authors with blogging being a way to ponder to the crowd and how important it is to have reputable voices.

> *"There certainly have been plenty of bad reporters, self-deluded academic scientists, incompetent bureaucrats, and so on. Can the hive mind help keep them in check? The answer provided by experiments in the pre-Internet world is "yes," but only provided some signal processing is placed in the loop."*

In response to Jaron's essay, Cory Doctorow wrote:

> *"…if you want to really navigate the truth via Wikipedia, you have to dig into those "history" and "discuss" pages hanging off of every entry. That's where the real action is, the tidily organized palimpsest of the flamewar that lurks beneath any definition of "truth".*
>
> *The Britannica tells you what dead white men agreed upon, Wikipedia tells you what live Internet users are fighting over.*
>
> *The Britannica truth is an illusion, anyway. There's more than one approach to any issue, and being able to see multiple versions of them, organized with argument and counter-argument, will do a better job of equipping you to figure out which truth suits you best.*
>
> *True, reading Wikipedia is a media literacy exercise. You need to acquire new skill-sets to parse out the palimpsest. That's what makes is genuinely novel."* (Doctorow, 2006)

For someone entering the constantly reconfiguring space of video game development and its markets, Doctorow describes an important skill necessary to successfully navigate the well of aggregated knowledge. The ability to look at the landscape of conflicting sources and draw conclusions over blind acceptance of what is presented as truth.

Reddit

Reddit has an enormous user base. Its compartmentalized nature of "sub-reddits", essentially separate dedicated message boards, allow people to get together around certain topics. A reddit user however is able to post to and comment on topics in any board across the site globally, unless the board is made private.

/r/gamedev is the most prominent board dedicated to game development (based on subscriber count). It features a weekly set of initiatives – *Feedback Friday*, *Screenshot Saturday*, *Soundtrack Sunday* and *Marketing Monday*. These threads welcome developers to showcase appropriate content to engage with the community for critique and feedback. The periodic nature of these threads has a lot of developers returning with updates and new content, as a way to gather feedback and promote.

The board has amateur and professional developers, ranging in experience, sharing original content and aggregate links to external sources. The value comes from communication with other people

and conversations around the shared content rather than content itself, which often gets shared across multiple other networks.

Twitter

Twitter provides an interactive two-way tool that serve as a conduits of knowledge. Its format creates a fleeting ephemeral stream of data exchange. *Twitter* is not a prudent platform for the storage of knowledge, and subsequent searching of that knowledge. It can be useful for announcements about your product but data on the stream is soon and often lost within the noise unless it is "picked up" by a community and discussed on another platform.

Facebook groups

The Facebook demographic is broad but due to the controlled nature of the user's stream, their Facebook timeline and user interface is often very noisy and although Facebook also employs algorithms that alters the users stream based on collected metrics from the user, and posts promoted by Facebook business customers. Because of these factors the platform can be used in a similar way to Twitter but posts are nestled within a stream of other 'distractions'.

Slack

Slack has the capacity to be a controlled public discussion platform. Due to its recent rise in popularity in the NZ (New Zealand) Gamedev scene an analysis of it is omitted from this report.

6.3. ANALYTICS

One of the roadblocks in demystifying the marketplace in games is the hidden nature of raw data. Stores and platforms don't offer useable statistics that would help market analysis, understandably, big money and security are involved.

There are many forms of analytics infrastructures currently active and available to the consumer and business owner. Some games include this as a feature of the game often used to, not just improve on future titles, but also iterate on the product that has provided in the data in the first place through small software updates or "patches". Some titles have even used that data as an overt feature of the gameplay experience such as the Choices board at the end of a chapter in *The Walking Dead*.

A full analysis of all of the current services are beyond the scope of this project but, as some of them are mentioned in other places of this document, here one in particular is discussed which has been created to specifically collect game user trend data.

Steam Spy

Steam Spy is a tool that scrapes data from public profiles of gamers, analysing their game libraries to make some relatively accurate sense of sale statistics. The data isn't 100% accurate as described by the creators (Galyonkin, 2015a), but is the closest approximation that can reveal broader market trends.

Sergey Galyonkin, marketing specialist and creator of *Steam Spy*, is also responsible for a number of prominent blog posts that illustrate major topics of concern in PC gaming industry based on data scraped using the tool.

He uses the data to illustrate trends in a comprehensive manner, like the playtime behaviour correlation and what to consider when pricing a game on steam (Galyonkin, 2015b); what's causing

the mass panic "indiepocalypse" and that it's a natural market cycle afforded by new lows in barriers of entry (Galyonkin, 2015c). Though it's unclear how these relationships relate to console or mobile market, given a limited data set that focuses on PC games, it is nevertheless important and brings some partial clarity to the unknowns of the external forces at play. *Steam Spy* gives everyone the tools to input their own parameters and correlate data that is useful to them, removing even further layers of obstruction when someone else collates such data for the masses.

6.4. ONLINE JOURNALISM

As Lanier states, quality writing done by quality writers costs money (Lanier, 2006). It is tacit knowledge that, for many sites, advertising is the primary source of revenue. Pages generate ad revenue that funds further content to be published that generates more ad impressions, and the cycle continues. Ideally for new developers looking to learn the quality of content would increase for ads to pay for said content, however as seen by the likes of *Buzzfeed* and click-bait aggregators, volume replaces quality. As long as a large volume of content is consistently transmitted, and enough people see it, ads generate impressions based on sheer quantity instead of quality.

And while not all websites favour quantity over quality, it's important to understand the ad-based revenue model in a toolbox of online navigation skills.

Medium.com
A relatively new macro-blogging service that started in 2012 by a co-founder of *twitter*. Its authoritarian name, clean interface and professional design is easy to interpret as a news or a journalistic outlet. Journalism does happen on the site, even paid for journalism, but so does everything else, since anyone can write and publish an article on any topic. The website as a whole is more like a social media sharing platform than a journalistic outlet, except catered towards long-form conversation in contrast to *twitter*. The above mention of Steam Spy's articles is a good example. Because it's a personified space where authors are at the face of their content, it distinguishes it from a content dump, yet it can still fall to aggregation behaviour described by Jaron Lanier.

gamastura.com & killscreendaily.com
These websites have some very good articles but it is often difficult for inexperienced developers to tell the difference between a good article and one that is simply well written.

Comments
Sometimes responses to articles and comments on presentations can yield some very useful learning. However it is very difficult to find and should be read with the consideration of how it relates to more respected theories. Sometimes these comments can also be will written but also have no content of significant of value. Certain more popular communities such as *YouTube* have a very broad audience increasing the "noisiness" and difficulty in finding useful information.

Developer Conference Recordings
Conference recording repositories such as the *GDC Vault* are often premium membership only access repositories of talks given at the conferences over the years. The *GDC Vault* is regarded as the Holy Grail of game development knowledge coming from the "best and brightest" of the industry.

It should be noted that advice of this kind dates very quickly. It is also very difficult to catalogue information in audio and video unless the presentation is transcribed.

6.5. SHARED EXPERIENCES

As they are discussed in detail with respect to my experiences, a full list of networking events, conferences, trade shows and meetups is not listed here. However, it should be noted that these industry and consumer events are all subject to a level of corporate pressure. All known forces and history about the presenter, their background and the information should be considered when interpreting information shared at these events as often "the story" can be skewed due to brand responsibilities and sometimes even non-disclosure agreements. More information on this topic is discussed in Public Playtesting on page 19.

6.6. PREVIOUS PROFESSIONAL EXPERIENCE

This research project employs heuristics and ethnography to treat my own professional experience as a data set for analysis.

6.7. OTHER SOURCES

A full review of all literature from more collegial sources such as *gamedev.world* and the *gamestudies.org* journal is beyond the scope of this research project. Academic business and management literature too was not forcefully shoehorned in to the practice, most of this acumen is gained from the online sources discussed above, however some knowledge was gained form generic game design theory literature such as *Rules of Play* (Salen & Zimmerman, 2003) that have informed my practice and hence this research project.

