

Digital Games – their Production, Management, Consumer Market, and Business Models

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ABSTRACT

Much research work focuses on the actual game design, and the underlying technologies and systems. This tutorial focuses especially on the creation and creative processes to develop games, the required production processes, creative team management, and rounds up with the presentation of business models that make games to an experience for the consumer. The tutorial will present several case studies of successful (and non-successful) game developments and the factors why the game designs contributed to a consumer experience from a management perspective. It gives insights into the game company internal production processes and the management of the involved creative teams – from creative idea-finding to successful business model. To create a game experience, it is essential to understand the consumer market, and the general audience behavior, which is presented within the scope of this tutorial. The tutorial is aimed at people that would like to learn more about the game production from a company perspective. After the tutorial the audience should understand how to establish a gaming company, how to manage the internal production process, and which business models are adequate for different companies.

1. INTRODUCTION

The tutorial fits to the themes of “Fun and Games 2010”, as it complements the different categories in the following ways:

- understanding game design for serious games (e.g. learning, health), it is essential to understand the market for games from a consumer perspective. This tutorial presents a consumer perspective, their requirements, needs, and a general picture of the game consumer market;
- the tutorial especially points out creative methods and approaches in designing digital games, and the management of creative teams;
- technology and systems utilized in games are presented as tools and utilities to successfully create a game in the business context;

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Conference '04, Month 1–2, 2004, City, State, Country.
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- by elaborating the design process, participants shall learn the tasks and workflow of creating and distributing a digital game successfully;

2. TARGET AUDIENCE & CHARACTERIZATION

The tutorial is aimed as introductory tutorial for an audience interested in the businesses and management aspects of games. Intermediate and advanced audiences will benefit from the presented case studies, and practical use-cases. A special focus is on creative team management, which is the decisive factor in creating game designs, gaming systems, and understanding the consumer side of game experience. The tutorial is especially suited for participants intending to open their own game studios, or being creative team managers.

3. TUTORIAL MODULES

The introduction offers a glimpse of the digital game industry, and the digital game production environment. It shows how games are produced, distributed, and marketed by presenting macroeconomic market indicators and game company relevant microeconomic features. A special focus is to outline the game design process inside a game studio, and an introduction into creative team management.

- brief history of digital games
- game industry as global vertical industry
- PC, console, handheld, and mobile games
- market characteristics and regulation
- game design process
- creative team management

3.1 Audience Behavior, Market, and Society

Media, as digital games are, are not solely about selling content, they are about a service eco-system: consumer electronics, interaction devices, software, online-portals, and consumption cultural value. It especially focuses on the evaluation of consumer experience from a business perspective. This part of the tutorial focuses on:

- consumer behavior and needs
- measuring consumer experience
- targeting the consumer
- game communities
- marketing strategies and impact
- industrial trends and emerging platforms

- games as product

3.2 Producing and Managing Game Designs

This track of the tutorial especially focuses on the managing and producing components of a game. It presents the different management functions (planning, organizing, directing, and controlling), roles, skills typically required in media industries in various positions across the game development company. A very special focus is on techniques stimulating the creative team work. Besides this track focuses on:

- methods for stimulating creative team work
- technologies and software in a game studio
- production processes from idea to distribution
- management functions, roles, and skills
- organization of a game studio

3.3 Business Models and Case Studies

Within the scope of this track, the tutorial presents 3 different case studies of successfully produced games. It reviews management decision, market placement, innovation process, and why it was successful from an audience perspective. The following list shows the detailed points of this track of the tutorial:

- selected digital PC Game
- selected mobile Game
- selected location based games

3.4 Creativity Workshop: From Creative Idea to Business

In this practical workshop, the audience will design and evaluate a creative game idea. The main emphasize of the practical workshop is on the idea development phase of games. Tutorial participants will develop in teams a game idea by applying the method of "Design Thinking". To enable competition, the best game idea will be selected, and evaluated according market potential, business model, production process, and audience parameters. The direct outcome of the workshop will be presentation of the game idea. After the tutorial, the participants will have the chance to create a joint publication, describing the process of idea finding and practical realization of a game idea.

