

User Centricity: Privacy and Security Issues

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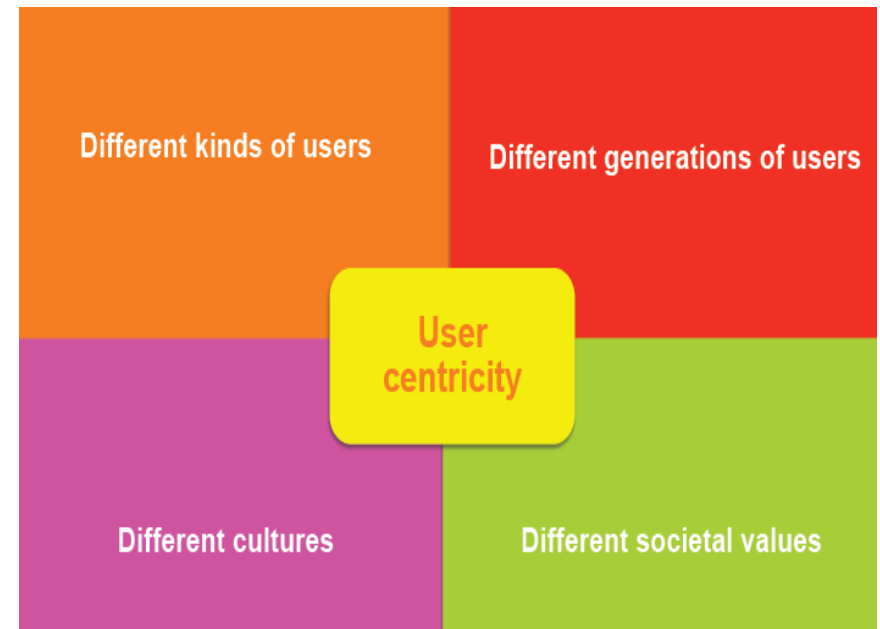
What is User-Centricity?

- A design philosophy in which the needs and expectations of the end user of an interface are the centre of focus.

(<http://www.igi-global.com/dictionary/user-centricity/31261>)

- Let your users be inspired. Give your team the tools, access, information when, where, and how they want it.

(<http://www.usercentricit.com/>)



*Human-oriented/ Citizen
Trust, Privacy and Security*

- User Centricity -

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Security & Privacy



*Human-oriented/
Citizen
Trust, Privacy and
Security
- User Centricity -
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- Today's rich service offer in the World Wide Web increasingly requires the disclosure of personal user data.
- Service providers' appetite for personal user data, however, is accompanied by growing privacy implications for Internet users.
- Targeting the rising privacy concerns of users, privacy-enhancing technologies (PETs) emerged.
- One goal of these technologies is the provision of tools that facilitate more informed decisions about personal data disclosures.
- Unfortunately, available PET solutions that protect personal user data are used by only a small fraction of Internet users.
- A major reason for the low acceptance of PETs is their lack of usability.
- Furthermore, most PET approaches rely on the cooperation of service providers that do not voluntarily adopt privacy components in their service infrastructures.
- Addressing the weaknesses of existing PETs, this work introduces a user-centric privacy architecture that facilitates a provider-independent exchange of privacy-related information about service providers.

Jan Paul Kolter
Dissertation, Sept 2009
University of Regensburg
User-Centric Privacy – A Usable and Provider-Independent Privacy Infrastructure

More effective User-centric Trust, Privacy & Security

International WG

Collaboration with Experts who have already done excellent work to efficiently integrate their work (Mary Ellen Zurko, Kostantin Besnosov, etc.)

Multidisciplinary WGs

Identification of inter-relationships between the different disciplines regarding Trust, Privacy and Security

More effective User-centric Trust, Privacy & Security

International Multidisciplinary Workshops

Facilitate the design of usable, socially accepted and economically viable secure services

Collaboration with Standardization Organisations

Definition of Standards involving REAL user needs regarding Trust, Privacy and Security

Human-centric Trust, Privacy and Security

Collaboration between legal, psycho-socio, technology and security experts

Multidisciplinary workshops/ WGs (targeted countries)

Non-security experts citizens/developers

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Gamification in the Internet of Things



Panel: User-centricity in a Smart World: Between Human Factors and the Internet of Things.
CENTRIC'15 Conference.

Inmaculada Rodríguez PhD. University of Barcelona.

The first
“thing” in
the IoT.



John Romkey, Simon Hackett, 1989

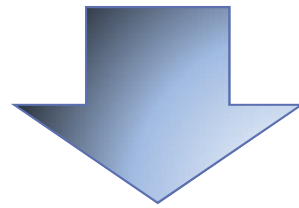
From now
on.



Photograph: Peter Menzel



Whoa!
What a
huge leap!



New
Interaction Design (IxD)
approaches.

- More and more devices
- More and more users
- More and more apps

How can some designs gain
advantage over others?

- More and more devices
- More and more users/communities
- More and more apps

How can some designs gain
advantage over others?

