



Business Issues of Pervasive Games

June 2007

Overview of IPerG Business and Organization research

(from the original application):

- ④ The business and organisational research is about establishing the opportunities and requirements for a widespread use of pervasive games, both commercially and for societal purposes.
- ④ This includes research into the following areas:
 - ④ *Target groups. Identifying and understanding the (potential) players of pervasive games.*
 - ④ *Market structure. Organisation of the market for distributing pervasive games.*
 - ④ *Revenue streams. A new value chain means new revenue channels.*
 - ④ *Product life cycle. Rethinking games as products. New models for game development and the game production **life cycle.***
- ④ Additionally, this research theme serves as **Market- and Technology watch**, keeping the project up to date with the latest market news.

- ④have we done the above?



Overview Presentation of IPerG Business and Organization research

⇒ ...The results have been:

- ⇒ (D.4.1 Internal Design Guidelines - non public 2004)
- ⇒ D4.2 Business Revenue Models - 2005
- ⇒ D4.3 Market Technology Watch - 2005
- ⇒ D4.4 Business Guidelines - 2006
- ⇒ D4.5 Business Opportunities and Business Structures -2006
- ⇒ (D.4.6 Updated Internal Design Guidelines - non public 2007)
- ⇒ Upcoming D.4.7 Final Business Design Guidelines - 2008 public.
- ⇒ ...We have had a stronger emphasis on the end consumer/end player, focusing somewhat less on business-to-business issues, than was originally assumed.
- ⇒ This because we have found that that if the end consumer does not understand or appreciate pervasive games, then there will be no business-to-business issues. So business-to-business has come after identifying target groups, and after defining the consumer experience of playing a pervasive games



Overview Presentation of IPerG Business and Organization research

When we started out things were different: Some things have changed from 2004 - 2007. Trends that has impacted the market and business research:

Good things 2004 - 2007 :

- ☐ Strong growth of the A.R.G genre.
- ☐ Popular breakthrough of GPS in and for mobile phones.

Less then good things 2004 - 2007:

- ☐ Commercial "*non-explosion*" of location based mobile gaming, - based on mobile mast positioning. (2001 - 2004 there were high hopes on that genre).



Overview Presentation of WP4

➤ **Methods; what have we done, and how have we done it.**

- o Play tests of showcase games with accompanying focus groups.
- o Post-play workshops.
- o Quantitative surveys.
- o Ethnographic studies.
- o Diaries.
- o Structured depth interviews.
- o Concept tests.



Overview Presentation of IPerG Business and Organization research

We have market researched games such as:

- ② Epidemic Menace.
 - ② Coup.
 - ② Insectopia.
 - ② Hot Potato.
 - ② Momentum.
 - ② City Mission.
 - ② Day of the Figurines.
 - ② Garden of Earthly Delights.
 - ② Perplex City.
 - ② ...and others, e.g. various volunteer organisations etc:
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- ② The respondents have been as well, ordinary game players, as well as, industry representatives, venture capital, etc.



Overview Presentation of IPerG Business and Organization research *(different usage contexts = different businesses)*

The design space:

Botfighters

City Mission

Coup, Insectopia

High intensity

Hot Potato

Day of the figurines, Low intensity

Momentum, Epidemic Menace

Hitchers (MYHT)

Mobility, (mobile phone)

Local, event based



Overview of conclusions. - quick and positive.

The good news is that people like pervasive games! :-)

- ☐ On most occasions we have received a very positive feedback on our showcase play tests.
- ☐ People are prepared to pay money to get a chance to play again (cf. ARG:s).
- ☐ People want to take an active part in the game and produce user-created content.
- ☐ People can see pervasive games enter new (non-game) areas of daily life (c.f. City Mission).

(Could of course to some extent be the novelty value)

Some more sobering news is that:

- ☐ People do not have any previous grasp about pervasive games. They do not know "where to put it". (This is important, - why?....)



Overview of conclusions:- quick and sobering.

☐ **Hierarchy of effects theory:**

☐ **1.**
↓

☐ **2.**
↓

☐ **3. Brand Attitude**

- 1. Physique
- 2. Personality
- 3. Relationship
- 4. Culture
- 5. Reflection
- 6. Self-Image

☐ ↓

☐ **4. Brand purchase intention**

☐ ↓

☐ **5. Purchase Facilitation**

Category

Brand

Need

Awareness



Overview of conclusions:- quick and sobering.

1. Category Need: - dissected

In the sciences of business economics, this is also known as “*product level typicality*”. It is the science of choices.

When consumers fulfill consumption goals the decision is based *first*, from which product category to buy (i.e which *need is recognized & felt*), and *second* which brand to purchase within the product category, or experienced need category.

- ② Different products may fulfill the same consumption goal,
- ② e.g. cars, bicycles and public transportation are all “*ways to get to work*”,
- ② e.g. chocolate bars, cookies and fruit to are all “*snacks*”.
- ② **On such a level - What is a pervasive game?** “*snacks*”? or “*ways to get to work*”?



Overview of conclusions:- quick and sobering.

- ⇒ **There are some cost issues, that are specific for pervasive games. An SME may need to consider:**
- ⇒ **Developing for:**
 - A large number of diverse hardware platforms.
 - Geographic positioning -special competences.
 - Volunteer staff on the ground? - Recruitment and management.
 - Specific legal and ethical issues (The Bean, Manchester Cathedral).
 - Intellectual property licensing models.
 - Management of user-created content.

All costs rarely seen in production of conventional games..



Specific legal and ethical issues (Manchester Cathedral).

'Is this the first virtual desecration of a sacred building?

