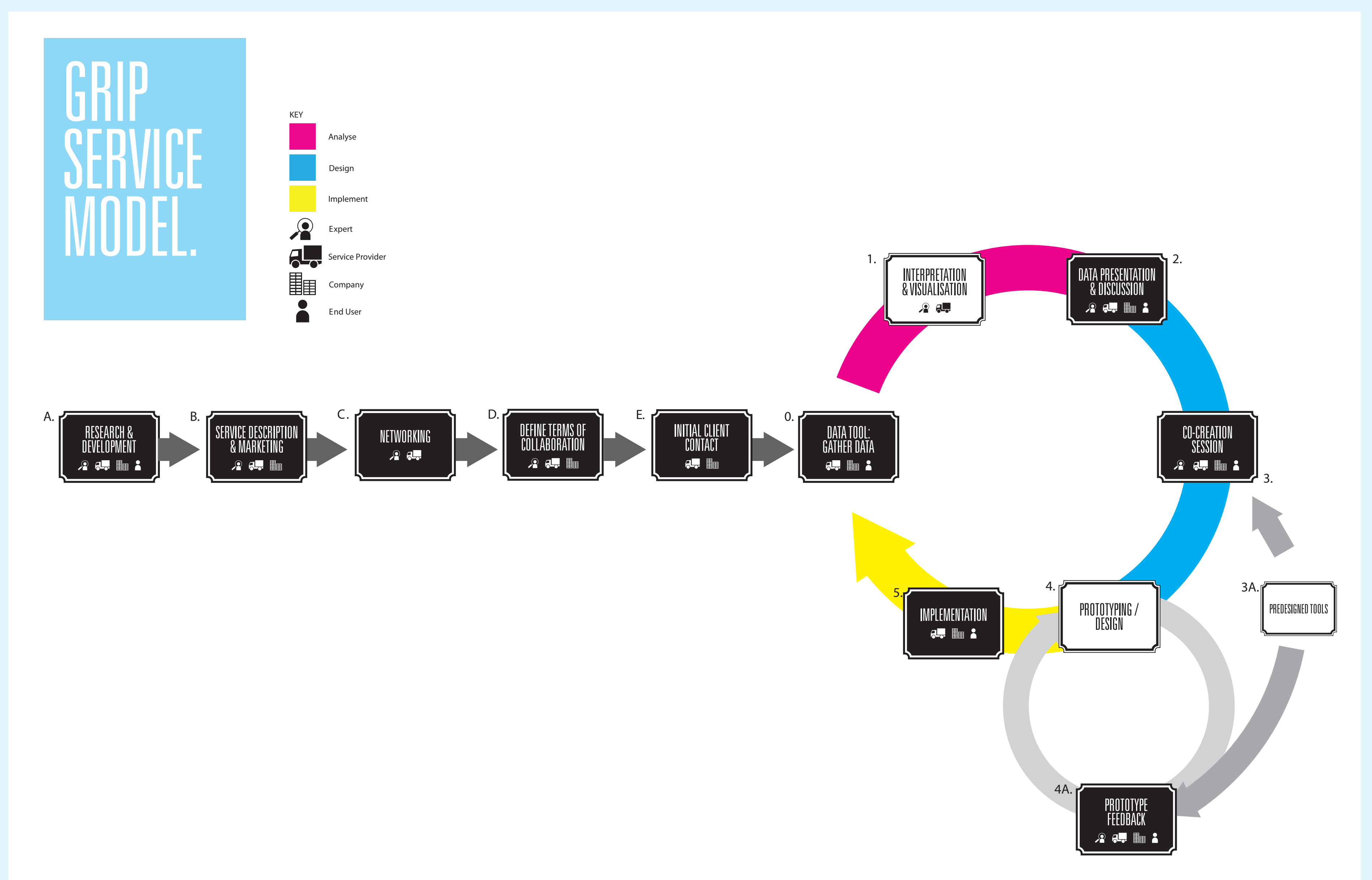




DESIGN  
UNITED

Platform for Dutch Research in Design



# Product-Service Systems: How tight should be the designer's grip?

GRIP

## GRIP: Flexibility versus control in the design of Product-Service Systems

### About

GRIP investigates how designers achieve a balance between flexibility and control when designing Product-Service Systems. The underlying purpose is to stimulate designers to create effective and socially responsible value for users and other stakeholders.

### Background

The creative control of designers is lower in systems design than in product design. The designers have to deal with complex, dynamic environments and need to negotiate decisions with a range of stakeholders (e.g., product development partners, service delivery partners, and end-users). The Product-Service Systems development process is not very formalized and is characterized by a high level of co-creation and co-production. Industrial designers entering this field need to strike a new balance between flexibility in their approach and control over designed outcomes when working together with other stakeholders.

### Questions

The central question of this project is the following: How do designers strike a balance between flexibility versus control

when designing PSS? The question is placed in the context of the creation of effective and socially responsible value for users and other stakeholders. The project's application field is the prevention or reduction of work-related stress. New technologies of sensory measurement allow for new design solutions, leading to a new social dynamic between stakeholders (workers, employers, doctors, stress coaches, etc.) and thus to new issues of flexibility versus control for designers.

### Results

Part of the team will focus on sensory measurement of work-related stress in the office; another part will focus on the role of design during early stages of development of Product-Service Systems. In both activities, new designs for such systems will be created and tested on their effectiveness and their commercial and social desirability. Main results are a) exhibitions of new design directions for optimizing levels of work related stress, b) academic publications about where designers should be flexible in their approach, and where they need to seek control over system outputs, and c) an industry manual about tools and methods for designing Product-Service Systems.

### Facts

Duration of the project: 2011 to 2015.

Funding: Philips Design and Fonds Economische Structuurversterking (FES), as part of the Creative Industry Scientific Programma (CRISP).



## Partners

- Delft University of Technology
- Eindhoven University of Technology
- Design Academy Eindhoven
- Philips Design

## People

**Prof. dr. Petra Badke-Schaub**, Delft University of Technology, project leader

**Dr. Dirk Snelders**, Eindhoven University of Technology, project leader

EINDHOVEN UNIVERSITY OF TECHNOLOGY:

**Prof. dr. ir. Elke den Ouden**, initiating member

**Dr. Evelien van de Garde-Perik**, postdoc

**Ir. Sebastian Goudsmit**, PhD candidate

DESIGN ACADEMY EINDHOVEN:

**Dr. Bas Raijmakers**, initiating member

**Mike Thompson**, B.A., research associate

PHILIPS DESIGN

**Ing. Geert Christiaansen**, initiating member

**Ir. Luc Geurts**, designer

**Marie Perez**, B.A., designer

**Helle Ullerup**, B.A., designer

## Case

### Concept:

New technologies such as Galvanic Skin Sensors allow the measurement of a person's stress level in relation to time, space and people. This data will be used to create visualizations of stress. Mapping stress in the workplace allows experts to pinpoint causes of stress at individual and group levels. This may form the basis of increasing stress awareness, improving discussions with colleagues or stress experts, or reorganizing the workspace and/or activities.

The following questions will be addressed:

*What data should be collected and visualized?*

*What should this data reveal at both individual and group level?*

*How can we put this data visualization to good use?*

*Which stakeholders should or should not have access to this data?*

Case: Mapping stress and Stress data visualization