Motivational Design

Gamification is the application of game-design elements and game principles in non-game contexts.



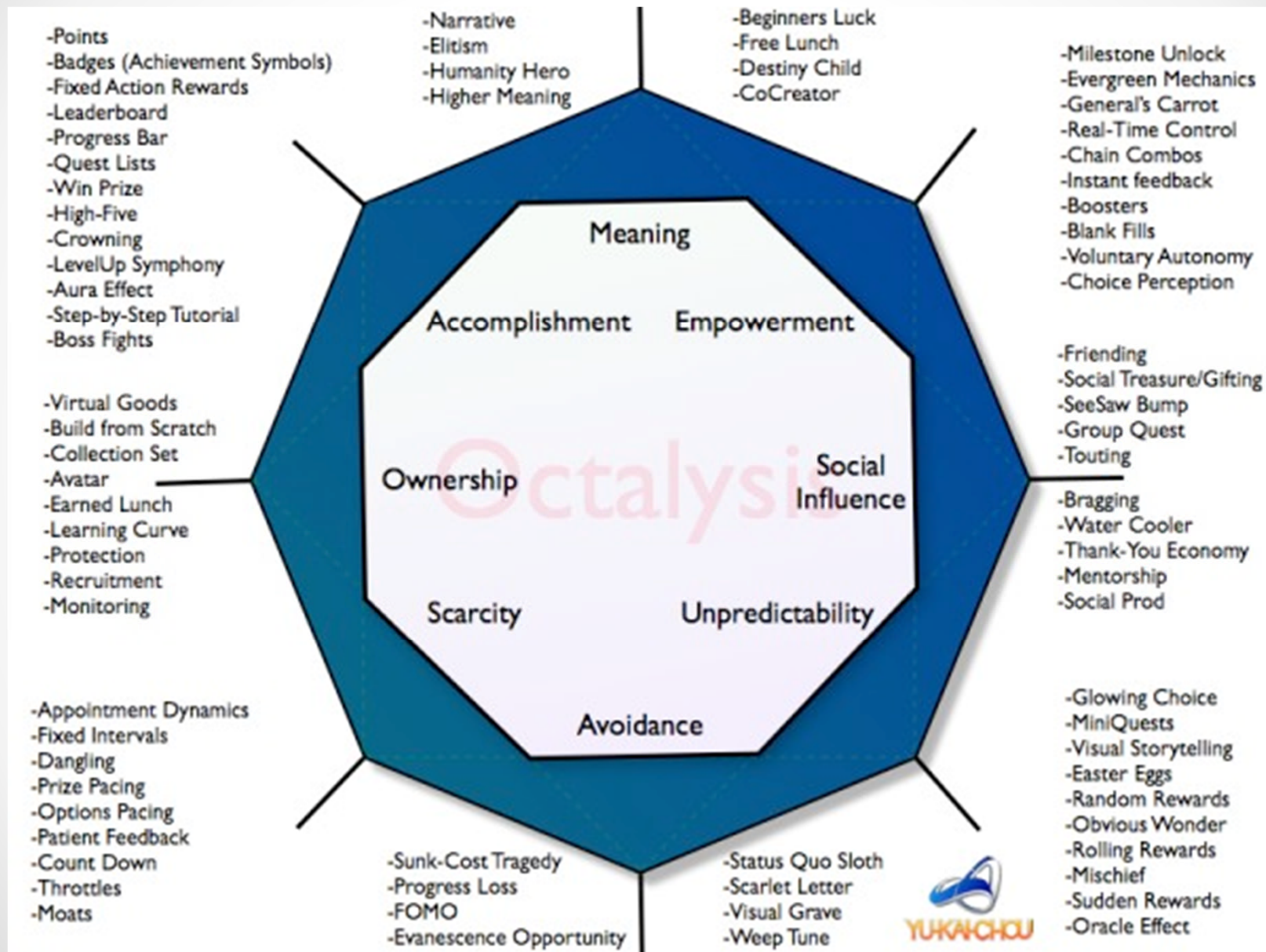
From elearningindustry.com

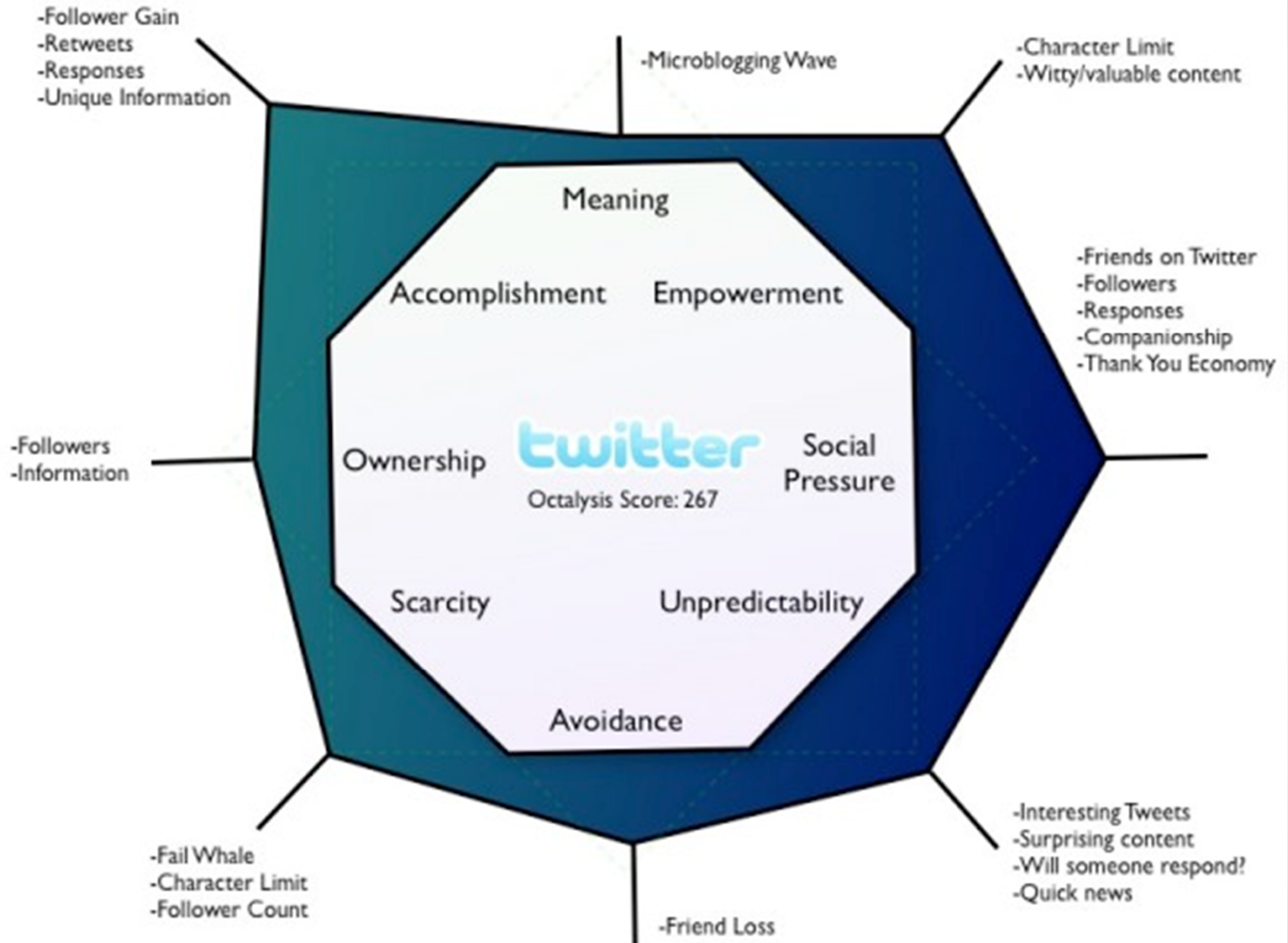
Gamification is the application of game-design elements and game principles in non-game contexts.



Challenge:
Design Human-Centric experiences that focus on the motivations and rewards that truly engage IoT users.

Octalysis Gamification Framework





Marczewski's player and user types hexad.



