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Mind the Gap:

Education, Consultancy and Research at CIID

COPENHAGEN INSTITUTE OF INTERACTION DESIGN (CIID) WAS FOUNDED BY SIMONA MASCHI AND HEATHER MARTIN IN AUGUST 2006. WITH AN AIM TO BUILD AN INTERNATIONAL CENTRE OF EXCELLENCE IN INTERACTION DESIGN AND INNOVATION, CIID INCORPORATES THREE ELEMENTS –EDUCATION, RESEARCH AND CONSULTANCY– THAT TOGETHER EXPLORE NEW THINKING IN DESIGN AND TECHNOLOGY.

Copenhagen Institute of Interaction Design (CIID) was founded by Simona Maschi and Heather Martin in August 2006. With an aim to build an international centre of excellence in interaction design and innovation, CIID incorporates three elements –education, research and consultancy– that together explore new thinking in design and technology.

The consultancy element of the institute has been operating since the very beginning and a pilot year of the educational programme was launched in collaboration with the Danish Design School in September 2008. The Interaction Design Pilot Year is a way of co-creating what will hopefully become a 2-year Masters course with the students, faculty and staff that will be part of it. Discussions with Danish and international design schools, companies and research institutes are underway, regarding possibilities for collaboration and affiliation.

The formation of Copenhagen Institute of Interaction Design (CIID) is an attempt to close the gap between education, consultancy and research. Part school, part design consultancy and part research institution, CIID brings together elements that have been traditionally kept separated. The three aspects at CIID are consequently understood less as separate elements and more as different focus points for looking at the world from a design perspective.

Design as a Process of Framing and Focus

The way that CIID seeks to close the gap between education, consultancy and research, is inherent in their approach to design generally. To understand this, let's take a classic interaction design task –redesigning an automated cash dispenser (ATM). Seemingly a clearly defined task, the design process can actually be viewed by zooming in and out of the object, a selection of different 'focus points' that generate different kinds of understanding and insights into the problem.

The design task, for example, can be accomplished by focusing attention on the 'middle distance' of the object itself. This would involve looking intently at the interface, so attention is paid to the interaction between the machine and the person. The design team would iterate and reiterate the interface until it becomes as intuitive as possible. Such an investigation employs skills traditional associated with interaction design.

Now imagine that we zoom out a little, widening the focus to include social processes. This means considering questions like what can be done to remove the uneasy feeling triggered by people waiting behind you or concerns about people loitering nearby? The focus is now not only on the interface but also the surroundings –taking in to consideration how the ATM relates to the street. To solve this problem, interaction know-how may have to be combined with knowledge on psychology, sociology, architecture and urban planning.

Zooming out even further, the design process may now deal with questions over banking systems; perhaps how money is moved from one location to another or how a ready supply of cash at all locations is ensured. These questions will require knowledge of logistics, security and demand management. Zoom out even more and we are involved in questions about the overall banking system itself –the nature and status of money, cash versus electronic payments, lending, credit, foreign transactions and confidence. To create a successful solution, knowledge from other domains, such as finance and law might be required.

Interaction Design is micro as well as macro. We can now zoom in as much as we can zoom out. Zooming past the interface takes a design process to new realms of molecular, nano, subatomic and even genetic design. Again this requires different kinds of knowledge and skills to support the design process. Increasingly the interaction designer is not only expert in design interaction but in cooperation.

At CIID, the ability to operate effectively at different focus points, to scope out a project by changing vantage points, enables creativity when setting the problem. Zoom too far in or out, or for too long, and the detail is removed from the investigation. Yet failing to explore different focus points can mean that a key piece of information is missed, one that might have generated a truly original solution. The art is to find the 'sweet spot' that is both appropriate and fruitful.

This conception is used to provide a holistic understanding of CIID's activities. Rather than treating them as separate entities, they are understood more as tendencies towards occupying particular focus points. The school zooms in and out at will, the consultancy keeps a tight focus, and the research arm enables a sustained investigation at macro and micro levels.

Education

There is an increasing worldwide demand for skilled interaction designers. Interaction Design is now seen to operate at the core of a company's business. It is increasingly difficult to distinguish between products and services. The oft-sited integration between Apple Computer products and services is made possible through interaction design. It's the glue that holds the different elements together and presents new opportunities through their interplay. The development of mobile computing has only strengthened this trend. Added to this, the value that improving usability brings, and the sheer pleasure that artful interaction design can produce, is challenging the dominance of a features-led electronic industrial design. The Wii isn't the most technically advanced gaming solution on the market, yet the intuitive and fun interface is changing the industry.