7. PROJECT REPORT & CRITIQUE OF ARTIFACTS

This section establishes research aims and showcases a collection of reflections gathered through production of artifacts and general culture observations and discusses strategies employed to develop them.

Throughout the development process, artifacts have been created in form of the game (*Swordy*), the business (*Frogshark*) and all of its internal processes, a devblog (*frogshark.com*), a game website (*swordygame.com*), variety of social accounts (*twitter*, *youtube*) and other documented media (photos/videos), podcast, social media posts and physical merchandise. Figure 1. Assets & Artifacts Map describes assets created that count towards the cumulative identity of *Frogshark* & *Swordy* entities which will be discussed in this section.

7.1. RESEARCH METHODOLOGY

To assist small teams of entrepreneurs in game development using online, workshop and conference knowledge to inform practices, this project posits the research question:

> How valuable is the existing common knowledge on how to build a successful 'indie' business in the game development industry?

This question addresses the "noisy" nature of the current developer knowledge database and proposes this exegesis as a sort of 'roadmap' or 'guide' to interpreting this information.

This research is a qualitative ethnographic review using participant observer techniques in complete participation – I was already inducted in to the indie movement culture before the start of this research during the early stages of the development of Frogshark. It employs an ethnographic approach to development defined as the entire scope of making in relation to the Frogshark identity, including but not limited to prototyping, production, business, marketing, legal, asset management, research, promotion, documentation, reflection, process design and testing.
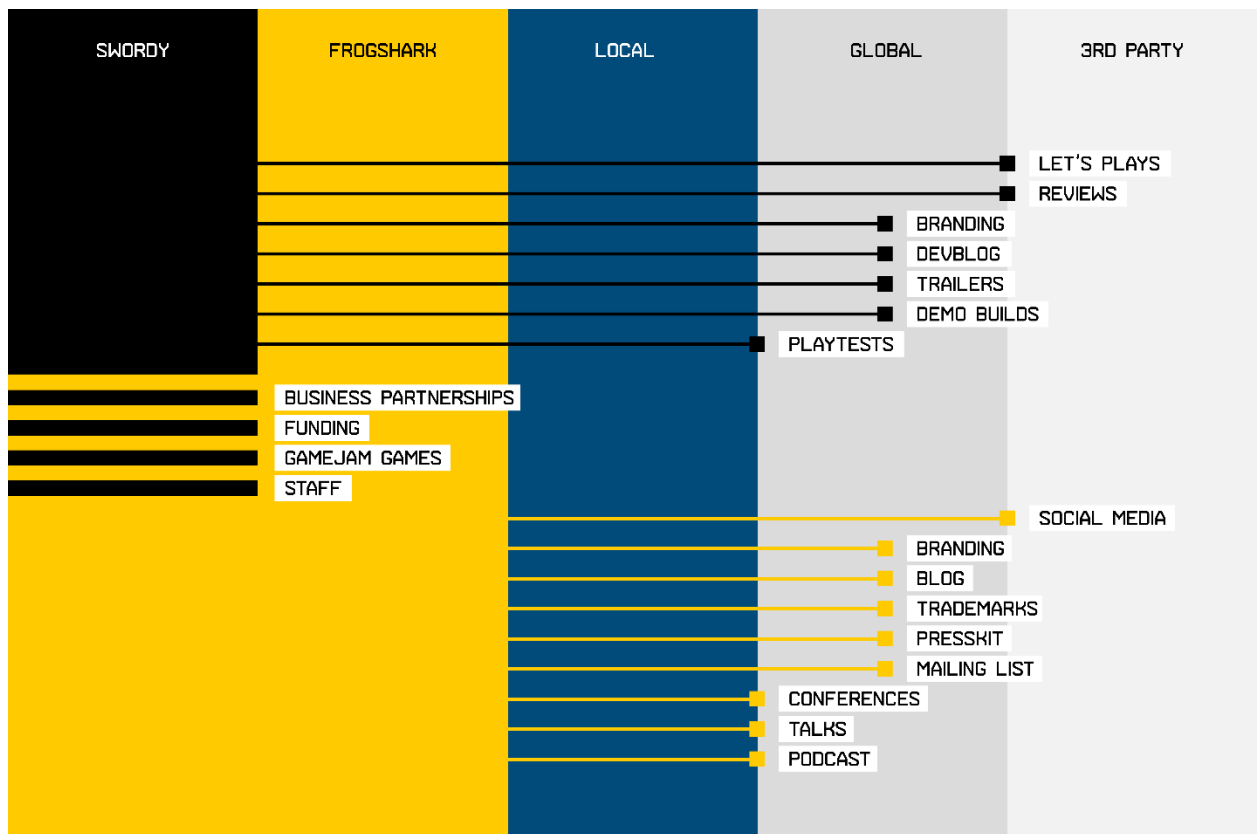
Figure 1. Assets & Artifacts Map

7.2. PRODUCT DEVELOPMENT

This section outlines the methods to finding knowledge in the area of game development using *Swordy*, a local multiplayer physics brawler game, as a catalyst for knowledge discovery.

PRODUCTION & HUMAN RESOURCES

Each member of the team had three to four years of industry experience dealing with large scale production in game and software development. This developed common sense that was used as the "laser" to instinctively cut through unclear collected knowledge.

The team member's existing knowledge also allowed them to fill every major role in game development including but not limited to business, programming, design, art, sound, marketing and community management.

Frogshark has distinct roles, with wide overlaps:

	History	Past Roles	Commitment	Current Roles
Alexey	3+ years at Gameloft NZ.	3D & Tech Art, Graphic design	Full time	Sound, Art, CM, PR
Hamish	4+ years in UX & software development.	Programmer	Full time	Code, Business, CM
Danny	3+ years at Gameloft NZ.	3D & Tech Art, Graphic design	Full time	Art, Animation, Game Design
Gordon	6+ years of Unity3d development.	Programmer	Contractor	Code, optimization

Figure 2. Frogshark team role breakdown, past & present

DESIGNING AROUND THE TOY

Swordy is designed around a single mechanic. James Marsden extended Jesse Schell's definition of a "toy" as:

> *"an object that is fun to play with" (Schell, 2008, p. 26)*

to describe:

> *"setting up an action and reaction that makes the player feel powerful, regardless of any rules or challenge being imposed" (Marsden, 2013).*

In *Swordy* the toy is "the harnessing of centrifugal force with an analogue control".

A concept of sword fighting was turned from a binary composition of actions (e.g. press X to strike) into a direct relationship in analogue control between the player's ability to interface with the game console through the controller (thumb sticks) and the player character (sword aim/swing).

DESIGN - ITERATIVE PROCESS

In making *Frogshark* and its assets, iterative design methodology wasn't exclusive to software production, but included other aspects of creation such as brand building, professional networking and customer relations.

Eric Zimmerman's iteration loop model for iterative design methodology *Design > Analyze > Test* (Zimmerman, 2003) can be misinterpreted as overly simplified. Zimmerman does address the importance of:

> *"larger conceptual, technical, and design questions that drive the project as a whole"*

however, iterative design is not as linear and cumulative as his theory suggests and I have chosen to expand on this theory to provide a more adaptive and reactionary model (*Figure 3*). Back-tracking, discarding outcomes, misinterpretation of analysis, mistakes, the shifting nature of design goals and external forces are important parts of each iteration loop.

External forces such as but not limited to economic stability, political situation, market saturation, natural disasters, all affect the way designers shift their goals and the way their audience perceive

and react to certain MDA "Aesthetics" of design (Hunicke, LeBlanc, & Zubek, 2004). The only cumulative constant that persists is linear time that generates history and context of "the process" in its entirety which serves an important reference point among many that provokes iteration.

