

# Future laboratory CreaLab

## Annual report 2014

### Research 2014

#### A flexible and new working environment – A diagnosis at social and economic level

(Manager: J. Meissner)

The project deals with the importance of paid and unpaid work, new forms of work including their statutory regulations as well as the economic impact. Creating a flexible and self-determined working environment becomes more and more important for employers and enterprises. Due to the intensive use of modern information and communication technologies, an increase in efficiency can be achieved. One example to achieve this would be the introduction of mobile-flexible working arrangements. The aim of the project was a detailed analysis of the risk and opportunity potential of current trends. An overall assessment and recommendations are to follow.

#### Ki@K – Understanding culture as a small enterprise

(Manager: R. Stäheli)

The project Ki@K offers a coaching or further education for employees and managers within a small enterprises and public organisations. The aim of the project is to show what great impact art and culture can achieve beyond a decorative function. Cultural events can bring joy, create meaning, and strengthen the cohesion and networking in small enterprises internally as well as with external stakeholders.

#### Mobile living and working

(Manager: S. Amstutz)

The main objective of the project is to create sustainable and temporary modules for living and working spaces. These should be very cost efficient, assembled and disassembled within two or three days and delivered by a regular truck. The architectural trade-off is to produce low cost



IKEA-like products, which at the same time are economically valuable, environmentally sustainable and in terms of design, and appealing to customers in the creative industries. During the project, the feasibility of such an idea will be tested and a concept will be created to then finally implement this idea.

#### RÄMSKI – spatial medial settings for teamwork in innovation processes

(Manager: J. Eckert)

The project addressed the question 'How can virtual teamwork be improved by using suitable spaces and technologies in the future working environment?' In order to gather the needs of users in virtual teamwork an online survey that looks into the interplay between technology and space settings was conducted. The aim was to achieve ideal settings, which includes the

developing and testing of the first prototype rooms and furniture for virtual teamwork. A total of 95 participants were involved, 2/3 of academic knowledge workers at the Lucerne University of Applied Science and Arts and 1/3 of employees of two companies (the large company SAP and the small company 'Erlebnisplan'). The result of the evaluation is based on 4 typologies:

1. Workshop room / extended meeting room
2. Individual workspace
3. Video conference
4. Solutions for open office environments

For further details and results please click the following link:

[http://blog.hslu.ch/crealab/files/2013/09/RAEMSKI\\_Endbericht\\_141007.pdf](http://blog.hslu.ch/crealab/files/2013/09/RAEMSKI_Endbericht_141007.pdf)



**Meet2Create – Collaboration Space** (Manager: S. Amstutz)

The CCTP was happy to start a project for the EMPA in January 2013. The EMPA planned a new building for research named „NEST“. A highly installed backbone of concrete is used as vessel for modular research units. The units are specifically designed according to a research projects' content, placed within the supporting backbone and replaced after completion of the research by other modules again. People would live, work and spend their leisure time in these units. The CCTP's is not only responsible for the design and implementation of the leading house unit but also for monitoring the work environment of the researchers who work in these units. In addition to ensuring a functional operating system of the offices, the units of Meet2Create also serve as a laboratory for interdisciplinary research, focusing on future working environments.

**S (t) mart - ups for generations**

(Manager: P. Wolf)

The goal of this project is to achieve a better use of the potential capacity of generations to 50plus and 65plus through the establishment of s(t)mart-ups for engineers (specialists and managers) in Switzerland. With this project, Geiger Evolution aims to understand the potential of a new business model that can be offered in their offices in Zurich, Lucerne and Sempach and covers a niche market. The aim of the project is to provide assistance to start-up companies from the targeted generations. It is to be expected that the success rate may be increased to 80%. In case of a great success the potential savings will be immense. The employability of the targeted generation will be strengthened and long-

term unemployment (40%) is greatly reduced. For this business model there is a business plan that will be implemented.

**ToMap - A toolbox for the management of transdisciplinary projects** (Manager: P. Wolf)

The starting goal for the project launched in June 2013 was the observation that in applied transdisciplinary research projects involving academics and practitioners, very often a classic approach for project management is used. This approach is characterized by the concept of rationality, a point of view from which work and work power as controllable and a „command and control“ approach. Hierarchical project management appears promising and the projects usually are planned detailed in advance. Due to their linearity, the traditional project management and its approaches are thus not able to handle the inherent complexity, dynamics and unpredictable events in applied transdisciplinary research projects.

A literature review of the project group shows that in an integral process project management the approach should be based on four principles: dialogue, materiality, iterativity & flexibility and closeness & distance. However, there are so far little empirical insights into whether and how the four principles in real transdisciplinary projects play a role and how to deal with the resulting challenges. The project explores these dynamics empirically in transdisciplinary projects at the Lucerne University of Applied Science and Arts.

**Peax – An electronic mailbox** (Manager: C. Larbig; Department: W, D&K)

Is it possible to better organize the own mail and process it more efficient by digitizing it?

A bunch of researchers of the CreaLab accompanied the Base Net Ltd during almost four years while developing and testing a solution for internet based processing of mail. Stefan Hermann, Director of Base-Net AG, experienced the valuable research time together as follows: „The main question was how to make complex tasks simple. The CreaLab has supported us in developing a digital interactive platform for processing electronic mail. Thanks to this collaboration the Peax portal was created. „

Peax allows the user to have his correspondences and to process his bills and other interactions with companies via the online portal. A clear overview is guaranteed, because the digital post office is only at one place. For example, all requests for payments can be managed from a single program. In addition, money can be saved and the environment can be better protected. After a year of pilot operation with nearly 500 registered test pilots Peax was honoured with an award from the Chamber of Commerce of Central Switzerland (IHC). Not only was the degree of innovation praised, but also the social benefits of the solution that enables individuals to simplify the secure exchange of data and information with companies and government agencies.

