COLLECTIVE LEARNING JOURNAL
STSRT/GLOBAL STS DESIGN NETWORK
2017 RUTGERS, NJ

Prepared by the 2017 Design Team
on behalf of the community of learners in Rutgers

The theme of the 2016 session, **"Integrating Technology and Organization in the Digital World"**, did a fantastic job of illustrating for us what a dramatic transformation our society was undergoing, and gave us keen insight into the future of work design. We collectively made a profound discovery that we had leapt to a <u>new S-Curve in organizing – at the ecosystem level.</u>

Thus, the 2017 Design Team decided to continue this exploration in 2017: *What is the definition of a collaborative business/service ecosystem, and what are the fundamental Values, Principles and Design Elements for creating Collaborative Ecosystems from an STS perspective?*

We deliberated a number of ecosystem designing topics in Rutgers:

- *What is the <u>definition </u>of a collaborative business/service ecosystem?*

At Rutgers, we concluded that in a dynamic environment at the ecosystem level, the boundary/scope is continuously changing; nevertheless, we need a mental construct that can help us understand this complex social interaction reality. We were offered two constructs in Rutgers, one by Peter Aughton and one by Chris Lawer, that are similar in intent to find *interdependency in value creation* around which to put boundaries, but achieve this through different approaches. Aughton's method is derived from a participative design approach (most like STS), while Lawer's approach is expert-driven. The Rutgers' community compared and contrasted both approaches in a pre-workshop that added depth to our understanding of collaborative ecosystem design and how we might reinvent our STS/work systems participative toolsets.

Some STSers noted that classical STS also determined interdependency in the core work system, albeit with different approaches – NA STS through variance control interaction structures and Lowlands STS through customer order parallel processing interaction structures. One of the most important tools for mindset shifting in STS has been "system mapping" of these interaction structures (i.e. the nature of relationships, structures, processes and resources governing them) in the organization to help us to understand the way the system works and the points of leverage for transformative change – especially how feedback (and feed-forward) loops drive the bigger picture. Aughton and Lawer added new more rigorous dimensions to systems mapping and new insight as to what designing interventions are appropriate for the dynamic nature of ecosystems.

- *What are the <u>fundamental Values</u> for creating Collaborative Ecosystems from an STS perspective (i.e. humane and healthy)?*
  - Promote **human dignity**
  - **Respect** for people

- **Diversity**
- **Social and economic justice**
- **Mutual benefit**
- Opportunity for **contribution** (to make for better thinking, ?, people, planet)
- Timely **learning and adaptation**
- Do no harm (know both intended and unintended consequences before acting?)

Our values underlying a collaborative ecosystem are about promoting *human flourishing*, both individual and collective. The values represent a clear focus on ecosystem contributors' ability to develop and use their competencies and creative potential to the fullest extent in co-creation with others for mutual benefit, thereby enhancing adaptive capacity (resilience and agility) for the health of the total ecosystem, while enhancing every individual's 'quality of working life'.

- ***What are the <u>fundamental Principles</u> for creating Collaborative Ecosystems from an STS perspective?***

The Rutgers session did not produce a specific list of design principles. We did a data dump of a mix of design elements and design principles. This is our interim work to deliberate. The one thing to note is that our shared values appear to be reflected throughout this list with the word "shared" appearing frequently, reminding us of the highly participative nature of designing.

- ***What are the <u>fundamental Design Elements</u> for creating Collaborative Ecosystems from an STS perspective?***

The case studies were particularly informative about design elements. Certain design elements are more stable, while others are more dynamic. Four design elements were called out as significant to collaborative ecosystem designing:

A. **<u>Purpose</u>**

B. **<u>Relationships and Quality of Interactions in the Community of Systems</u>**

C. **ICT Support Systems**

C. **<u>Leadership</u>**

Digital both broadens and deepens what organizations and ecosystems can do by bringing visibility and thus engendering trust. Digital is emerging a new kind of workplace, which we will explore together in Leiden in 2018 with the theme "**Technology@Work in the 21st Century**" and begin another learning journey.