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Lessons learned from open innovation business development in lighting

TNO, CL, DL, LIV, CICAT, GLV

Open innovation business development

Objective:

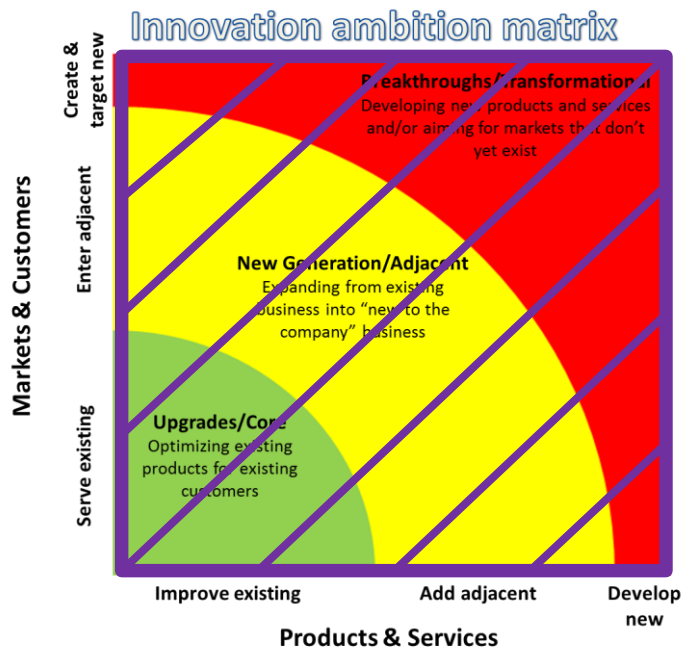
Accelerate deployment of value enhancing SSL solutions
= growth by innovation in
products, systems, business models, services, marketing ...

Business development = preparation of potential growth opportunities; facilitate and monitor the implementation

Open innovation → collaboration with other stakeholders in the innovation phase (from early on); more successful in clearing obstacles

Extra requirement: public communication of experiences

Innovation cases



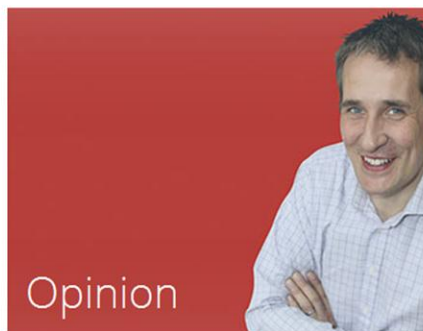
26 business development cases:
covering the whole innovation matrix,
covering multiple options in business
development,
covering many value enhancements,
much more than HCL
and green business development,
in 5 European regions

Involving stakeholders

Quadruple helix



Lessons learned 1



“The big issue I have with all the HCL research is that, while I can be convinced of the arguments and can understand the implications, it doesn’t reflect what I experience in my real life.”

= actual business obstacle

Lessons learned 1



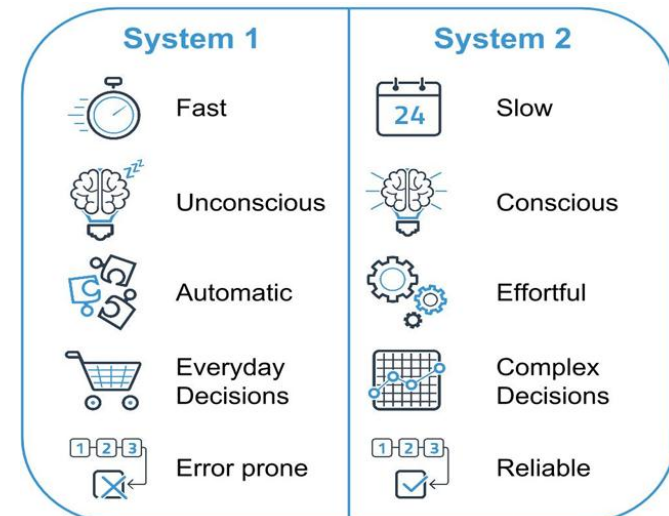
“... it doesn’t reflect what I experience in my real life.”

But: the ‘experiences’ do NOT invalidate the HCL results or recommendations.

No single conclusion on HCL can be drawn from those experiences → non-rational reasoning (fast brain).

Majority of human thinking is non-rational.

Majority of decisions is non-rational.



