QUESTIONS AND ANSWERS
(ON GAME INNOVATION)
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EDITED BY ANNAKAISA KULTIMA AND KATI ALHA

TRIM Research Notes 4
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Hi!

Hello!

Hei!

Moi!

Anna Kultima
Juha Köönikä
Kati Alha
Juho Karvinen
My name is Gipster and my friend here is a gain developer. We wanted to know more about games. And not only about games, but how they are made. We read books and they did not answer to our many questions. We wanted to know more.

We asked.

We were answered.

This is our story.

... Oh. Here are the researchers who were able to use their time to explain stuff.

Yes! Yeah! Hai! Howdy! JOO!

Timo Nummenmaa Jussi Kuitinen Tuuli Saarinen Tanja Shvonen And others
CHAPTER 1: CHANGE
1. CHANGING PROCESSES: FINNISH GAME INNOVATION PROCESSES

I WAS THINKING...

WHAT IS THE STATUS OF FINNISH GAME INNOVATION PROCESSES? WHAT'S HAPPENING IN THERE?

Well, Finnish game developers, probably like developers everywhere, are working in an environment of constant change. There are so many things happening at such a fast pace that processes might be difficult to maintain. And often people may have completely different ideas on the matter. Despite the different vocabulary they might use, they manage to work it out by maintaining flexibility and concentrating on people and their ideas.

SOUNDS LIKE FUN!

WELL, CHALLENGE CAN BE FUN...
I was just wondering... Does it matter how games are made? Like, first I'll have an idea, and then I'll just go and execute it?

Actually there are quite a few development methods that have been around for quite some time. Some fit better for game development than others. The process of making games needs agile methods that can work with iterative processes. The most popular method at the moment is Scrum, but that is not perfect either.

Come again?

Oh, so I need to work flexibly!

Yes, but it takes practice!
I WAS THINKING...

WHAT IS THE FUTURE OF THE GAME INDUSTRY? GAME MAGAZINES ARE FUSSING ABOUT ALL SORTS OF THINGS, BUT WHAT DO THE GAME PROFESSIONALS ACTUALLY FIND WORTHWHILE?

Well, they’re really excited about all the new possibilities that Internet connectivity can offer, whether from a business or gaming point of view. They think that the audience is getting broader and broader, expanding to all sorts of people instead of just gamers, and these new player demographics will want games to offer them deeper, more sophisticated and meaningful experiences, a challenge the game developers are willing to take on. Technology of course affects what can actually be done, so many are really waiting to see what happens after the present console generation: will there be a new one or will the current consoles stick around for a long time?

WHOA, THAT’S REALLY INTERESTING! THANKS!

NO PROBLEM!
4. CHANGE IN VALUES: CASUAL GAME DESIGN VALUES

I’m a bit confused...

What is happening with these games? There was so much talk about “casual games” and now, where has it all gone?

Casual design

“Casual” is best understood as a change in design values. A lot of games are more casual these days. They go with such values as acceptability, accessibility, simplicity, and flexibility. These respond to recent transformations in game cultures: the players are more heterogeneous and the play has become a secondary activity in many levels.

Oh, so they are still around?

Sure, more than ever, perhaps.
5. Change in the Scope of the Design: Expanding Game Experiences

I was wondering... Why don’t some games work with casual audiences, even though they are simple and easy to approach?

Well, the design process should be thought of in broader terms. We have to consider the other steps of the game experience aside from the gameplay. It is not sufficient to just alter the gameplay. It involves the environments and the distribution, as well as the whole maintenance process, all of which have to be rethought, as the whole production process is formed around the hardcore products.

Yeah, that’s right!

Oh, so that’s the fuzz about the innovation in business models and all!

Huh?
I HAVE A QUESTION!

I HEARD THAT GAMES ARE BECOMING SERVICES. HOW DOES THAT CHANGE THE CONCEPT PHASE OF GAMES?

... THAT MAKES SENSE, THANKS!

YES, GAMES ARE INDEED BECOMING MORE LIKE SERVICES THAN PRODUCTS. THE VITAL DIFFERENCE BETWEEN GAMES AND GAME SERVICES IS THAT GAME SERVICES ARE IN CONSTANT CHANGE AS THE PLAYERS PLAY THEM. THIS LEVEL OF CHANGE POSES CERTAIN NEW CHALLENGES FOR THE CONCEPTS. BUT IN THE END, WE HAVE HAD SIMILAR CHALLENGES WITH TRADITIONAL PRODUCTS.
CHAPTER 2: INNOVATION & DESIGN
I was thinking...

How should one go about researching game design?

What?

Most of the game design literature concentrates on describing the content: e.g., games and good design principles. You should really study the design activity as well. For instance, using models of design activity from other areas of design research can give you a much better view on game design and, therefore, help you create better design tools, for example.