This making process is a long term commitment, and it's natural for people to change over long periods of time, shift their beliefs and desires and it is important to account for those changes and understand the way they affect certain processes and context in which the making is done.
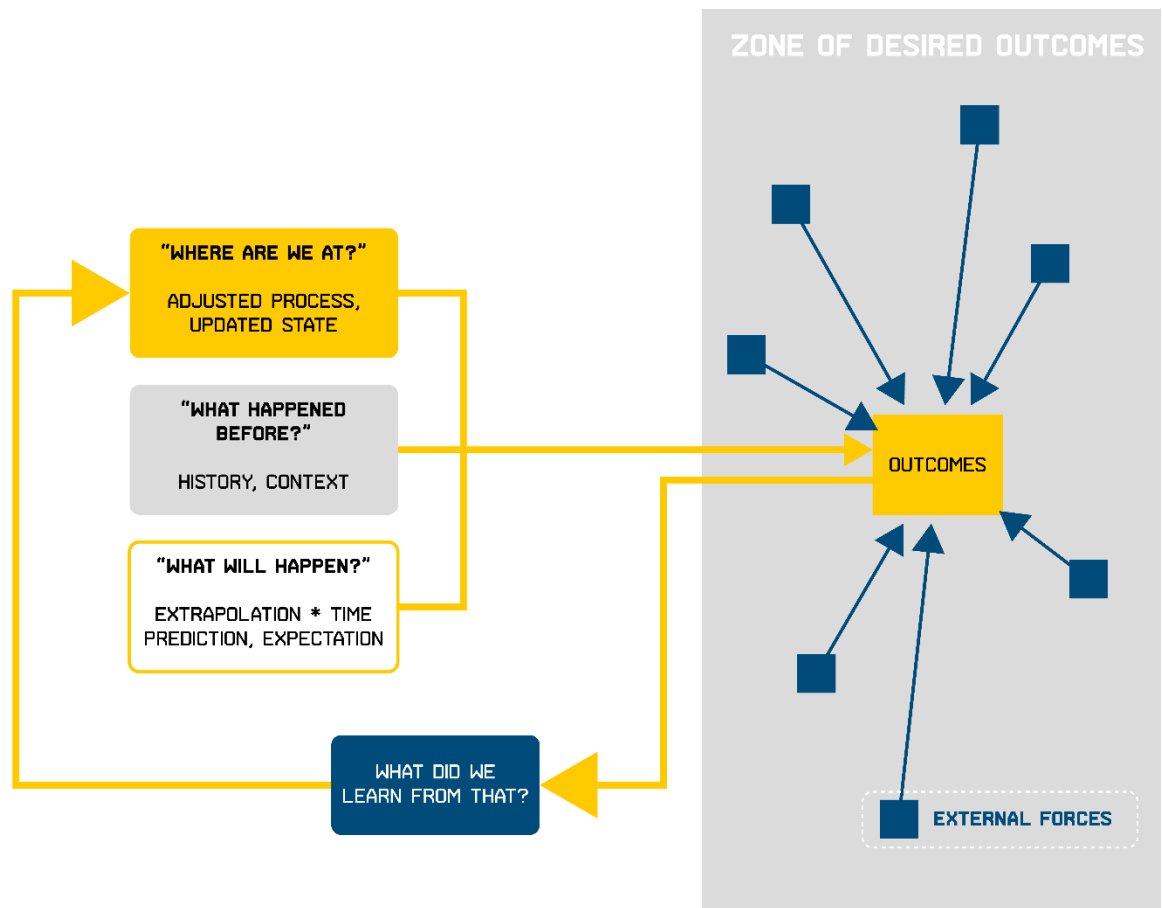
Figure 3. Iterative approach to broader process design

Swordy started from Danny's top-down 2D sword fighting prototype (*Figure 4*) that used binary controls to execute 3 actions: strike, force strike and parry. The game mimicked the nullification mechanics of "rock, paper, scissors". The first iteration of *Swordy* (*Figure 5*) was a departure from 2D into 3D due to choice of game engine and technology the team was most versed in at the time.

Features that complemented the "toy" mechanic were iterated on as the core development loop. Instead of content such as levels and graphics, development was focused on game loops, predictive systems for impacts, robustness of analogue response and other systems that enhanced the core mechanic.

Applying this method to gameplay design was described by Salen and Zimmerman:

> "Emphasizing playtesting and prototyping, iterative design is a method in which design decisions are made based on the experience of playing a game while it is in development." (Salen & Zimmerman, 2003, Chapter 2).

As they put it,

"it is not possible to fully anticipate play in advance",

which was relevant to development of the core mechanic of *Swordy*. Playtesting is discussed in more detail in Public Playtesting section.

When the original 2D prototype was being discussed in terms of timeframes and scope of the game, the scale and weight of the project the team was then about to carry could not be anticipated. The difference between scraping together a hobby game and a commercial production is overwhelming in the amount of responsibility and consequence it carries.
There is a certain threshold beyond which not only the developers are committed to the project, but the local and extended community, business and partners with legal liabilities on top. This puts tremendous pressure of certain expectations and integrity on the makers and inevitably affects the creation process.

A project that was thought to be a three months hobby game, spiralled into a commercial production with far more moving parts than anticipated.

There is also tension caused by the shifting nature of the industry and gamer culture that sways developers' confidence at times and calls for reactionary changes which sometimes are in conflict with the team's principles, such as monetization models, user acquisition, PR practices etc.

When a game gains traction and entertains a potential of success, the added expectations and pressure is an added point of friction with a local and extended communities. The associated stress can compound based on commercial outcomes.

Figure 4. "Swordy" 2D prototype, Danny Lawrie (2009).

Figure 5. "Swordy" first playable by Frogshark (2014)

7.3. PLAYTESTING

This section talks about playtesting methods and reflects on Swordy playtests undergone during development.

Where *Swordy* is concerned, there are two stages to this method: internal developer playtests and public playtests.

CLOSED PLAYTESTING

This is the first foray into finding the "fun", described by Ian Bogost as a shorthand for the feeling of operating a system, working within it and interacting with its logic (Bogost, 2015). In doing so developers project a map of potential experiences player facing "aesthetics" as defined by MDA approach (Hunicke et al., 2004).

The team's cumulative work experience allows fast tracking of certain decision making based on already established knowledge eliminating the need to playtest everything.

Development teams have a higher tolerance to gameplay issues and lenience towards own creations. Certain aspects of developers' own designs are easily overlooked to focus and distil others, often to the detriment of those focal points. Public playtesting is a way to widen the tunnel vision and break out of the subjective design cycle.

PUBLIC PLAYTESTING

Valve's[3] approach to playtesting describes methodologies and merits of different types of data derived from variety of such approaches. *Frogshark* uses primarily direct observation as described in *Valve's* presentation (Ambinder, 2009, p. 13).

The key difference between *Frogshark's* and *Valve's* attitude towards direct observation is what they call "artificial gameplay sessions" (Ambinder, 2009, p. 27). *Swordy* was tested in a showcase environment where participants engaged voluntarily, minimizing the "tester" self-awareness bias an organized play session would impose. The difference becomes clear when asking specific people to test the game compared to a diverse stream of seemingly random strangers forming their own play sessions. In the latter, developers are able to observe play as it occurs, despite the less than ideal environment, while the former carries biases that affects the participants' play that are associated with being explicitly observed and the self-imposed expectations to be useful to the developer.

Another method occasionally utilized as described by *Valve* is "verbal reports" (Ambinder, 2009, p. 18). Be it during or after the play session, what the players say correlated with observation of their play can reveal more meaningful insights than a strictly verbal feedback because often what the player says alone is not reliable foundation for design decision making.

Swordy utilizes minimal tracking within the game that tracks match durations, kill counts, favoured weapons and similar utilitarian features. Such data is more useful for debugging however than design decision making, at least when the dataset is limited at the early stages of development.

Playtesting at Local Game Dev Meetups

Gamers have grown to expect a certain quality and visual fidelity to games as consumer products so much that presenting an unfinished and barely functioning software will undeniably affect the first impressions, reception and response. Hence it's good to reach out to a community of fellow developers that are more lenient and willing to ignore lack of polish and give criticism based on their experience with the systems.

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[3] Valve is a respected and innovative game company who are responsible for the development of the *Steam* online distribution platform.

Direct observation has been instrumental for *Frogshark* since *Swordy's* first public appearance where the gameplay potential of the *Swordy* "toy" became first apparent.