**Corporate Collaboration Space**(Manager: S. Amstutz)

So far, the design of spaces for different forms of cooperation was given too little attention in most companies. The reason is that the traditional thinking includes a low diversity of adaptive work settings for collaborations.

The project aims at identifying the necessary conditions of Corporate Collaboration Spaces (CCS) and the related forms of cooperation. This



includes developing typologies of meeting rooms and facilities for knowledge work in the office infrastructures of the future.

### Initial and continuing education

The CreaLab offers annually a big variety of events in teaching and training. Not only do students from all departments of the Lucerne University of Applied Science and Arts and the University of Lucerne take part in these events, but they also appeal to externally interested guests and partners.

### CreaLab 3rd Summer School, CO Labor'atories – Creativity on Tour (Managers: B. Minder and S. Ossevoort)

Under what conditions can you best be creative when you're mobile? 70 experts and students studied this question during the third CreaLab Summer School between 25th and 29th of August in 2014. The results of the CreaLab Summer School provide rich insights and challenge the traditional concepts of using existing spaces. Ivan Stalder, a consultant of Witzig The Office Company summarizes the research question as follows: „As a specialist for office planning and office furniture, we are interested in the 4th place: The working place outside the office, home office and café. We believe that such 4th places are the future working environment and therefore we would like to know more precisely what constitutes such places.“

The 3rd Summer School CreaLab had no fixed venue - the participants were consistently mobile and set up creativity environments in various places over and over. In addition to furniture that supports mobile creative work, the results provide concrete insights into the characteristics

of mobile working places. To give an example, room dividers and a clear overview of situations are essential for focused mobile working in public places. Not to mention that sheltered places in nature might increase more deep and open discussions. Overall, the great insights from the CreaLab Summer School question the usefulness of fixed spatial concepts such as offices as working places in the future. Besides developing new concepts for products and services as well as business models, the results show that with the right equipment there is potential for creativity in public places.

### Vision Quest (Manager: R. Förster)

Since June 2014 CreaLab offers Vision Quest in different formats. The courses are aimed at supporting individuals to gain access to their personal vision. One of the participants (school teacher) makes her statement as follows: „It was fascinating to see how things in the self-confrontation suddenly gain clarity. Feeling how much strength and energy in this intense encounter is with yourself and nature. As for me I experienced an exhilarating and rewarding moment!“

The aim of the Vision Quest is to explore the personal vision and put it into practice. In order to achieve this, methods such as working with creative techniques and movements are implemented. A Mechanical Engineer summarizes his experiences as follows: „Impressive, how many answers can be found in the nature“. Experiences in nature do definitely broaden our horizon, by relaxing and changing the view of our familiar thoughts old patterns can be broken. This is how a business woman felt after her first intense day: „This approach has enabled me to decide between many options for my future career. On top

of that it came out of myself.“ The exchange in a small group inspired, supported and expanded the own freedom of action. Besides, also for the development of a team it is important to know which path each member would like to take.

### Ideation – Creating new Business Ideas

(Managers: P. Wolf, P. Link)

During the 48 hours of the Creathon, students were intensively involved with new methods to generate and evaluate ideas, as well applying creative techniques and developing them into a business idea. Applying the process of design thinking, the students developed and tested prototypes of their idea. Not only did the students have the chance to work in interdisciplinary groups of different departments, but they also worked closely together with external idea consultants, experts and lecturers.

In the second part of the ISA module, the final business idea was outlined in a business model. Hypotheses were developed and validated. Finally, this business plan was then presented to a jury and judged.

### Speeches and Publications

Within the last year, the core team members hold national and international presentations in various events about different topics, such as:

On 04 June 2014 Patricia Wolf and Peter Troxler led at the R&D Management Conference in Stuttgart a workshop where the participants discussed about the question, „How can the industry use open knowledge sharing in innovation strategies?“ In the workshop the latest trends in research and development in the corresponding topics were presented, reasons

and ways to approach this within the company were discussed.

Jens Meissner attended the UBS Health Forum in Wolfsburg, on 13th of November 2014. His keynote speech was about „Economics 2030: The working environment of tomorrow – mobile, agile, digital“. He illustrated the influence of megatrends in our working environment, as well as how a successful use of flexible working conditions in practice in the future might look like.

On the first Management Symposium for nursing cadres in Zurich, Patricia Wolf gave a speech on September 18 2014 about how employees nowadays can be inspired and motivated for changes.

At the 3rd UNESCO Conference on Technologies for Development which took place from 4th to 6th of June in Lausanne, Urs Gaudenz and Marc Dusseiler represented the topic „Bio hacking“ - Different ways to share knowledge“.

### Working methods

The CreaLab works with an established core team of 17 people from all departments of the Lucerne University of Applied Science and Arts (economy, technology & architecture, art & design, social work and music). The core team is committed to the program development: they're discussing about recent developments, about project proposals, plans and initiatives of CreaLab.

CreaLab also works closely together with students from all departments, where students are given the opportunity to develop their skills by tackling challenging and modern tasks in a problem-solving environment. Among other things CreaLab cooperates openly with external companies in order to enhance the practical world.

Up-to-date information is available in the blog of CreaLab: [blog.hslu.ch/crealab](http://blog.hslu.ch/crealab)