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1. Copenhagen Institute of Interaction Design. Photo David A. Mellis.

The Interaction Design Pilot Year introduces students to a whole universe of designing interactions and seeks to provide the skills for a discipline that has come of age. The students enrolled on the intensive pilot year receive a deep immersion into interaction design and will complete skills courses (video prototyping, computational design, user research, etc.) and deeper investigations in to graphical user interfaces (GUI), tangible user interfaces (TUI) and service design. Students are encouraged to continually prototype their ideas to develop both practical skills and a keen strategic awareness. An important element of the education is the opportunity to collaborate with 4 industry partners in a set of innovation workshops.

Interaction Design has evolved beyond the point where it was either understood as simply web design or, at the other extreme, the ability to produce 'cool stuff'. Companies, governments and other organisations now recognise the power of the discipline and its potential for a central role in their activities. Interaction designers are moving to centre stage.

By encouraging students to explore a wide range of projects and the close connection and interplay between interaction and service design, CIID seeks to provide them with the skills to play a strategic role in determining an organisation's future direction.

Consultancy

While students are given free reign to explore, the CIID consultancy arm tends to work on shorter, tightly focused projects with clear goals that reflect a faster-paced industry. CIID has already developed a number of partnerships with businesses around the world that were attracted by their emphasis on prototyping and the ability to see things from the user's point of view.

R&D departments have traditionally tended to focus on the back end –how something works– design research is often coming from the other direction i.e. seeking to understand how something is perceived and –particularly at CIID– how users interact with it. The relationship between R&D departments and the interaction designer therefore is rather like two tunnel diggers coming from different locations. They must cooperate to figure out how they will meet in the middle.

Prototyping is central to CIID's approach. Guessing what your customer wants is a very hit and miss affair with far more misses than hits. It's equally problematic to simply ask people/consumers what they want. Often they don't know, or think they want something that in reality they actually don't –they base their requirements on previous experience. Such market research approaches make a paradigm-smashing product or service highly unlikely and will probably lead to unwelcome feature creep. Prototyping offers an alternative path. It engages with the end-user and 'asks' questions in a physical way, persuading users to think outside of their previous experience. Prototyping is fast at CIID, where special quick-build technologies are applied to consultancy projects that are tightly focused in terms of scope and deadline.

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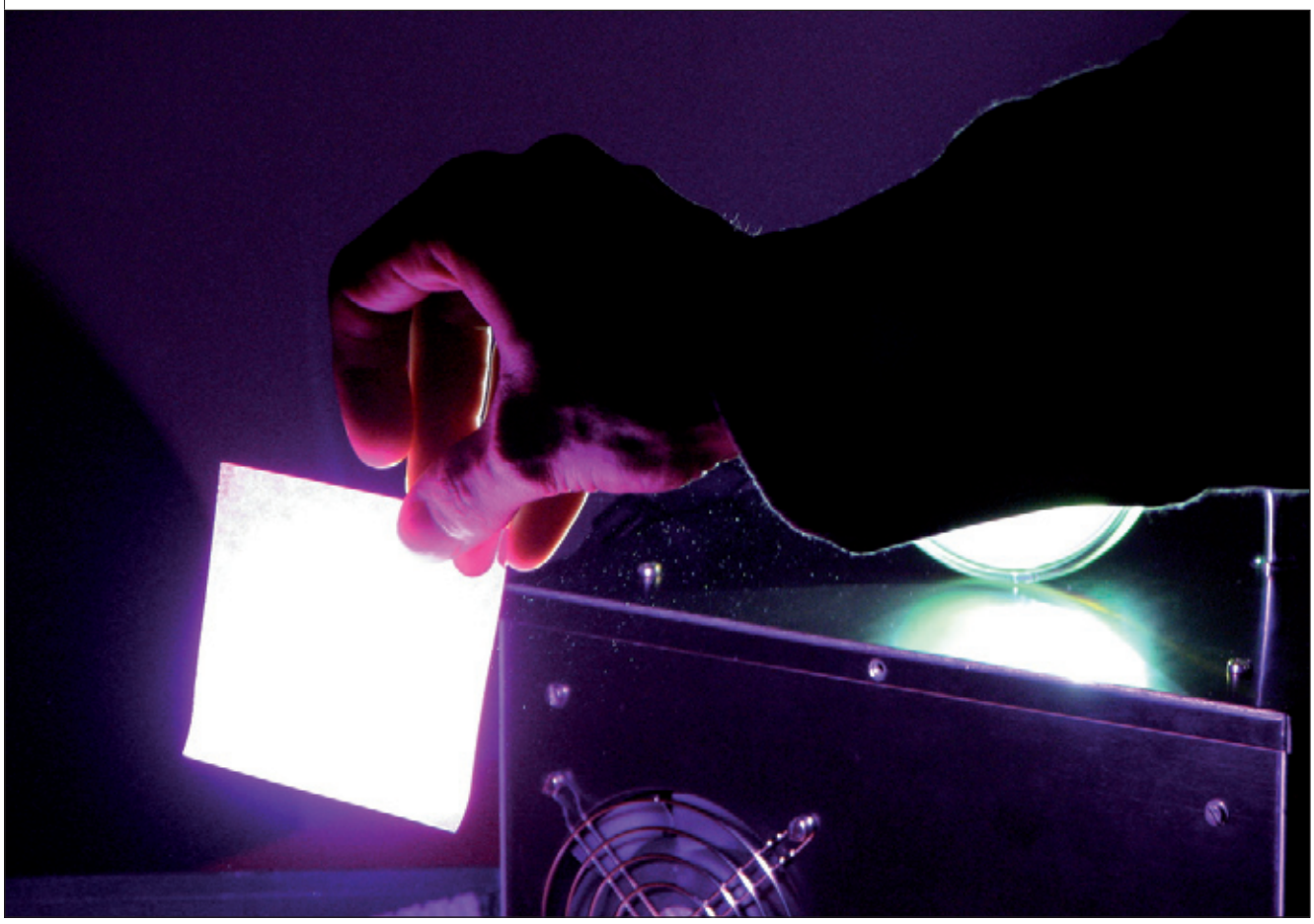