Playtesting at local meetups yields not just useful feedback, but allows the community get involved in the development process as a spectator at the least, grants recognition in the community and offers potential partnerships and affiliations with other developers.

There comes a point however when novelty wears off and the persistence in presence fatigues the hype and engagement drops off. An influx of fresh players or a major new development helps refuel the interest at this point.

Playtesting at Digital Nationz 2014

Digitalnationz was a large scale tech event in Auckland.

The age range among attendees granted insights into an audience (8-12 year old demographic) that hasn't been play-tested with before. Their parents also offered some feedback as they watched their kids play. Valuable insights were gained in form of perception of violence in *Swordy*, which served an important pointer for ESRB & PEGI rating approximations later on.

Playtesting at Armageddon 2014

Armageddon is a mixed media pop culture event that combines comic books, anime, cosplay, videogames, fantasy and sci-fi cinema. Over the years observing *Armageddon* as a visitor and then comparing that to one of an exhibitor, it's clear that the event is too focused on merchandise and trinket acquisition.

Bad booth placement contributed the most to low engagement and the kind of foot traffic exposure because of a separate pavilion that was predominantly focused on merchandise sales, separate from dedicated videogames areas.

Playtesting at PAX Aus 2014

PAX Aus (in Melbourne) was the "debut" showcase for *Swordy*. First time exhibiting at this scale amplified all previous play testing experiences, offering more validation, confidence and further refined direction for the game. The primary point of difference was that the player base consisted of a large volume of consumers and not developers. A more gender-diverse player base was also observed engaging with Swordy than at any other event.

Booth placement contributed a huge amount to volume of foot traffic. Swordy setup had two large screens, drawing a crowd at an intersection of major walkways through the show floor.

This is where *Swordy's* first fans outside local NZ community were born. The people that kept coming back to play more and brought their friends multiple times and engaged on social media afterwards.

As the only gaming even of this scale in Australia with 40.000+ attendees, the show captures a wider Australian market, drawing people from all over the country (Bender, 2013). It also attracts large publishers, advertisers, press, streamers and *youtube* personalities in search of content for their businesses. *Frogshark* developers were hosted on a *Twitch* stream, gave interviews, talked to publishers, press writers and bloggers, networked with developers that flew in from the region. All these things condensed in a single place in a span of three days is an opportunity that simply doesn't exist in New Zealand at such scale.

Playtesting at PAX East

Booth placement was less than ideal which hindered discoverability, however the floor layout allowed for the que to another AAA[4] title behind the *Swordy* stand to be exploited to get a constant flow of players.

A new play experience (a new *"arena"*) was tested which was put together in a rush before the event. The problems that became apparent with this *arena* revealed its own weaknesses and these lessons helped map out issues that can be anticipated for all future game levels and systems.

American PAX audience appeared more passive compared to Australian PAX. Less enthusiastic and not as involved as far as verbal feedback, though similarly a few vocal people come back with their friends multiple times.

Playtesting at EGX London, PAX Seattle, Bit Bash Chicago

The development team did not attend these events and *Swordy* was shown remotely which made it impossible to observe people interact with the game. The only feedback available was through social media posts, which isn't useful towards design decision making without observation of play.

7.4. BRAND IDENTITY & COMMUNICATION DESIGN

This section establishes principles and strategies by which Frogshark operates its brand and reflects on the artifacts created in relation to game developer identity.

Frogshark, as a modern day startup, began with a small group of passionate friends declaring their love for making games with a placeholder company name.

Frogshark as a business came out of necessity to enter commercial space where an incorporated entity was required, initially to take *Swordy* to *PAX* Australia. A marketing campaign leading up to *PAX* set the brand into motion.

Frogshark and all of its assets are made by the 3 co-founders. Inevitably the work done carries its creators' personalities embedded within. The developers embrace this design philosophy and instead of hiding behind the *Frogshark* brand, the developers stand in front of it as individuals.

Simon Sinek's "Why, how, what" marketing model proposes that people buy into a narrative than just buy products (Sinek, 2009). *Frogshark* is attempting to share the story of its makers in attempt to minimize the empathy gap that the internet carries as a medium. *Frogshark* aspires to be known for the people and ideas it represents rather than a "game studio" brand, to be more relatable as human beings rather than a faceless company. To achieve that, a few strategies are employed which span multiple communication channels including, but not limited to the ones discussed in the Literature Review section.

Websites

Frogshark operates 2 separate web entities with individual distinct functions:

1. Frogshark blog (frogshark.com)

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[4] "AAA", or "triple-A", is a relatively undefinable term that refers to high production cost game products sold in the mainstream commercial market.

2. Swordy website (swordygame.com)

The *Frogshark* blog (frogshark.com) is a brand focused hub that aggregates content produced and relevant to Frogshark that aren't limited to Swordy specifically, such as posts about events, photo reports, updates on development and podcast episodes, conferences, post-mortems and technical developer updates. This documentation feeds into "sell the why" method of brand marketing and gradually builds a transmedia narrative surrounding *Swordy* and *Frogshark*.

The *Swordy* website is a separate page made with the purpose of being the storefront for the game and a destination for searches done outside the platforms *Swordy* is going to be on sale. It's a way to customize the experience and presentation beyond what an existing vendor (such as Steam or the Xbox store) would allow, presenting exclusively *Frogshark's* content that would otherwise be filled with other games people could spend their money on instead.

Podcast

The *Frogshark Podcast* began with 3 goals in mind:

1. A way to contribute to and bring local game development scene closer together, document and promote local initiatives and individuals.
2. Carry *Frogshark's* brand forward and over across video and podcasting space, increasing presence and value.
3. Get better at vlogging[5] and on camera presence.

Initially the podcast was focused on covering NZ game related events, but wasn't gaining much viewership, so was redirected to focus towards developers and conversations surrounding games and the context in which they are made. The episodes produced with new direction gained more views (based off internal youtube analytics that's not within the scope of this section to discuss) and positive verbal feedback from members of the Auckland game development community.

This project is a long term investment. While production costs per episode don't justify the immediately apparent returns such as views, subscribers and shares, the intangible value of this medium shows its worth in ways it slowly moving towards the original three goals of this initiative.

Logo design & graphics

Figure 6. Frogshark logo. 2014

The "Frogshark" name originates from a sound of a frog ribbit together with the two-note tune from movie Jaws, an inside joke.

The main strategy for choosing the kind of name was a simple question: is it easily searchable? Any common dictionary word would be lost among search results. A compound made-up word was an easy way to keep it from competing with common words and easy to pronounce and remember.

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[5] "Vlogging" is periodic or episodic blogging in video form using popular video hosting services such as youtube.com or twitch.com.

It took few iterations on the graphics before a "Paw & Fin" pictograph (Figure 6) was settled on. The main strategy was to use simple recognizable shapes with no gradients that look consistent in black and white as well as color on a screen and in print. The pictograph emphasizes the contrast between a circle and a triangle as visual shorthand for the amphibians and to aid memorability of "frog" and "shark".

Merchandise

Past *PAX* attendees that Frogshark consulted, advised that the event has a collectible and trading culture for game pins. This was an opportunity to spread the word about Swordy during the show and let people keep a memorable token.

After a review of what other developers have done, options being a cheap tin stamp or the expensive acrylic enameled metal, the Frogshark team decided to create designs that would be unique to Swordy, driven by two factors:

1. Cost
2. Marketing impact

To save costs, Frogshark settled on a DIY[6] solution, using homebrew assembly.

For marketing impact, the design was driven by desire to have the merchandise represent the kind of bold, handmade, tactile and craftsmanship qualities the team wanted Swordy to inspire. This drove the design towards laser cutting bamboo sheets with a "Skull Crown" design, seen in Figure 7.

The "Skull Crown" design was initially an in-game icon representing "Deathmatch" that mirrored an in-game feature where a character gets a crown for collecting the most gold. The design made its way to the pins and team shirts, becoming part of Swordy identity.

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[6] "DIY": Do It Yourself.

Figure 7. Swordy PAX merchandise: pins, controls card, team shirts

To further align with the marketing impact goals, each pin was stamped with *Frogshark twitter* username and *Swordy* website so that people know where they got it from and where to look for the game after PAX was over.

