# Play, Design & Services



**Ramon Llull University** 

### **Service Ecosystems**

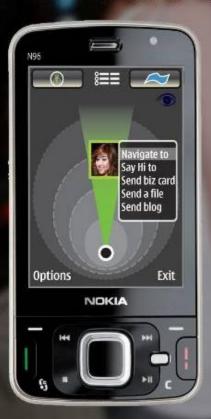




- Over 75% of the economy is services
- Moreover even physical products are composed of physical artifacts and service layers
- Fundamentally related to consumer experience
- Many problems of innovation are related to service and process design
- Techno- focus design errors (Internet, SMS, etc)
- For some problems, looser, less deterministic methods of innovation and design are useful



Point to send a message or flash image







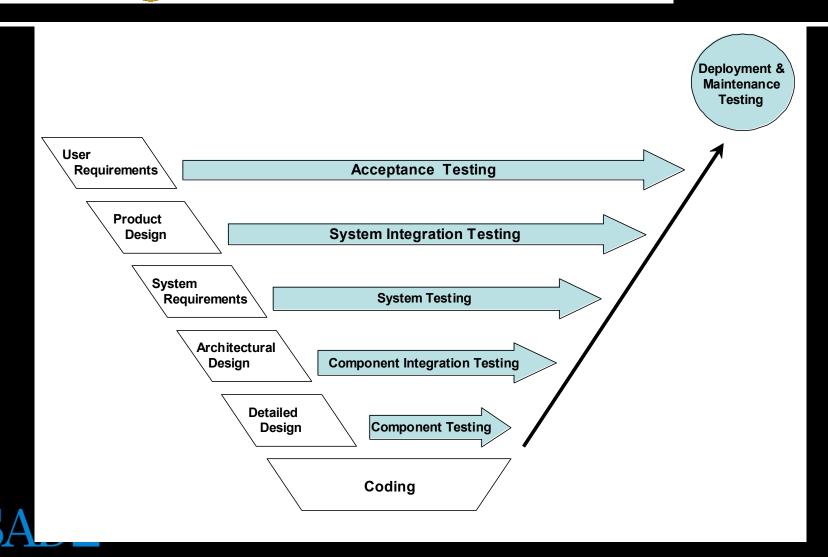


# Play and Design

- practical, creative resolution of problems or issues that looks for an improved future result
- creative process based around the "building up" of ideas. There are no judgments in design thinking
- eliminates the fear of failure risk taking & play



# Traditional Development & Testing



### **Problems of Socialization**

- "The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to him. Therefore all progress depends on the unreasonable man." George Bernard Shaw
- Goal Create a social context where it is OK to unreasonable – expand with context of play



### Valid & Invalid emotions...

#### Valid

- Rational design
- Optimization
- Satisficing
- Self interest
- Economizing
- Aesthetics (maybe....)

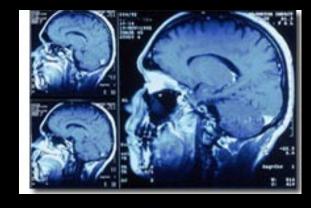
- In-Valid
- Fear
- Jealousy
- Altruism
- Sympathy
- Happiness
- Hope
- Religious faiths
- Collectivism vs. individualism



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### Watch a Video Introduction to Play

- Attunement play
- Body play & movement
- Object play
- Social play
- Imaginative and pretend play
- Story telling narrative play
- Transformative, integrative and creative play
  - http://www.nifplay.org/what\_opp\_corporate\_md.html





### **Serious Games**

- Premises:
  - More fun = more time
  - Experiential
  - Physiology : excitement=dopamine = increased memory
- Examples
  - Teaching patients to cope with treatment
  - Teaching medical students anatomy &immunology
  - Simulations, public policy, epidemics, public planning









# **Design Thinking**

- Bring methods of product design to focus on a variety of problems
- More than expensive plastic
- Methods of ethnography, anthropology and psychology well aligned towards consumer experience and services
- Many problems with a focus of social responsibility and change



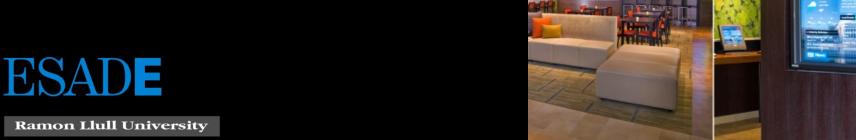






# **Premises**

- Empathy
- Play
- Quantity
- Wicked problems no obvious solutions
- Emotion focus on experience and feelings, not rationality



### **Define**

- Decide what issue you are trying to resolve.
- Agree on who the audience is.
- Prioritize this project in terms of urgency.
- Determine what will make this project successful.
- Establish a glossary of terms.