Lessons learned 1



<https://www.youtube.com/embed/dQXFIDEGnhE?start=12&end=38>

~~Non-visual aspects~~ → colour → emotions
= ok for fast brain process



Picture: Philips Healwell

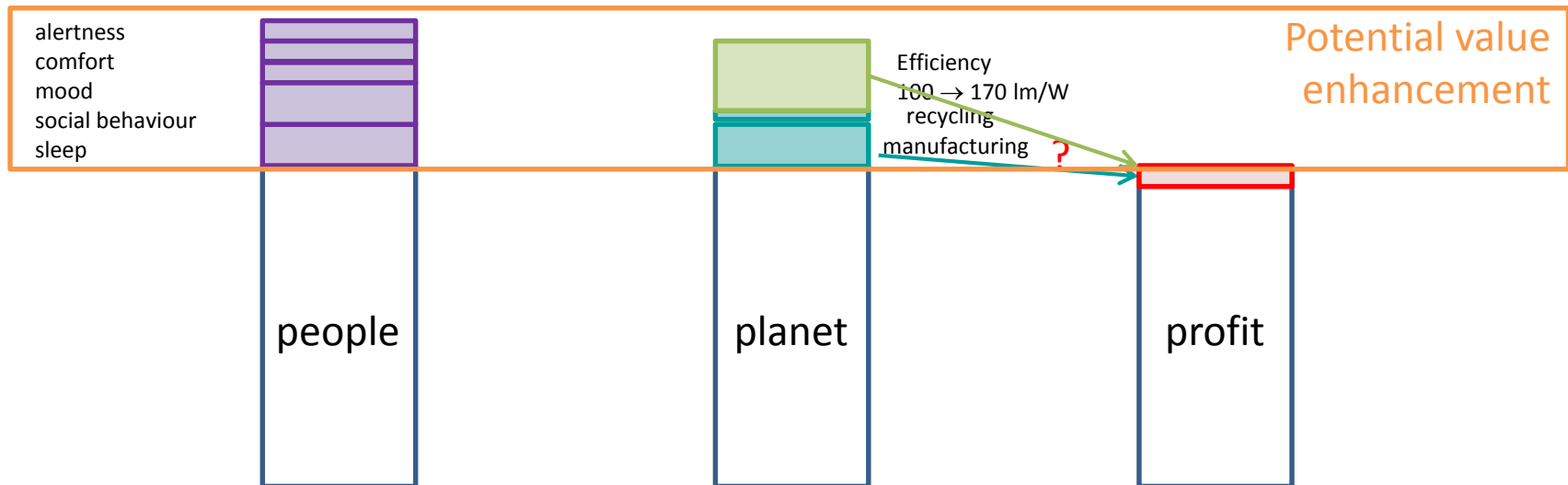


Picture: Brocken Inaglory, wikimedia

Lessons learned 2



Value of lighting in companies according to sustainability



Value enhancing SSL solutions:

Value according to sustainability / green business development:

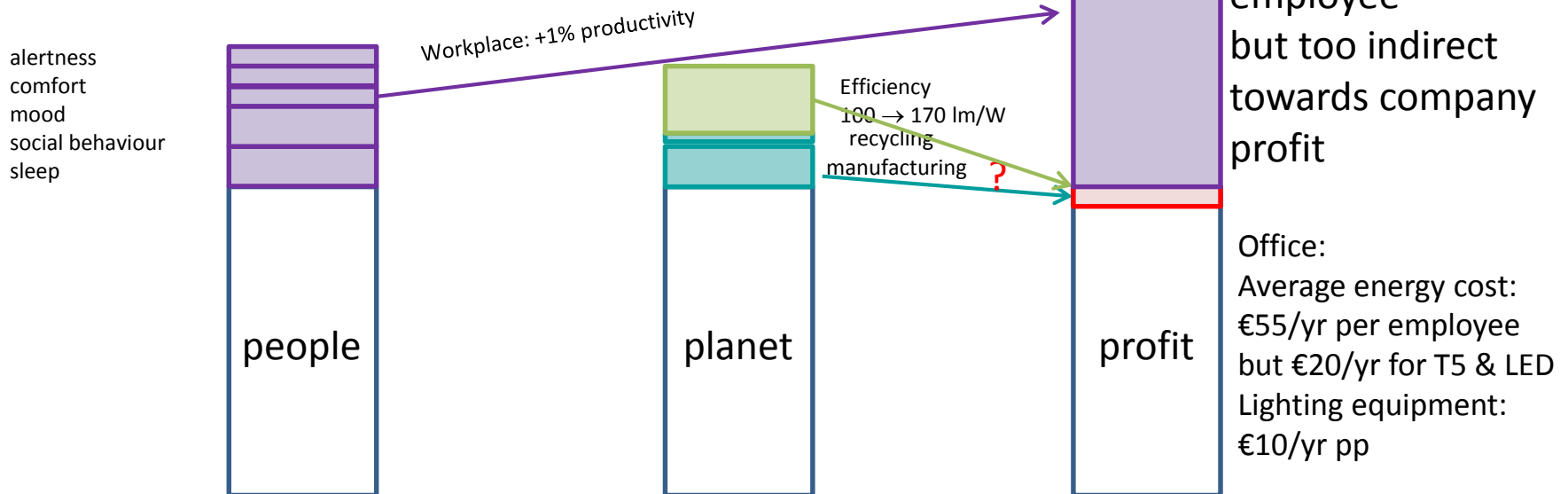
Still very rare in companies (>< uptake in cities)