The giveaway strategy initially was to gift the pins only to people who played a round of Swordy because a limited run of 1500 was made, making day one a frugal endeavor. The word spread making the pins well sought after on day two. Majority of bulk was given away because the tactic was adapted to giving them out to passersby's and idle crowds, attracting more people to the game and making day two the busiest. Day three again required a more frugal approach, and the pins ran out by the end of the day.

Trailers

Market research proposes that games that have trailers but no demos do financially better than those with demos (Schell, 2013). *Swordy* doesn't have a demo.

A checklist presented by Emmy Jonassen offers a good combination of common sense and youtube sensibilities that *Frogshark* relied on for its trailers (Jonassen, 2013).

Swordy trailers were constructed from scratch, using *Frogshark's* in-house produced music and footage that sometimes relied on custom in-game tools, captured specifically for the trailers. This approach was more time intensive, but allowed the game feel to be communicated through the piece of marketing. Figure 8. Swordy Xbox Release trailer audience retention analytics and Figure 9. Swordy PAX trailer audience retention analytics show the retention rates well over 50% for both trailers, graphing out where on average people stop watching. Emmy Jonassen's proposed trailer structure is sound, except for "call to action", which being at the end of the video reaches a much lower audience, given a decent portion of the watchers drop out before the end. She is however,

right about the first 3-5 seconds being most important to grab attention, as clearly reflected in the analytics.

Embedded media gets more attention on social media, based on Frogshark's Facebook and Twitter analytics. Updates with videos and images in form of screenshots or photos get read, shared and favoured more that plain text updates on timeline based social media platforms mentioned above.

Mailing list

Starting with *Digitalnationz*, *Frogshark* started a mailing list, collecting email addresses of people who played *Swordy*. The strategy is that if they liked the experience and offered their emails, they are potential future customers. When *Swordy* releases, there will be and established user base that can be target directly with a call to action to purchase *Swordy*. No emails have been sent to this group at the time of writing, so it's not possible to tell the usefulness of this approach in relation to Swordy. There is however data, that shows a relatively high rate of open emails using this marketing method (MailChimp, 2016).

Presskit

Presskit is an important tool that enables third parties to do *Frogshark's* marketing. Most articles that were written about *Swordy to date* have been largely copy and pasted from the presskit mixed in with writer's opinion.

Frogshark uses Vlambeer's presskit. It helps package all the relevant information and media the press needs in easily accessible way (LeRay, 2015; Rose, 2013; Zecher, 2015).

Game jams[7]

Throughout 2015, *Frogshark* created two games, *Whalebus* (*Figure 10*) and *Spacecream Freighters* (*Figure 11*). Both are local multiplayer party games, which further refine the team's understanding of the genre and perpetuates the *Frogshark* brand in relation to the games the studio makes.

Game jams are an opportunity for cross promotion. Releasing game jam games for free that have embedded marketing material for *Frogshark's* paid games is another avenue to drive sales.

Being on a single project for too long is fatiguing and sometimes it is necessary to do other things in order to rejuvenate enthusiasm and motivation. *Frogshark* developers participate in some game jams as part of such practice. It's a way to express ideas that don't necessarily align with the main project, while still staying within the medium and participating in the game making community.

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[7] Game jam is type of event where participants create small games commonly from scratch in a short period of time.

Figure 8. Swordy Xbox Release trailer audience retention analytics

Frogshark ›

SWORDY PAX AUS 2014 Announcement
Created: 24 Aug 2014 • Duration: 0:46 • Privacy setting: Public • Lifetime views: 17,146
VIDEO

This month (1 Sep 2015 – 28 Sep 2015)

AVERAGE VIEW DURATION	AVERAGE PERCENTAGE VIEWED
0:33	73%

Absolute audience retention   Relative audience retention
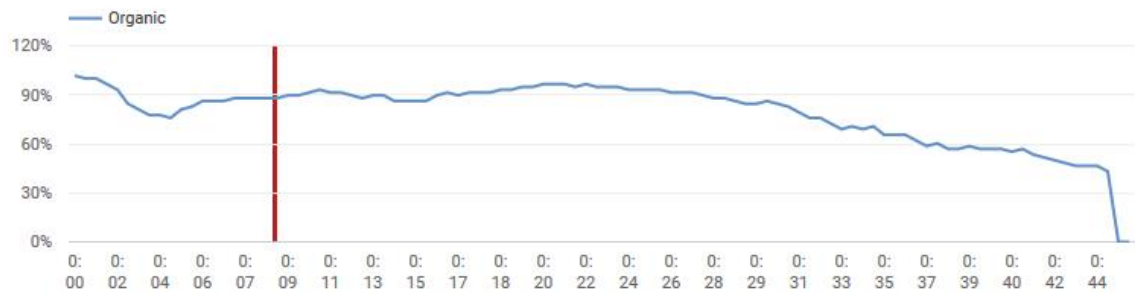
Figure 9. Swordy PAX trailer audience retention analytics

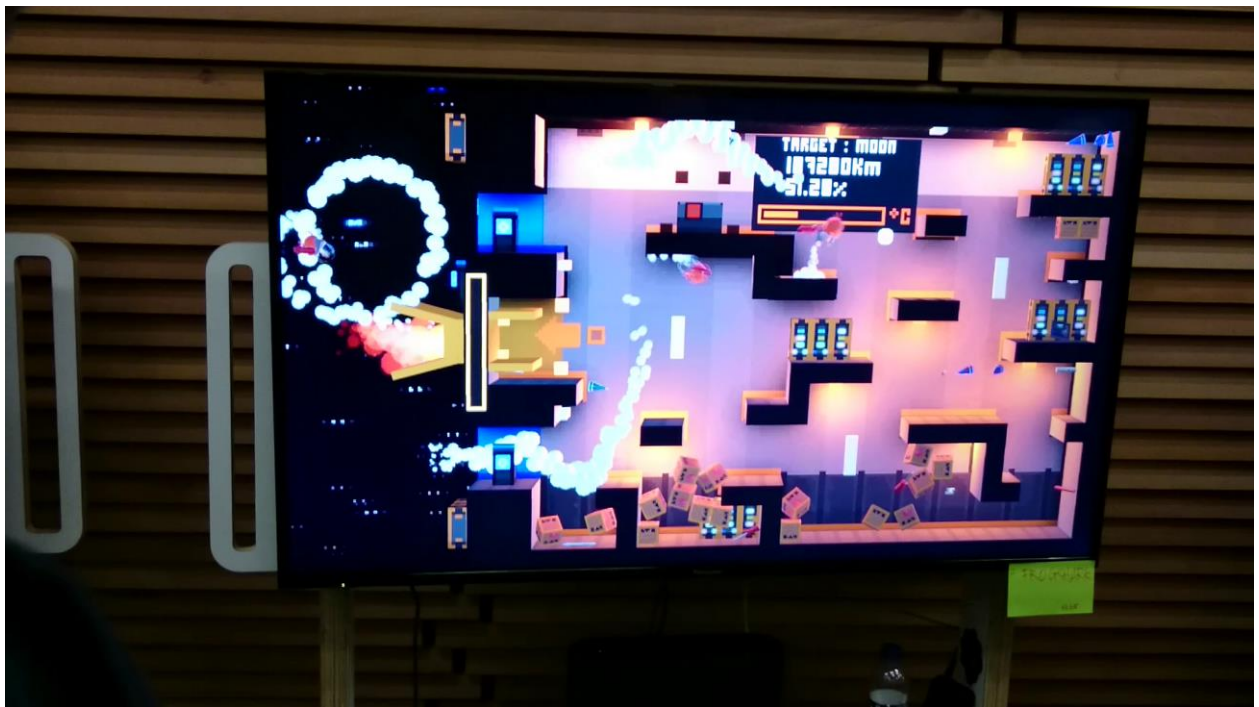*Figure 10. Whalebus by Frogshark. Global Gamejam 2015*

Figure 11. Spaceteam Freighters by Frogshark, Kiwijam 2015

7.5. NETWORKING & COMMUNITY BUILDING

This section identifies groups that form Frogshark's interactive brand building practices and identifies tools that it uses to approach these groups.