Thanks for hearing
:)

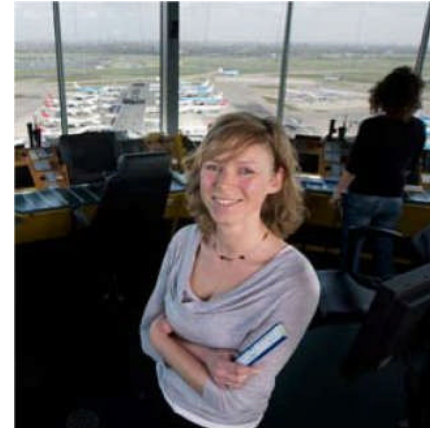


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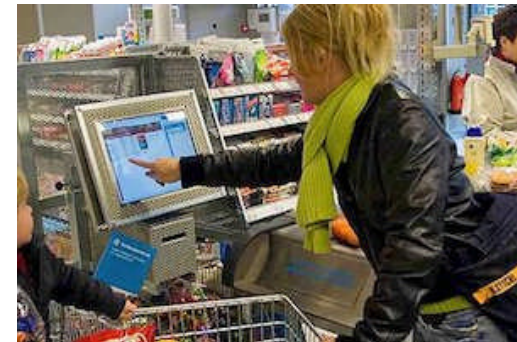
HMI design and validation
pilots,
air traffic controllers,
maintenance engineers





Human factors and the Internet of Things

An everyday example



Pros

Great!

Time efficient

Cons

What if you want to put back a product?

Quite a number of cards and devices

Potential of manipulation of buying behaviour

Dilemma: do I provide my personal details to make use of this system?