Current local energy performance calculations of buildings are a serious obstacle

Lessons learned 2



Impact of lighting in offices



Value enhancing SSL solutions:

Value according to sustainability / green business development:

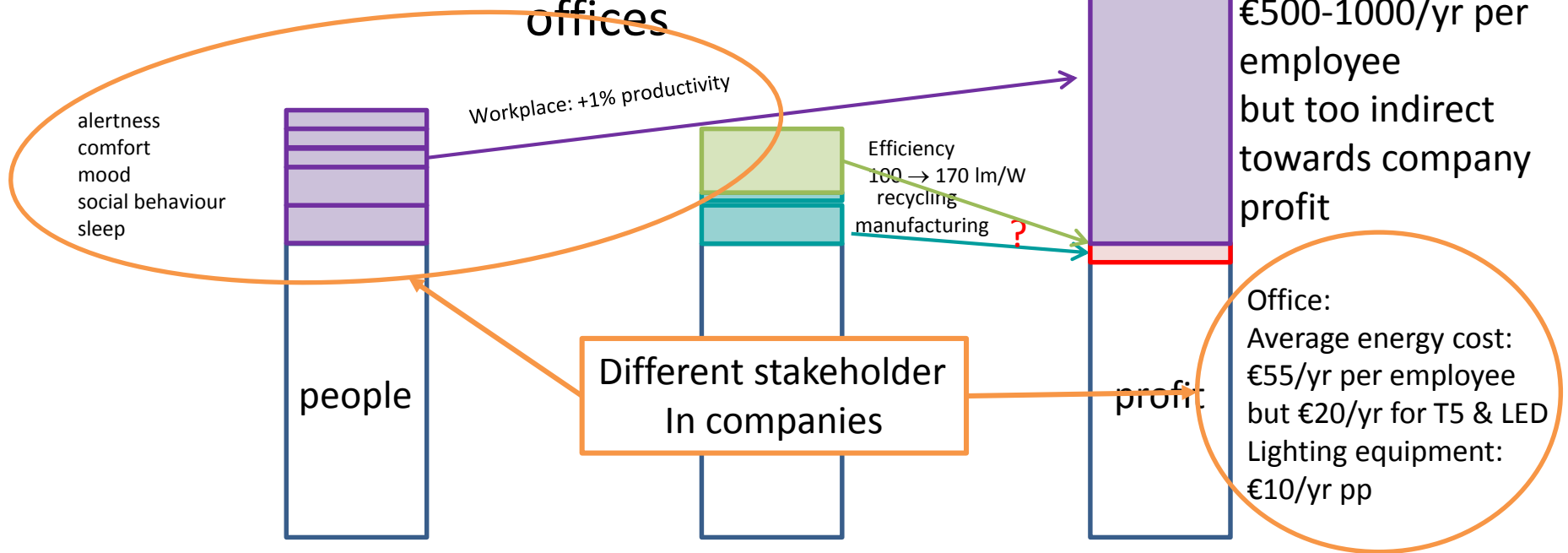
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Lessons learned



<https://www.youtube.com/embed/ggd3m4uoo4w?start=190>

2 business development cases:

‘The Window’ & ‘The Better Light, Better Control’

Most important lessons:

- ✓ Goals can change
- ✓ Consortias can change

Least expected:

- Outside parameters

- Change goal

- The window: regulatory restraints

- Inside parameters

- Consortias

- The Better Light, Better Control:

- Different partners = different time perspectives

The Amber light



Most important lessons:

- ✓ Partners of the consortia have to be fully involved from the beginning till the end.
- ✓ Important to taking into account the tests and the customer feedback.

Least expected:

- ✓ Consortia's sometimes forgot to keep in mind the overall objective of the BDE.
- ✓ The market place is not always very receptive to new ideas and innovations.