In contrast to practices discussed in Brand Identity & Communication Design section, which in general can be classified as outward facing initiatives, networking and community building is an interactive process that requires feedback between outgoing and incoming communications in relation to the brand identity.

Four major sectors are identified that define *Frogshark's* networking approaches: customers, developers, press and businesses.
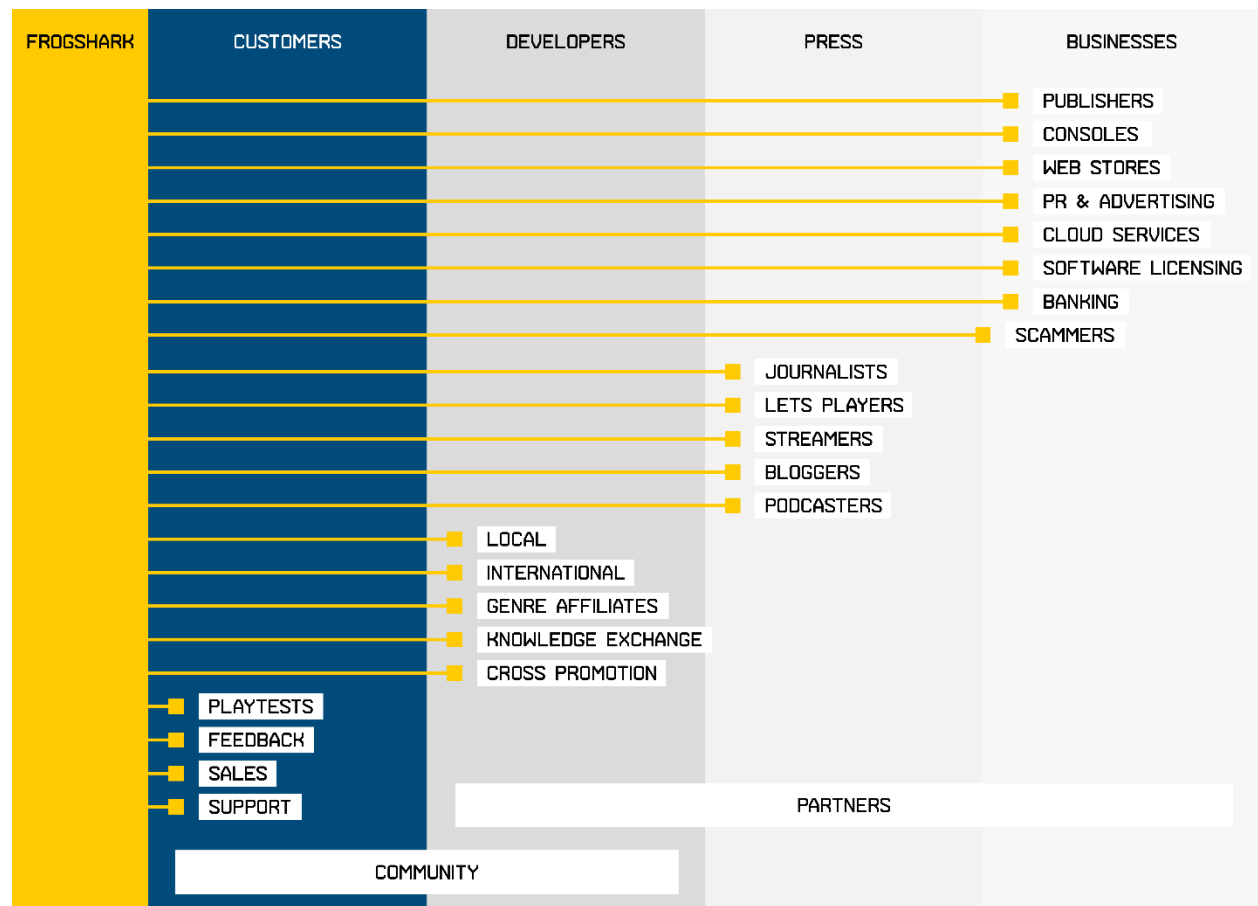

Figure 12. Networking sectors & functions breakdown

Customers

The approach to engaging this group in the pre-release phase as "potential customers" is similar to post-release. Every player, social media follower and newsletter subscriber is a potential customer of *Swordy*, and an existing customer of *Frogshark*. Referring back to "sell the why" method, this group would be 'buying in' to the brand before they pay any money for the game. By contributing their time and social media engagement they've subscribed in some degree to an idea about *Frogshark*. *Facebook*, *Twitter* and *Reddit* is used to connect with players, some of whom stumbled upon *Swordy* by accident, some others have played it at one of the events in person. This groups is discussed more in "Public Playtesting" on p19.

The main engagement tools for this group are face to face event participation, Twitter, Facebook, Reddit, Youtube and Frogshark blog.

Developers

This group is differs from the previous in that they understand the game developer language, mode of operation and associated perils. This grants a kind of empathy understanding towards unfinished

features and project directions whereas non-developers may not be able to accept them. A community of developers is a great resource for useful feedback, sharing experience and avoiding common mistakes.

Interpreting criticism from either of the aforementioned communities can be challenging. Many avoid harsh criticism, and it's easy to ignore the echo chamber effects of a small community. *Frogshark* attempts to mitigate this by participating in more developer communities internationally that helps to more effectively distil the kind of feedback and knowledge that gets shared.

The main engagement tools for this group are face to face event participation, Twitter, Email, Slack and Reddit.

Press
Press outlets are dealt with on a case by case basis. Having the presskit up to date is one part of the process. Given a specific genre and hardware requirements to play *Swordy*, the press outlets need to be researched before contact is made to make sure *Frogshark* presents its content appropriately. Depending on the medium the press-person operates in, they would be provided with the latest text, video, screenshots or build of the game.

The main engagement tools for this group are Email, YouTube and Presskit.

Businesses
Once *Frogshark* became more visible as a company, it started getting approached by other businesses and contractors offering their services. When money is involved this is challenging territory to traverse. It was important to the founders to avoid sacrificing the integrity of the game or the company when doing business. This primarily concerns original IP[8]. *Xbox* for example is a favourable partnership, where as some of the publishers that were negotiated with offered questionable value for a significant percentage of revenue.

There are also many scammers among both the press and business groups, who attempt to get free copies of the game, claiming to have a *YouTube* channel or a media platform. It is important to research these requests in order to vet out fraudulent intent.

The main engagement tools for this group are Email, Presskit and Skype.

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[8] IP (Intellectual property).

7.6. BUSINESS, NETWORKING & PUBLISHING

What follows is a raw account of the data collected pertaining to the business and law aspects of the project.

LEGAL

Trademarks

Frogshark is committed to *Swordy* as the game name. It has 2 years' worth of organic marketing behind it and digital assets such as URLs, social media presence and 3rd party articles written about it. Protecting that name is very important. Worst case scenario would be another studio deciding to take the same name for their game and forcing Frogshark to rename, wasting all the marketing money and effort spent promoting the brand.

Trademarking "Swordy" allows legal protection ensuring Frogshark is the sole entity allowed to use the name in a videogame category.

Trademarks are regional, and get assigned per-country, therefore a big expense to register in as many countries. Priority is given to countries Frogshark identifies as either key distribution regions or strategically important from legal protection point of view: New Zealand, Australia, EU, USA.

Software licenses

It's easy to overlook the severity of costs associated with software licensing. Piracy gets people started learning technology and industry standard operations, but commercial space carries liabilities potentially fatal to a business when money and profit get involved.

The world of software is changing however. Many of the industry standard software is moving towards subscription based systems, minimizing software costs.

Adobe offers entire suit of tools at a monthly fee. Unity3d has a monthly subscription plan. Microsoft BizSpark program offers all of Microsoft office tools, windows OS licenses and developer IDE[9]s for free for 3 years to young businesses.

PERSONELL

Operation

Frogshark operates out of a home office. It only makes sense that a limited budget operation cuts as many costs as possible. Paying another set of bills for internet access, utilities, rent and transport just doesn't make sense. This has definite pros and cons.