Oh, okay!

Yeah, that’s how it really is.
8. DIFFERENT FACES OF 'INNOVATION'

INNOVATION...

IT SEEMS LIKE SUCH A BUZZ WORD. WHAT DOES IT ACTUALLY MEAN?

Well, it can mean a lot of different things. People often use it in the same way as "creativity" or "invention," but it actually differs from that and it's best to understand it as a process of coming up with and executing new ideas. There are also different levels of innovation, for instance radical and incremental innovation, and one can innovate on different things: there is product innovation, service innovation, and so on. They even talk about innovation ecosystems, since it really does not happen in a vacuum. It is a lot more than people usually think of.

OH, OKAY. I'M EDUCATED NOW.

GLAD TO HELP.

KATI ALHA  ANNKAISA KULTIMA  JUHO KARVINE  JUHA KÖÖNIKÄ
A SHORT INTRODUCTION TO CREATIVITY RESEARCH

NOW, TELL ME SOMETHING…

HOW MUCH DO WE ACTUALLY KNOW ABOUT CREATIVITY?

MHM…

WE KNOW QUITE A LOT! THERE HAVE BEEN A LOT OF DIFFERENT STUDIES ON DIFFERENT ASPECTS OF CREATIVITY. AND WE HAVE COME A LONG WAY SINCE THE INITIAL STEPS IN THE 1950S. CONTRARY TO THE TRADITIONAL ASSUMPTION OF CREATIVITY BEING A SUPERNATURAL FORCE, THERE IS GROWING AGREEMENT THAT CREATIVITY IS THE RESULT OF A SYNERGY BETWEEN MULTIPLE COMPONENTS. IT IS QUITE COMPLEX IN THE END AND THERE IS SO MUCH MORE WE COULD STUDY!

I BET THERE IS…
I WAS THINKING...

IS THERE ANY POINT TO USING DESIGN MODELS WHEN ANALYZING THE GAME DESIGN PROCESS?

SORRY?

YES! MODELS CAN BE USED AS A WAY OF RAISING THE DESIGNERS' OWN AWARENESS OF HOW THEY ARE DOING THE DESIGN ITSELF. THEY CAN REVEAL ACTIVITIES, DESIGN SITUATIONS, AND DESIGN CHOICES THAT COULD HAVE OTHERWISE BEEN LOST IN THE ANALYSIS OF THE DESIGN.

HEY, THAT'S PRETTY COOL!

IT IS, ISN'T IT?
I was talking with my friends...

They are still calling Doom the biggest innovation ever. But I know that type of game existed before Doom, so doesn’t that mean it’s not actually an innovation but a copy?

Innovation is often defined as the first successful implementation of an idea. In this sense, those actually doing something new but for one reason or another are not successful, are not acknowledged as innovations. Doom was the first game to make the first-person shooters a really big hit; therefore, it achieved innovation status. Only with the passage of time can we see which games and consoles become the acknowledged innovations.

Yeah, that’s a bit backwards.

When you put it like that... I guess.
I played some retro games and was thinking...

How have game innovations changed in the past?

Well, in the beginning the games were pretty simple and the markets were much smaller, but the few innovations from that era are very widely acknowledged. The beginning of the 1980s was the time of perhaps the richest innovations, and presentation and narrative elements were more important. In the 1990s the innovations were more focused on the technology, and in the 2000s the gameplay elements rose above other innovations.

That’s interesting! Can’t wait to see what will come next!

Yeah, me neither!

Kati Alha

Gnipster
I was thinking about the games of the future...

Are we going to have bigger and better games in the future as the game industry evolves?

Evolution is all about adapting to the current environment, to the markets and cultures, that is. Whether this phenomenon is good or bad is a whole different question. Today “the fittest” game can be a polished FPS, tomorrow it might be a free-to-play farming game with micro payments.

Huh, so evolving doesn’t necessarily mean getting better and bigger.

Exactly.
I was at a conference a while ago...

I heard a game developer saying that she's sick of everyone talking about innovation. I thought innovation was a good thing, doesn't everyone want more of it?

There are a lot of different attitudes toward innovation. Actually, we found seven different attitudes to innovation from game industry professionals: artists, universalists, followers, evangelists, nihilists, realists, and scarecrows. The game industry is still rather innovation centric, but different people might see it differently.
CHAPTER 3: PRACTICES
15. The Four Innovation Philosophies Guiding Game Development

How do game developers ground their development processes in innovation?

Well, it is not that complicated. For one, they think that good ideas will do the trick, but on the other hand, one needs creative and visionary personnel. Finally, there is a need for some kind of review processes that come either in the form of iteration or in the form of getting some kind of approval. Together, these approaches guide the development processes.