2. Copenhagen Institute of Interaction Design. Photo David A. Mellis.

Research

Design research can mean different things to different people and places. It can mean, among other things, research into the nature of design itself (the methodological approach), research into the potential for design processes (exploring its relationship to other disciplines, art for example); it can also mean research into other areas conducted from a design perspective (e.g. political systems).

Research at CIID isn't defined by the nature of design research itself but more by the type of projects and how one goes about it. Research projects tend to be longer than consultancy projects and delve into an issue in great depth. These projects have a wider focus than that usually required in the consultancy work.

Take the example of an investigation into the customisation of mobile devices. A commercial scope might be to create an interface that can be personalised by the user. Perhaps they download components through a web browser, adding and removing elements as required. These solutions will be prototyped and discussed with the potential user and client. The focus here is tight, necessitated by a clear brief and limited time, often just a few months or even weeks.

Design research, with projects often lasting two to six years, can afford to take a longer view and investigate different focus points for a sustained amount of time. Zooming in, there is potential for CIID to undertake research into interaction technologies and techniques, contributing to public knowledge (a CIID research lab is planned and links are

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3. Copenhagen Institute of Interaction Design building.

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4. Copenhagen Institute of Interaction Design students.

currently being formed with educational and research institutions to provide for this). Zooming out, design research gives the opportunity to widen the focus considerably.

To return to our hypothetical mobile device customisation, a research project provides the scope to entertain societal and even philosophical questions: 'is total customisation a good thing'? If people decide to only receive sports and entertainment news on their mobile device, how might this affect their participation in society? Is it even fair to them to enable this possibility? How might this be overcome? Such questions are clearly outside the scope for most businesses that operate in highly competitive environments. This leads to seeking governmental and charitable sources of funding, though they too will wish to see a return on investment down the road. Design research provides for an engagement with more questions yet design is still expected to provide answers.

Aligning Education, Consultancy and Research at CIID

By closing the gap between education, consultancy and research, it is the ambition of CIID to enable cross-pollination between these different activities –this would be impossible if they were kept air-tight.

Consultancy projects, with their tight focus and intensive nature, keeps CIID connected to business and a rapidly developing interaction design discipline. It also provides for the generation of questions than can be further explored through research projects. Research will generate knowledge that informs the educational and consultancy activities. Students will benefit from both: they get to meet senior industry people and gain insight into their world. They can also get a taste for the wider issues around interaction design. To complete the circle, CIID benefits from the fresh thinking and energy that the students bring.

The exploration of how these activities can inform one another is seen as appropriate for an institution of interaction design. It's early days, but there are signs that the model is working. The Interaction Design Pilot Year only opened in September 2008, yet the activities already seem to play together in ways that are rewarding yet hard to predict.

References:

- ciid.dk
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