

# Motivation and Persuasion in Mobile eLearning

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# Motivation and Persuasion in Mobile eLearning

## ≡ Outline:

- ≡ Mobile eLearning
- ≡ Motivation and Persuasion in Mobile eLearning
  - ≡ Reasons for Persuasion
  - ≡ Increasing Motivation and Persuasion
- ≡ Dangers of Persuasion
- ≡ Categorization of Mobile eLearning Applications

- ≡ Mobile eLearning: special kind of eLearning
- ≡ Adaptation of eLearning on mobile devices → usage of mobile devices
- ≡ Definition:  
“Mobile eLearning must include the ability to learn everywhere at every time without permanent physical connection to cable networks.”  
(Georgiev et al., 2004)
- ≡ Representation of the next stage of computer-aided, multi-media and interactive based learning

## ☰ Requirements:

### ☰ Requirements on people:

- ☰ Ability to handle mobile devices
- ☰ Blinding out the environment to learn effectively or involve both the environment and the device

### ☰ Requirements on devices:

- ☰ Highly portable and lightweight
- ☰ Available anywhere
- ☰ Easy to use by people with no previous experience of the technology
- ☰ Adaptation to the learner's abilities, knowledge and learning styles is required
- ☰ Enabling wireless communication

## ≡ Possibilities:

- ≡ Learning is possible anywhere and anytime
- ≡ Because of GPS or wireless networking technology learning becomes location-independent
- ≡ Learning process becomes more comprehensive and flexible
- ≡ For disabled people good educational opportunities

## ≡ Concerning persuasion:

Many people use mobile devices in their daily life → opportunity of more engagement, motivation or interest in learning

# Motivation and Persuasion in Mobile eLearning

## ≡ Persuasion through mobile devices:

- ≡ Very young research field
- ≡ Outrider: Stanford University → B.J. Fogg (investigation since 2001)
- ≡ Only since 2006 active participation also from other researchers

## ≡ Statements:

“Mobile phones will soon become the most important platform for changing human behavior.”

“We are on the cusp of a persuasion revolution.”

(B.J. Fogg, 2007)



<http://www.bjfogg.com>

# Motivation and Persuasion in Mobile eLearning

## Reasons for Mobile Persuasion

≡ Mobile devices can be:

≡ “The heart”

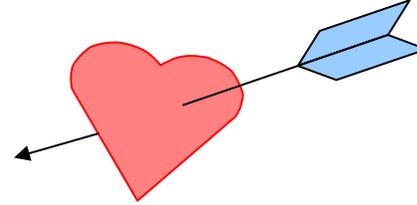
≡ “The wristwatch”

≡ “The magic wand”

(cp. B.J. Fogg, 2007)

# Motivation and Persuasion in Mobile eLearning

## Reasons for Mobile Persuasion



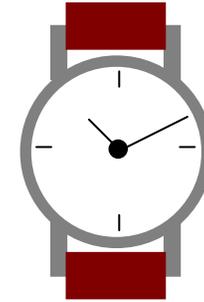
### ≡ “The Heart”:

- ≡ “Like the love of your live, the mobile phone completes you.” (B.J. Fogg, 2007)
- ≡ People carry their mobile device always with them
- ≡ People feel anxious without their mobile device
- ≡ Advantage over other devices: much more personalized and practical

→ Mobile-human relationship can become the most personal, intensive and lasting of all relationships

→ Chance to addict to new experiences and the possibility to try out new behavior

# Motivation and Persuasion in Mobile eLearning



## Reasons for Mobile Persuasion

### ≡ “The Wristwatch”:

- ≡ Invention and distribution of mobile devices: important step for people to become more independent and mobile
- ≡ Mobile device can act as a virtual servant: provide information wherever people go
- ≡ Mobile device can play the role of a teammate, a friend or entertainer

→ Persuasion through entertainment

→ Nothing is better positioned in people’s daily life to intervene at the opportune moment