4. TUTORIAL SCHEDULE

The tutorial can be held as half-day or full-day tutorial. For a half-day tutorial, the sub-modules of the tutorial would need to be reduced according the requirements of the conference organizers (e.g. by removing "Businesses Models and Case Studies"). However, the practical part of the tutorial would still remain intact.

Table 1. Tutorial Schedule

Time	Topic
09:00-09:30	Introduction
09:30-10:30	Audience Behavior, Market, and Society
10:30-10:30	Coffee break
10:30-12:00	Producing and Managing Game Designs
12:00-13:00	Lunch break
13:00-14:00	Business Models and Case Studies

14:00-14:30	Coffee break
14:30-17:00	Creativity Workshop: From Creative Idea to Business

5. TRAINER'S BIO and EXPERIENCE

5.1 Tutorial Relevant Experience

The trainer established in spring 2009 the EMMi Lab. (Entertainment and Media Management) laboratory, and utilizes since several years the Design Thinking method in various workshops, and as part of the teaching curriculum (e.g. SAME workshop series, student exercises,). Previously held tutorials attracted a wide audience (e.g. ACM Multimedia 2009, EuroITV).

- Lugmayr, A. (2009). Ambient Media, EuroITV 2009, Leuven, Belgium
- Lugmayr, A. (2009). Ambient Media and Beyond, ACM Multimedia 2009, Beijing, China
- Lugmayr, A. (2009). HCI in the Era of Ambient Media – And beyond 2009 INTERACT Tutorial. Human-Computer Interaction – INTERACT 2009: 938-939. (not held)
- A. Lugmayr, "Ambient media and beyond," in conference tutorial (2h) Silicon Valley, California, USA: 1st International Conference on Designing Interactive User Experiences for TV and Video (uxTV) 2008, 2006 <http://www.uxtv2008.org>.
- A. Lugmayr, "Ambient (intelligent) media and beyond," in conference tutorial (half-day) Salzburg, Austria: European Interactive TV Conference (EuroITV) 2008, 2008 <http://www.euroitv2008.org>.
- A. Lugmayr, "Modern Techniques in Professional Film & TV Productions," in conference tutorial (half-day) Amsterdam, Netherlands: European Interactive TV Conference (EuroITV) 2007, 2007

5.2 Short Bio



Prof. Dr. Artur Lugmayr describes himself as a creative thinker and his scientific work is situated between art and science. Starting from July 2009 he is full-professor for entertainment and media production management at the Department of Business Information Management and Logistics at the Tampere University of Technology (TUT); EMMi – Entertainment and Media Production

Management (<http://webhotel2.tut.fi/emmi/web/>). His vision can be expressed as to create media experiences on future emerging media technology platforms. He is the head and founder of the New Ambient Multimedia (NAMU) research group at the Tampere University of Technology (Finland) which is part of the Finnish Academy Centre of Excellence of Signal Processing from 2006 to 2011 (<http://namu.cs.tut.fi>). He is holding a Dr.-Techn. degree from the Tampere University of Technology (TUT, Finland), and is currently engaged in Dr.-Arts studies at the School of Motion Pictures, TV and Production Design (UIAH, Helsinki). He chaired the ISO/IEC ad-hoc group "MPEG-21 in broadcasting"; won the NOKIA Award of 2003 with the text book "Digital interactive TV and Metadata" published by Springer-Verlag in 2004; representative of the Swan Lake Moving Image & Music Award (<http://www.swan-lake-award.org/>); board member of MindTrek (<http://www.mindtrek.org>), EU project proposal reviewer; invited key-note speaker for conferences; organizer and reviewer of several conferences; and has contributed one book chapter and written over 25 scientific publications. His passion in private life is to be a notorious digital film-maker. He is founder of the production company LugYmedia Inc. (<http://www.lugy-media.tv>). More about him on <http://www.cs.tut.fi/~lartur>.