Pros:

24/7 access to the team that lives together. Constant feedback, unconstrained schedule, cost savings.

Cons:

Living together introduces some lifestyle friction between team members. Relaxed timeline and schedule can easily get out of hand and get too relaxed. Blurring the line between lifestyle & work takes a mental toll on motivation and passion at times.

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[9] IDE: Integrated Development Environment, a software suite for programmers to develop and debug aspects of a project.

Memorandum of understanding management

Frogshark team operates on trust. Everyone wants the game to do well and decision making is carried out in the interest of the project. Lee and Zimmerman describe the way they structured Gamelab and the "overriding directive" over how they treat the work people do for the company. "Make everyone an Author" (Lee & Zimmerman, 2006), is similar to how Frogshark operates. The team can take their own initiatives, research and innovate, produce content and develop ideas, which contributes to the culture of Frogshark.

Conflicts arise, and the best course of action is to keep egos out of the process and do what is necessary to move forward.

The team doesn't get paid. Savings and grant money pay for rent and living costs. Proven potential of the game is a financial motivator to keep going, however is not a guarantee and course of action requires re-evaluation at times to balance certain decisions that bet on market potential.

The team does have a formal agreement in place in regards to share ownership and processes concerning withdrawal or sale of business.

Extended support

The production of Swordy and Frogshark brand creation may seem like a small scale project, but there are a lot of people and initiatives that make it possible to carry out with just 3 people. Frogshark utilizes resources and help it can get.

AUT University campus and facilities were used in merchandise prototyping. Laser cutting machines and workshop were used to prototype the Swordy pins, the textile labs to produce screen printing on the team shirts, video editing suite early on and a recording space for 3 of the podcast episodes.

NZGDA organized meetups, providing metaphorical "roof" under which Frogshark was able to incubate alongside other developers and creatives.

PIGsty provides screen and utility resources, networking support, contracting opportunities and potential future partnerships.

IGDA while a very new chapter as of 2015, is a secondary catalyst for game developer oriented events and initiatives some of which Frogshark attends.

FUNDING

ID@Xbox funding

Frogshark has been lucky to receive funding from Microsoft as part of the ID@Xbox program. It's a no strings attached grant, which is one of the only reasons the team is able to work full time. The grant pays for rent, travel and business expenses. Should the team be located somewhere other than Auckland, the money would last longer, not without the sacrifice of the biggest game development community in New Zealand.

KiwiGameStarter

Frogshark applied for the KiwiGameStarter grant. An initiative aimed at independent developers that were required to submit a game prototype with a business plan.

In 2014, Frogshark had a solid prototype, ready to be exhibited at PAX Aus, but the business roadmap wasn't yet clear. The game scope hasn't been defined and the proposition presented didn't

make the judges feel like the team was ready to take the game to market. In hindsight it was true that the team wasn't ready and the business case wasn't strong enough without a clear roadmap.

In 2015 Frogshark entered Swordy again, this time with an established market presence, solid business, release, and marketing strategies, with Xbox One backing and strong partnership potential. Part of the award selection criteria is looking at where the money would make the most difference which consequently landed the team in second place.

Awards, IGF, IndieCade

Awards is an avenue for a game to get recognition and be granted extra visibility through press coverage of events that happen yearly. Awards may also be an extra source of funding, however not guaranteed. Events and competitions are scattered throughout the year, many are free to submit to (Zecher, n.d.).

Frogshark submitter Swordy into IndieCade, and was invited to showcase. It was on display at the festival, though it did not get into the finals for the award itself.

There are many more Frogshark will apply for, but the most important one is IGF, which coincides with Game Developers Conference in San Francisco. It attracts developers and press from all over the world and there is a huge wave of press attention surrounding IGF and GDC for weeks following the event.

PUBLISHING, PARTNERSHIP & NETWORKING STRATEGIES

Publishers.

Frogshark has spoken to two publishers in the wake of PAX Aus. The team has been apprehensive of committing to a partnership like this. Some developers advised to go with a publisher, emphasizing the first commercial release and lack of experience, others have emphasized exactly the opposite. The team's gut feeling guided the negotiations and enquiry in the value of a publisher.

Publishers can be very exploitative and their terms can vary greatly (Ismail, 2015). Rami wrote a valuable checklist of things to think about when negotiating with publishers, which wasn't available at the time Frogshark was having theirs, however the instincts of the team followed closely.

First publisher was focusing on a platform that wasn't suitable for Swordy, so the conversation was short. The second however, tried to convince the team to make a rushed decision before Frogshark did any marketing. They were boasting industry and press connections they have and promised a lot of things for a 30% NET revenue share after the platform vendor's cut (leaving Frogshark with just %49 of total sales). They didn't offer any funding, reassuring that because they'd work off a percentage it would be in their interest for the game to do well.

The gut feeling of the team was that Frogshark could do their own marketing and, learning a lot in the process. The doubt factor to this decision was the amount of time and effort marketing, business and accounting would take away from production.

After Frogshark's deal with Microsoft was finalized, it was even clearer that publisher's services were indeed unnecessary in light of long term costs.

Meetups

The *Frogshark* team recognizes the importance of leadership when it comes to independent development community. The trio have their own heroes in the global community that inspire them. *Frogshark* is a very young team that gained traction unexpectedly fast and has a lot at stake.

Meetups harbour a lot of game development students and aspiring artists, coders and people who are toying with an idea of going indie or getting into games in the first place. By attending and showcasing latest developments, *Frogshark* becomes part of a support structure that exists at the meetups, where a lot of established developers of different rank and expertise frequent the event.

GDC

NZGDA awarded free tickets to *GDC 2015* allowing the *Frogshark* team to attend, primarily to announce *Swordy* as an upcoming *Xbox One* title which was a deal made previously through other channels, with some assistance from *Microsoft* gained from a previous relationship. Tickets and travel from New Zealand to San Francisco are otherwise prohibitively expensive.

A special *Microsoft Xbox* event was set up with to showcase a batch of *ID@Xbox* games. Frogshark released an official *Xbox One* announcement trailer through Xbox's official youtube channel when the event opened.

Given the density of *GDC* and the profile of people in attendance, there are a lot of opportunities for business. *Frogshark* secured a developer status with both *Steam* and Apple for *Swordy* because of a *Vive* demo Hamish attended, speaking to one of the *Valve* representatives there. This let us bypass *Greenlight*[10] and publish straight to Steam.

NZGDC

The most value *Frogshark* gets out of the New Zealand conference is an opportunity to catch up with people throughout the community, past co-workers and friends that fly in from all over New Zealand for the day.

In 2015, winners of *KiwiGameStarter* were announced as part of the closing keynote of the conference, in which *Frogshark* took second place. A small bit of PR for the team, following an NZGDA newsletter recapping the award winners.

PAX Aus

Because this was the first overseas event the team went to, there were a lot of unknowns. The goal was to see what it's like, to show Swordy and see if it's something people would play, to learn about conferencing and meet the Australian game development community. All the goals were fulfilled, the team and the business came away with more than was hoped for.

Australia faced an industry collapse when a lot of studios shut down between 2009 and 2011 (Miller, 2011). A lot of developers that came out of that opened independent studios. Frogshark got a chance to meet a lot of them, settled in the Arcade, a game developer specific co-working space. Everyone is very supportive of each other and were very welcoming towards New Zealand developers, of which there were a few. *Armello* developers *League of Geeks* offered help to stash TV's that were purchased for *PAX* until next *PAX* event.

PAX attendees have dedicated badge colors. Press gets their own, but what the team has learned that only the big recognized press get these. A lot of smaller bloggers, youtubers and streamers come in as a regular attendee. It means it's never certain who is at the booth. It is extremely important to be polite, kind and inclusive to whomever is at the booth. They could be a press person

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[10] Steam Greenlight is a way for Steam users to help choose which games are added to the service. Developers are able to submit information about their games, as well as early builds or beta versions, for consideration by users. Users can pledge support for these games, and Valve will help to make top-pledged games available on the Steam service.

in disguise looking for content to cover, or they could be no less important regular patron looking be included and to experience a new game.