Bishop of Manchester, Nigel McCulloch

"I think they [Sony] are going to be in for a surprise because we are not going to let this one go. You cannot use a cathedral in this way. One million people are visiting Manchester cathedral through this game. It is an abuse. They ought to have sought permission. This is a place of peace, not war. This game must have been planned for months. It is abysmal to have this massive gun pointing down the nave of our cathedral. And it is our cathedral, there is no doubt about it. It is extremely rude of them [Sony] not to have checked."

Sub-Dean and Canon Paul Denby

"Here in Manchester we do all we can to support communities through our parish clergy, we know the reality of gun crime and the devastating effects it can have on the lives it is not a trivial matter. For a global manufacturer to then re-create one of our great cathedrals with photo-realistic quality and encourage people to have guns battles in the building is beyond belief and highly irresponsible.

Right Rev Nigel McCulloch

"We are shocked to see a place of learning, prayer and heritage being presented to the youth market as a location where guns can be fired. This is an important issue, for many young people these games offer a different sort of reality and seeing guns in Manchester Cathedral is not the sort of connection we want to make. Every year we invite hundreds of teenagers to come and see the Cathedral and it is a shame to have Sony undermining our work."

The Dean of Manchester, the Very Rev Rogers Govender,

The point if this is: When bringing in reality into a game, reality may have issues with that, in ways that might affect your business.



Overview of conclusions:- quick and sobering

➤ **Bringing it out to the customers - roll out problems**

- o Product level typicality.
- o Mobile Telecom operators - revenue sharing
- o Mobile Telecom operators - billing and pricing models
- o Mobile Telecom operators - opaqueness of pricing models.
- o Weak status of mobile content

- oLeading up to two case studies, showing the problems of pervasive games...



CASE STUDY#1

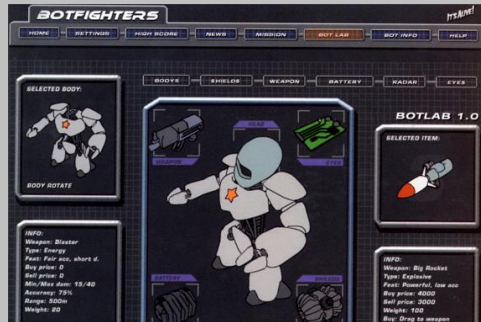
Botfighters - a study of successes and problems

A location based “cyber-shmup” for mobile phones, based on mobile mast positioning. When one players’ “robot” entered the zone of a competitor, the player sent an SMS to “fire a missile” at that competitor.

It became quickly popular, with a hard-core gamer following. But the first mobile telecom operator to supported the game, demanded proprietary rights. Also there was no cap, on the SMS-bills, and the game studio got no share of the generated SMS-traffic.

Lessons to take away:

- Proprietary rights hampered growth towards critical mass.
- Highly unbalanced revenue share model.
- Player had no control of costs.



CASE STUDY#2

City Mission, -A success that never got started

A location based "treasure hunt" style of game for camera phones. One player created an adventure/treasure hunt for other players by photographing places and uploading them. Other players found the places, and checked their location.

When tested by IPerG research staff the results were dramatically positive for all aspects of the game, both the play aspect, as well as the user-created content aspects. The revenue model was diversified.

But consumers fright for data traffic costs, and costs for buying mobile triangulation from operators, killed the game.

Lessons to take away:

- Critical game infrastructure could not be bought in bulk from mobile telecom operators.
- Consumer shuns mobile services due to control issues of billing costs (cash cards).
- Flat rate would have saved the game



Ways forward: lifestyle game design

- ④ **From studying these game examples, and many others, we have found some general issues of communicative placements.**
- ④ Games should be seen as service, not as a physical product. Pervasive games, in particular, are a life style service. This because, in general games as a product have strong connotations to the players' notion of social self. This is a business issue, as it pertains to the notion of communication design for the product.
- ④ Point of action - bring in experienced lifestyle analysts in a marketing team.
- ④ We have used Kapferers' Brand Prism model to position the experiences of playing our showcases...



Ways forward: a taxonomy of models

- ⊞ **A taxonomy of pervasive game business models seen in a game design perspective:**
- ⊞ **MMM - to build into the mobile phone content economic ecosystem.**
- ⊞ + Ubiquity of mobile phones.
- ⊞ + Unlimited in scaling up.
- ⊞ ? -Typicality issues for location services...?
- ⊞ - The mobile telecom operators (*but it takes only a human decision to change that...*).
- ⊞ - Weak status of the mobile content category

- ⊞ **Event based model - to make an event and use an event based business model**
- ⊞ + A clear thing to sell.
- ⊞ + A controlled environment.
- ⊞ -Intrinsically limited in scaling up

- ⊞ **Object based business model**
- ⊞ + A clear revenue model for micro - and medium sized payments in the large scale (*O.t.T.*).
- ⊞ - Tangible objects give a sense of worth



Ways forward: the touring band analogy

Local rock bands? - A service for regularly returning occasions.

A local rock bands may look like it is:

- ⊖ Touring a region giving concerts.
- ⊖ Selling T-shirts.
- ⊖ Selling CD:s direct to fans.

But what it is really delivering to the fans? For an answer; view it as a service, the band delivers:

- ⊖ Something to do on a Friday night (the concert)
- ⊖ A memory of Friday night (the t-shirt).
- ⊖ A way of bringing back that Friday night (the CD).

The local rock band is interchangeable. Friday night is not; - take and own "Friday Night" (i.e a clear usage context), for a large enough amount of people and design a (pervasive game) product that is a service adding perceived personal value to a regularly returning occasion.



Thank you for your time! :-)