- *“Industrial development of SSL new products takes a total of two to three years, which includes prototype development, testing, first series and final large scale industrialization. Funding during this period is a major constraint”*



Jérôme Fourot, CEO, Novaday

Business experiment dealing with luminaires for renovation in buildings, Cluster Lumière, France

- *“Open Innovation not only allows identification of innovative adapted solutions, but can accelerate the development process, and reduce risks of failure ”*



Arch-Ing. Christophe Marty, Associate Director, Ingélux

Business development concerning luminaires for metro stations with interchangeable light engines, and airport lighting for lounges. Cluster Lumière, France

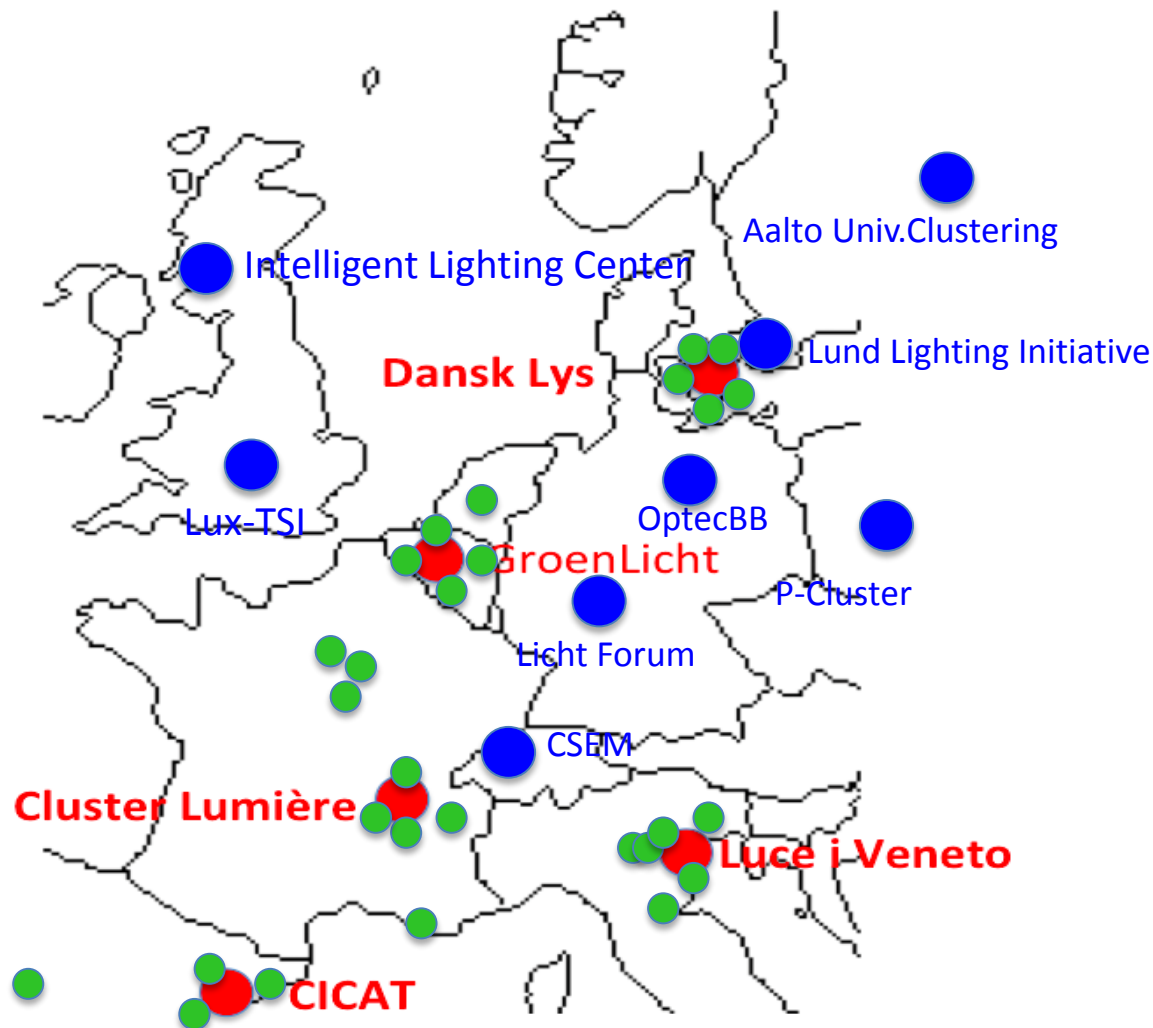
- *“Building a successful experiment with the client is the key target, prior to massive production of lighting solutions. This means that we have to be excellent in development and services”*



CEO, Lenoir Services

Business development concerning stair case lighting for metro stations, Cluster Lumière , France

Cross-cluster collaboration



- Lighting Clusters involved in SSL-erate (WP4)
- Lighting organizations having participated in Meetings with SSL-erate Lighting Clusters
- Clusters having conducted Actions with SSL-erate lighting Clusters

- “*Open Innovation approach is easier to manage locally, with clusters stimulating contacts between stakeholders, and taking cross-clustering initiatives”*
- *Cross-clustering at European level contributes to upgrade tools, methods, and strategies...*



Prof. Dr Marc Fontoynt, Cluster Lumière, Vice-President European Lighting Cluster Alliance (ELCA)