WELL, THOSE ALL SOUND IMPORTANT TO ME!

That they are.

Annakaisa Kultima
Junha Kõnnikä
Juno Karvinen
16. EXPERIENCES WITH SCRUM IN GAME DEVELOPMENT

Hey...

What’s all this fuss about Agile and Scrum in game development? What does it do. I thought Scrum had something to do with Rugby?

...Yes, scrum is originally a term used in Rugby and now the term is used to describe an agile, agnostic framework used in software development and more recently in game development. Scrum and other agile variants offer tools for better project management and hope to bring the “Fun” in the game to an earlier stage of the development process.

HMM, so I was right about the Rugby!

YEP, that’s right!

JUHA KÖÖNIKKÄ
I WAS THINKING...

HOW DO GAME DESIGNERS END UP WITH ALL THOSE IDEAS? HOW DO THEY BRAINSTORM?

HUH?

Do you mean Brainstorming or brainstorming?

Brainstorming is an actual technique that needs a skilled facilitator as well as trained users. It is difficult to say what game developers mean by brainstorming when they talk about it, but game developers also have other approaches for ideation. Some approaches are more organic and some more formal, but it is not all collaborative. Most of the initial ideas come about in solitude.

OH... SO BRAINSTORMING IS JUST A SMALL PART OF IT ALL?

YES!
I WAS WONDERING...

HOW COULD YOU STUDY THE EMOTIONAL AND SOCIAL ASPECTS OF A DESIGN PROCESS?

HUH?

WELL, WE USED A DESIGN DIARY. IT PROVIDED US WITH A GOOD VIEW OF HOW GAME DESIGNERS THINK AND FEEL. IN FACT, WE LEARNED THAT THE SOCIAL ASPECTS OF THE PROCESS ARE VERY IMPORTANT INDEED. UNCLEAR ROLES AND DIFFERENT INDIVIDUAL APPROACHES TO GAME DESIGN CAN CAUSE LOTS OF CHALLENGES FOR THE TEAM.

SOUNDS FAMILIAR...
19. THE ANATOMY OF A GAME DESIGN SESSION

CAN YOU TELL ME...

WHAT DO GAME DESIGNERS REALLY DO DURING CONCEPT DESIGN? ARE THERE ANY REALLY INTERESTING THINGS?

WHUT?

Yes, there are! Game designers use plenty of references to other games, movies, books, and other such cultural objects to describe design knowledge regarding existing design solutions. It also seems that designers first produce lots of different design alternatives without really evaluating them; once the vision starts to solidify, they start evaluating and weeding out the weaker ideas.

OH, OKAY!

YEAH, THAT’S HOW IT REALLY IS.
I WANNA BE A GAME DESIGNER...

I COULD GO ALL DAY AND MAKE NEW IDEAS ON WHATEVER I WANT TO...

Well, actually the game development process usually starts with some sort of design constraint. For instance, the theme might already be decided when you start ideating around it, and sometimes there is a character or a storyline that one has to create a game around. Technology or resources might also restrict the ideas that can be used. But a constraint is not bad as it gives direction for design processes. Constraints can be also broken if there is something intriguing enough to go forward with instead. It is a flexible process in the end.

OK, SOUNDS CHALLENGING...

IT CAN BE.
Why would I ever want to create a formal model of a game?

Well, with a model created within a suitable specification environment, it is possible to realistically model game rules and events. A highly abstract formal model can, given proper visualization techniques, provide comprehension and help communication in the development process. That is, when the techniques mature and proper guidelines are ready.

Sounds a bit complicated... but I am really looking forward to it!

Me too!
I spent hours doing a prototype last night...

Is it somehow possible to test ideas without implementing a prototype?

Sure! One way is to use simulations. Simulations allow designers to view system behavior at a higher level than prototyping would comfortably allow, even at a very early design stage. They are not, however, a replacement for prototypes!

Oh, so we still have to prototype too...

Yeah, that's the way it goes!
23. EVALUATING THE EFFECTS OF IDEA GENERATION METHODS

I WAS JUST THINKING...

HOW DO I KNOW WHAT KIND OF BRAINSTORMING METHOD WORKS BEST FOR ME?

THE EFFECTS OF THE METHOD CAN ACTUALLY BE QUITE DIFFICULT TO MEASURE. FIRST OF ALL, THERE ARE THE MOST TANGIBLE RESULTS: THE IDEAS THEMSELVES, WHETHER THERE WERE LOTS OF INTERESTING AND FEASIBLE IDEAS PRODUCED WITHIN A GIVEN TIME PERIOD. ON THE OTHER HAND, THERE IS A NEED TO LOOK AT LESS TANGIBLE EFFECTS: INSPIRATION AND LEARNING. USING DIFFERENT KINDS OF METHODS IS THE KEY, SINCE THEY GIVE YOU NEW PERSPECTIVES.