### Research/Observation

- High & Low tech ethnography
- Shadow customer
- Behavioral mapping, photographing
- Consumer journeys
- Camera journals
- Storytelling
- Un- focus groups







### **Brainstorming/Ideate**

- Do not judge play, go for the wild
- Generate as many idea, no "buts"... Only "ands"
- Log your brainstorming session.
- Go for quantity not quality
- Have one conversation at a time stay on topic – no interrupting or dismissing
- Be visual & physical





# Rapid Prototype

- Make models of products and ideas
- Play with materials and models
- Use movies to model user experience
- Cheap, easy, fast
- Create many scenarios in a physical space
- Body storm and role play define different types of consumers and act out their roles





### **Choose/Narrow focus**

- Select the powerful ideas.
- Focused prototyping.
- Set aside emotion and ownership of ideas.
- Engage the client get agreement from stakeholders.
- Remember: the most practical solution isn't

always the best.





# Implement

- Assign tasks.
- Execute.
- Deliver to client.
- Delivery team from design, engineering, sociology, psychology, anthropology, medicine, zoology, etc.



#### Business' new specialists



Concentration, Structure, And an unbelievably high level of precision. Not all tasks are easy. That is why there are Specialists.

Specialisterne is the first company in the world to base its concept on employing people who have autism spectrum disorders, ASD. The business utilises the special abilities of those with autism to solve valuable tasks in areas such as programming, software testing and data registration - tasks that require a high level of precision, systematics and endur-

#### More than a business

Specialisterne is a consultancy company functioning under regular market conditions and has experienced consistent growth since its conception. But Specialisterne is more than a business. The company's goal is to change the world's view about autism - and demonstrate that a person with ASD can develop into a skilful and valuable employee capable of contributing to society on an even par with everyone else. Using their previous experiences, Specialisterne plan to internationalise their business to create as many career opportunities as possible for people with ASD.

#### Competency development with LEGO® robots

In a collaborative effort between Specialisterne and the

#### Specialisterne in Brief

- Founded in January 2004 by Thorkil Sonne after his son was diagnosed with ASD
- 38 employees, 30 with ASD, located in Århus and Høje Taastrup, Denmark (as of September 2006)
- Manager: Thorkil Sonne Has solved tasks for numerous companies such as TDC,
- CSC, Systematic, Cryptomathic and Grundfos
- Learn more by visiting www.specialisterne.dk

candidates, the candidates are sent through an intensive job training and awareness program to identify their competencies and future plans. For this purpose Specialisterne use a range of educational tools such as the unique LEGO® MINDSTORMS\* Education robotics technology, which is ideal for developing strong competencies in persons with

#### A partnership with an international perspective

While using MINDSTORMS Education in its business, a strong partnership developed between Specialisterne and LEGO Education, the educational division of the LEGO Group. The two companies have created a close partnership in order to share knowledge and experience, so that MINDSTORMS Education can be used to help people with ASD at an international level.





#### Specialisterne and LEGO Education building bridges to the job

Specialisterne use LEGO® MINDSTORMS® Education robotics technology to train its candidates.

Very few think about the fact that a handful of LEGO® bricks can be an amazing training tool. However, in the hands of a person with ASD, the bricks can be the key to opening future career opportunities.

#### LEGO play with perspective

When Thorkil Sonne's son, who is also diagnosed with ASD, became interested in LEGO bricks, Thorkil Sonne quickly saw the possibilities in his son's active play with the bricks. Later, when Thorkil Sonne was introduced to LEGO MINDSTORMS Education, a unique robotics technology developed for educational purposes, he saw obvious opportunities to use robotics to develop competencies for people with ASD.

#### Robot helps with job profile

With LEGO MINDSTORMS Education, Specialisterne are able to identify and strengthen a candidate's analytical skills and competencies within systematics and problem solving. In short, building and programming LEGO robots allows a candidate to build a bridge to the job market.

#### LEGO Education in brief

LEGO Education develops teaching solutions that further the students' talent for problem solving, creative thinking and cooperation.

learning process: the students are given a challenge and are issued the tools necessary to solve the challenge on their own. This way the students experience the thrill of

educational institutions all over the world. Several solutions have won international awards for their high educational value.

www.lego.com\education



MINDSTORMS Education is a robotics toolset, which includes an intelligent NXT brick numerous sensors, motors, programming software and an activities kit.



#### A strong partnership

Obvious commonalities between Specialisterne and the MINDSTORMS Education robotics technology has led to a strong partnership between Specialisterne and LEGO Education. This partnership provides LEGO Education with valuable input into how the existing concepts can be used in new contexts and target groups. And it helps Specialisterne break new ground by providing people with ASD greater opportunities in the business world.







Art Center College of Design