PAX East

Business outcomes for *PAX East* come in form of *Frogshark's* first contractor Gordon, who is based in Boston, the same city the event is held at. After the event the team got together and discussed collaboration possibilities which lead to Gordon joining the team to help develop *Swordy*.

Chromacon

Frogshark team are personal friends with the organizer of *Chromacon*. He shares a lot of similar beliefs around independent creativity, art and games which align with his goals for the event. *Frogshark* was one of the two indie games on display in 2015.

DigitalNatioNZ

Frogshark wasn't seeking business opportunities out of *DigitalNatioNZ*. The value came from subject discussed in the Playtesting section. It was also an opportunity to meet some of the other developers showcase their games. *DigitalNatioNZ* offered free booth space, which is significant when it comes to conferencing, and can be one of the deciding factors to exhibit.

Armageddon

Unless *Frogshark* gets a placement at the *Xbox* pavilion through *Microsoft*, *Armageddon* was not a worthwhile event to exhibit at, given *NZGDA* booth placement and the merchandise consumer nature of the event as well as timing, being on the weekend before Melbourne games week.

Samsung GearVR

Before *Frogshark* was official, Hamish and Alexey participated in *VRJam* 2013 under the *Frogshark* name, creating a space on-rails shooter called *Warp*. Fast forward post-*GDC* 2015, *Samsung* contacted the studio requesting a port of the game onto a *GearVR* headset, sending us developer kit hardware.

Samsung and Vive are a potential future partners because the *Frogshark* developers are openly vocal about their interest in the VR space.

Office space

Through personal and professional affiliation, *Frogshark* was offered an office space at an Auckland game company that had unused spare desks, which the team had to decline out of sensibilities discussed in personnel of the Operation section above.

Popup Arcade

Frogshark's Global Game Jam[11] game *Whalebus* was on display at *Popup Arcade[12]*, an indie game development showcase focused around New Zealand developers. This lead to a podcast episode with the organizers, talking about initiatives they're involved with surrounding games and education.

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[11] *The Global Game Jam (GGJ)* is an annual distributed game jam.
[12] *Pop-Up Arcade* is a local independent "low-fi" regular game exhibition.

Fraud

Frogshark self-hosts their own email services. Once an email address appears in the wild, it's easily picked up by bots. Often the new address gets added to some database, opening up to all sorts of "business propositions", and so did *Frogshark's* inbox.

It takes experience and internet literacy to vet out scam emails. There are however some of the more custom emails catered towards the business that makes it seem legitimate that take further research to identify.

There are also some legitimate enquiries that are easy to dismiss. An example would be when *Frogshark* was approached by a Chinese company offering cloud multiplayer services which was dismissed at first due to lack of clarity on their part, but after further contact and some research, turned out they were a legitimate business, seeking partners for a selection of games to launch their platform with and even had a funding scheme. They invited the team to a networking event, which Gordon attended on our behalf.

Work for hire

Frogshark receives a number of emails time to time from individuals seeking work. Majority of which tend to be musicians and composers seeking to either get into games industry, or experienced artists looking for work. *Frogshark* isn't in position to outsource or hire people (with exception of Gordon, thanks to a special financial arrangement). In these cases, instead of turning people away, the team tries to engage with the artists and ask for their feedback on current *Swordy* assets or offer to point them towards people and communities that may aid their search.

This behaviour is encouraged instead of blanket rejection majority encountered in the corporate job hunting world. It helps the greater game development community be perceived as more inviting and supportive and reflects better on the brand.

8. CONCLUSION

Disregarding subjectivity of what "success" means, to answer the question of how valuable existing common knowledge on how to build a successful 'indie' business in the game development industry realistically, Frogshark would have to finish and publish Swordy to gauge how successful its practices have been. However, it is within scope of this research to submit that there is a large body of useful knowledge being built around independent game development. This can be gauged through the constant feedback loop of self-evaluation of all the processes and practices discussed in this project.

The biggest problem is that the useful knowledge is extremely fragmented. So much in fact, that to gauge a concrete instruction and build up intuition on the subject, the Frogshark team traveled to distant parts of the world, spoke to countless persons of greatly varied experience, made mistakes, exhibited at variety of types of events, signed many contracts and stripped away the corporate aspects of game business to reveal the inner workings of the team and its vulnerabilities to the public.

There is a huge, yet unseen territory independent game developers have to traverse in a step between hobby development and a legitimate registered business. It spans market research, legal & liabilities, human resources, marketing, professional and business development and so on, each area being a whole field of study in its own right, thus naturally, there is no one single source that can

dispense all the necessary wisdom to set indie game startups on their way to success. There certainly are "best practices" and common sense when it comes to all those areas, but a lot is changing too quickly to be treated as blanket fits all scenarios.

Frogshark's major successes can be summarized in the following things:

- Having a heavily tested central mechanic that drives the design of a product, making it accessible and easy to understand.
- Understanding that marketing, business, logistics, HR, networking and all the things that aren't directly project production related, are still as much part of "making the game" as sitting down with code.
- 'Testing the waters' early, getting people to play the earliest prototypes and talk about the game that could be before there was even a game.
- Listening to advice from people of experience, even if the advice isn't followed. Part of the "useful knowledge" extraction skill is listening and analyzing perspectives.
- Documenting and journaling as much of the work that's being created, not just the game development progress, but event photography, skype conversation recordings, financial transactions etc. You never know when something will be relevant or crucial to refer back to.
- Interacting with local and remote communities as much as possible throughout development.
- Constantly adjusting and re-evaluating new information, research and technology as it becomes available throughout ongoing lifetime of the company.

Frogshark's major failures can be summarized in the following things:

- Holding back some of the necessary decisions for too long (design, feature implementation, PR)
- Taking too long to get back into production after the initial success of PAX 2014. It took months to get over the "high" of the events that transpired.
- Attending and consequently spending production budget on some of the overseas events that weren't worth the investment.
- Having a work schedule that is too loose.
- Not fragmenting work into much smaller tasks initially.
- Resisting to negative feedback about designs that developers were too invested in.

Equipping yourself with as much knowledge as you can is eventually going to land you in a better position than you would be without it, but as far as navigating it, the knowledge itself will lend you the means to distill what is useful to you, depending on where you are and where you're trying to get to.

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FORM PGR14 COMPLETION OF AMENDMENTS AS REQUIRED BY EXAMINERS

PLEASE NOTE	• This form must be typed. Handwritten forms will not be accepted.
	• Double clicking on the check boxes enables you to change them from not-checked to checked.
	• This form should be completed by the student and the nominee(s) appointed by the examination panel to oversee any amendments
	• the examination panel or exam board will nominate who will sign off amendments – normally this will be the supervisor
	• The nominee(s) signing off amendments for master's and honours students should forward this form to their Faculty Postgraduate Office
	• The nominee(s) signing off amendments for doctoral candidates should forward this form to Jan Singhapan, Postgraduate Officer (Examinations), University Postgraduate Centre, WU519, Level 5, WU Building, 46 Wakefield Street, City Campus

Student ID No	0770936	**Name**	Alexey Botkov
Faculty	Design and Creative Technologies	**School/Dept**	Colab: Creative Technologies
Programme	MCT		

Research Output Thesis ☒ Exegesis ☐ Dissertation ☐ **Points Value** 120

Title Making Frogshark: Participant observation of 'indie' game development cultures

I hereby confirm that the changes required by the examiners have been carried out.

Student's Signature   **Date** 15 / 04 / 2016

CERTIFICATION OF NOMINEE

Name Ben Kenobi

I certify that the changes as required by the examiners have been successfully completed to my satisfaction.

Signature   **Date** 15 / 04 / 2016

CERTIFICATION OF ADDITIONAL NOMINEE

Name

I certify that the changes as required by the examiners have been successfully completed to my satisfaction.

Signature   **Date**

CERTIFICATION OF ADDITIONAL NOMINEE

Name

I certify that the changes as required by the examiners have been successfully completed to my satisfaction.

Signature   **Date**