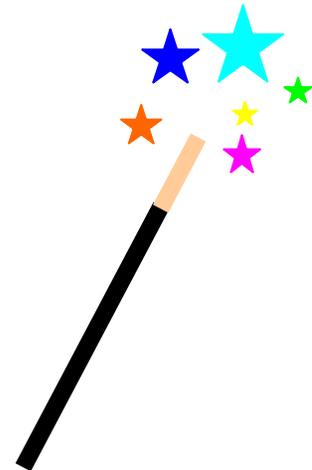
# Motivation and Persuasion in Mobile eLearning

## Reasons for Mobile Persuasion

### ≡ “The Magic Wand”:

- ≡ Mobile phones offer amazing capabilities → they act as a magic wand
- ≡ Special applications can be installed for controlling, coaching or motivating

- Mobile phones are ubiquitous cooperators
- Usage of mobile phones to attain own personal goals
- Mobile phones will become the dominant persuasion channel

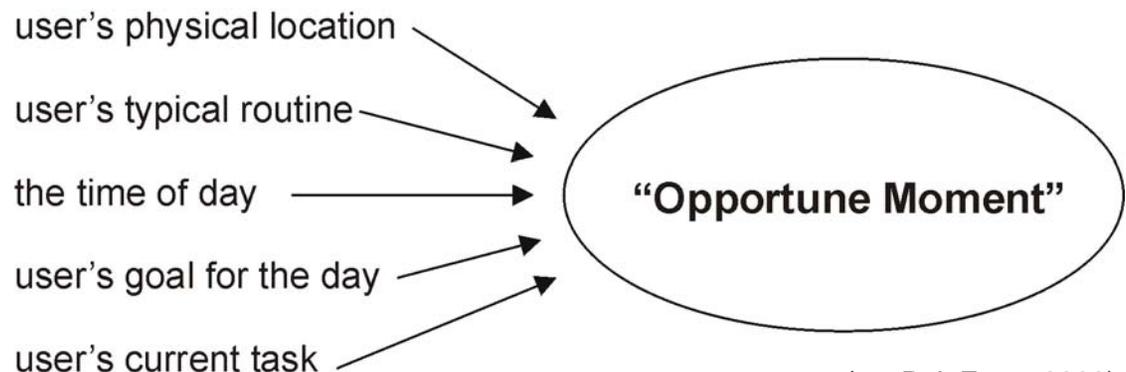


# Motivation and Persuasion in Mobile eLearning

## Increasing persuasion and motivation in mobile eLearning

- ≡ Two main attributes of mobile eLearning: Mobility and Connectivity
  - ≡ Chance to intervene with animation, help, support etc. at the opportune moment
  - ≡ Connectivity offers exchange of experiences, messages, motivation, tips etc.
  - ≡ Building of social networks
  - ≡ Increasing the power of social influence which plays an important part in people's daily behavior

Future mobile technology can determine



(cp. B.J. Fogg, 2003)

## ≡ Ethical danger:

- ≡ Mobile phones offer various technologies (Calling, SMS, Wireless Networks, GPS etc.)

  - Information can be tracked and stored in databases and are easily accessible

- Persuasion channel: used in negative manner / kind of manipulation

- The developers of persuasive technologies have no “adult supervision” or ethical guidance on these matters

## ≡ Danger of emotional dependency:

- ≡ Importance of mobile phones in an emotional manner

- Primarily mobile phones give sense of security

- Risk of becoming habit-forming on mobile devices

- People hand over the responsibility of controlling more and more to their mobile devices

# Categorization of Mobile eLearning Applications

- ≡ Learning and knowledge expansion
- ≡ Persuasion and change of behavior
- ≡ Personal Coaching and Controlling
- ≡ Gaming

