Understanding Innovation

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Editors

Design Thinking Research

Measuring Performance in Context

Springer

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Preface

The third volume of our series on Design Thinking Research presents the comprehensive collection of research studies carried out by the HPI-Stanford Design Thinking Research Program. This is a joint program of the Hasso-Plattner-Institute of Design at Stanford University in California and the Hasso-Plattner-Institute (HPI) for IT Systems Engineering in Potsdam, Germany.

The concept of Design Thinking refers to the methods and processes for investigating challenges, acquiring information, analyzing knowledge, and positioning solutions in the design and planning fields. As a style of thinking, it is generally considered the ability to combine empathy, creativity, and rationality in analyzing and fitting solutions to context. The overall goal that stands behind all those activities is to generate innovations.

There are several main factors that are crucial in the development process of Design Thinking. One is definitely the role of teamwork and the impact it has for the outcome of the process. Unified commitment, a collaborative climate, and the reception of support and encouragement by the team members are a prerequisite of all kinds of successful collaboration.

Teamwork requires dedication, coordination, and people skills. Teamwork is usually defined as a joint action by a group of people, in which each person subordinates his or her individual interests and opinions to the unity and efficiency of the group. Certainly, this does not mean that the individual is no longer important; however, it does mean that effective and efficient teamwork goes beyond individual accomplishments. The most effective teamwork is produced when all the individuals involved harmonize their contributions and work toward a common goal which is being put into practice in this program.

A further considerable factor when it comes to Design Thinking and its impact is the element of education. The term "education" implies the notions of learning, preparing for successful leadership and personal achievement, as well as opening the mind to new ideas and methods. Education in its best way should open the mind, and the process itself involves creating and solving our own challenges.

Another meaningful component of this program, as well as of this present book, is the facet of innovation. Innovation means – literally translated – improvement or renewal. This is a universal concept that is as old as mankind and every generation adapts it to their needs and requirements accordingly. To have an idea and to make it feasible is called an "invention." Whether an invention actually turns out to be an innovation only becomes clear when it is actually accepted by the users.

In order to make an invention work, it is crucial that the right instruments are chosen. These have a great and important impact on how Design Thinkers perceive the world around them, how they think, feel, and communicate. It was in 1964 when Marshall McLuhan coined the phrase "The medium is the message."

The actual core message behind the phrase that is constantly quoted and often misinterpreted is that we largely miss the structural changes in our affairs that are introduced subtly, or over long periods of time. Whenever we create a new innovation, many of its features and qualities are fairly obvious to us.

We often know what its advantages and disadvantages might be. But it is also often the case that after a long period of time and experience with the new innovation, we look back and realize that there were some effects of which we were entirely unaware at the onset.

Like the message that McLuhan had in mind when he coined that phrase, it is not primarily the content of the innovation, but the change in interpersonal dynamics that the innovation brings with it. It is crucial to not only look beyond the obvious but to seek the nonobvious changes that are enabled or enhanced by the innovation. In other words, an innovation is anything from which a change emerges. It often takes years or even decades before an invention becomes an innovation and before it becomes apparent to everyone.

I am pleased to witness the development of this book series over the years, and it is a rewarding experience for me to see this third volume coming to life.

May it be a fruitful contribution to the ongoing debate on Design Thinking.

Potsdam/Palo Alto Hasso Plattner
March 2012

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