OK, THAT IS GOOD TO KNOW! THANKS!

GO AND MAKE SOME CRAZY GAME IDEAS!

ANNAKAISA KULTIMA
I have tried it, but the ideas are sometimes difficult to use. They do not always fit to my design constraints. Should I use something else?

Well, you can actually modify the same approach to fit a given theme, for instance. But be careful: the “out-of-the-blue” ideas might be the ones that are more interesting. It is a delicate business to tailor your stimuli. However, a structured ideation session, like that with VNA, seems to do more reliable job than the natural ways or open-ended approaches.
25. A MODULAR IDEATION GAME – THE CONCEPT OF IDECARDS

Idecards...  
IS IT A SET OF CARDS FULL OF IDEAS?

Sorry. But yeah, idecards is actually a concept for a modular ideation game. It has a general deck of cards that one can use for stimulating any ideation or brainstorming session. They are like the playing cards for ideation games: one can create new games and play by different rules. One can also make decks that fit certain purposes, for instance a deck for designing more emotional game experiences or a deck for social games.

You talk too fast...

Sure, why not!

OH... LET'S PLAY SOMETHING!

You talk too fast...
I was wondering...

There must be more to game innovation than just rocking with pens, papers, and programming languages. But what?

Game companies have plenty of different practices to keep it all together. For instance, ideas can be collected from sources such as books and films, while more ideas arise when people discuss them together or just relax. Many ideas are thrown away or left to collect dust, while other ideas are revisited. The main usage of the ideas is partial or for inspiration purposes, mostly they are not used as whole parts. There is no single approach to all this, it varies a lot among individuals and companies.

Must be hard to know what works.

Yeah, people find their own ways.
I'm thinking of starting to use an idea management system. Which should I choose?

That depends on your needs. There are a lot of different systems out there! The biggest problem in the beginning may be to find a suitable application for you among them all. Testing the commercial systems may be hard, as not all give full free trial versions, and in the end there may not be a perfect system. Check out the iDelar concept for more thoughts!

Oh, I will, thanks!

No problem!
I'm curious...

What kinds of idea management systems do game companies use?

Excuse me?

You know, it varies quite a lot. Some use nothing except various pieces of paper. Some have very comprehensive commercial systems. More common management systems include general tools, like blogs, wikis, forums, and stuff like that.

Hmm, that's a lot of different stuff.

Yep, there's a lot of different needs too.
I am wondering…

What are the features that game developers wish to have in their idea management systems?

It depends. Different people may have different needs and beliefs. For instance, some want the easiest possible input, some want more structured input that is easier to handle later. But everyone seems to want better search and sort tools and linking between the ideas. That is not even too much to ask for. The current tools are not that amazing.

Somebody better go and make better tools!

I hope they do!

Kati Alha
30. TOWARDS BETTER IDEA MANAGEMENT SYSTEMS – THE CONCEPT OF IDELAR

IF YOU COULD DECIDE, WHAT KIND OF IDEA MANAGEMENT SYSTEM WOULD YOU MAKE?

I WOULDN’T WANT IT TO ONLY FUNCTION AS A REPOSITORY BUT ALSO AS A SOURCE OF INSPIRATION. YOU KNOW, NOT THAT MANY STORED IDEAS ARE USED AFTER THEY ARE CREATED. SO, WHEN YOU INPUT A NEW IDEA, IT WOULD INSTANTLY SHOW YOU SIMILAR IDEAS. YOU COULD ADD NOT ONLY YOUR OWN IDEAS, BUT EXISTING ONES AS WELL. SO YOU WOULD SEE WHAT THERE HAS BEEN AND USE WHAT ALREADY EXISTS AS INSPIRATION. OF COURSE, IT WOULD INCLUDE GOOD BROWSING FUNCTIONALITIES AND VERY EASY INPUT. THE IDEAS COULD BE MODULAR AND EDITED PARTLY OR AS A WHOLE.

Hey, that sounds great!

Glad you think so!

Kati Alha

Anna-Kaisa Kultima

SO...

Gnome
FLOWERI is a concept for a brainstorming room. The idea is to have a specific room dedicated for collaborative creativity within small groups. You can arrange brainstorming sessions there or just go and relax and gather your thoughts. It's supposed to be a different place, where you can switch your mind to another mode. But if you design this room for yourself, you should check what we experienced with our own room first.

OH, OK. I LIKE THAT IDEA!

THANKS!
Don’t go yet…
WE NEED TO THANK SOMEodies:
... And all the cool kids at our gamelab.
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