# Categorization of Mobile eLearning Applications

## - Learning and Knowledge Expansion

- ≡ Learning software like vocable trainer, driving theory trainer etc. adapted for mobile devices
- ≡ Applications provide solely knowledge expansion
- ≡ Example: **Pocketpauker Anatomie**



(Handylearn Projects H2H e.K., 2008)

# Categorization of Mobile eLearning Applications

## - Persuasion and Change of Behavior

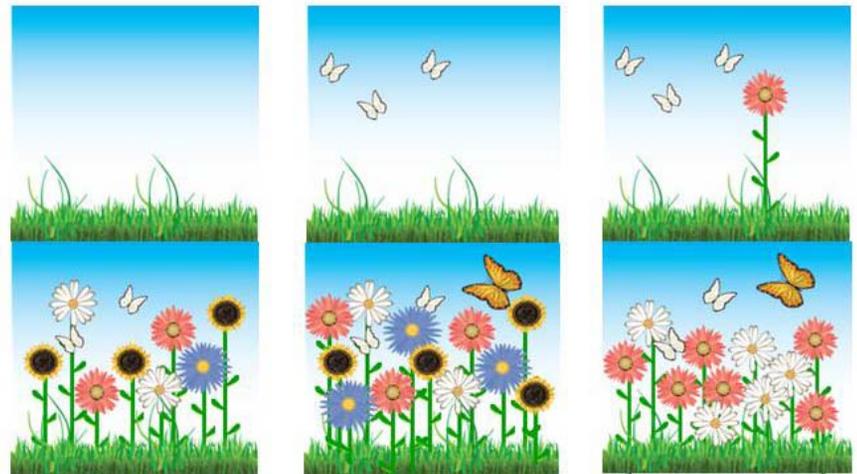
### ≡ Example: UbiFit Garden

- ≡ Application which tries to animate people to increase their daily physical activity



(Intel Corporation, 2008)

- Confrontation with actual physical activity and behavior every time when the phone is used
- Reminder which helps people to attain their goals
- Possibility to diagnose physical activity in a very simple way (at a glance)



(Intel Corporation, 2008)

# Categorization of Mobile eLearning Applications

## - Personal Coaching and Controlling

### ≡ Example: MyFoodPhone

- ≡ Concerns with balanced and healthy nutrition
- ≡ Is based on two technologies: camera function of a mobile device and interactive web-based service
- ≡ Three steps:
  - ≡ 1. Taking pictures of all eaten food during a day
  - ≡ 2. Sending pictures to personal food journal; adding food information
  - ≡ 3. Getting personalized feedback from dietitian (video message)
- ≡ Big web-community complements the basic service



(Rowse, 2008)

# Categorization of Mobile eLearning Applications

## - Personal Coaching and Controlling

### ≡ Example: MyFoodPhone

- People become in an insistent way aware of what they eat and drink
- Community can be used to share photos, information, help, support or motivation
- Intuitive but also very powerful application which helps to improve diet-related behavior



(Reiter, 2008)

# Categorization of Mobile eLearning Applications

## - Gaming

### ≡ Example: Cruel 2 B Kind



(McGonigal and Bogost, 2008)

- ≡ Game of benevolent assassination: opponents are killed by kindness
- ≡ Live action game especially designed and developed for mobile phones
- ≡ Is played outside in a real world environment in a defined area
- ≡ Each player is assigned with a secret weapon and weakness: compliment

- Task: Giving compliment to almost everyone in the street
- Instead of disregarding fellow citizens: constraint to interact with them
- Practice alternative social behavior



(Trefry, 2008)

# Motivation and Persuasion in Mobile eLearning

## ≡ Conclusion:

- ≡ Concerning learning: many advantages of mobile devices over other devices
  - mobility and connectivity aspect
- ≡ Even now many interesting ideas for help- and useful applications
- ≡ Most of applications work on a positive manner
- ≡ Critique:
  - ≡ Some exaggerated assumptions
  - ≡ Influencing factor is described as very high

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