

# Longevity Planning Block Design for Inclusive Financial Planning Services

Human Behavior and  
Service Design

Sheng-Hung Lee | Ph.D. Candidate at MIT





# FPA Annual Conference 2023

September 27-29  
Phoenix, Ariz.

Speaker

**Sheng-Hung Lee**  
Designer, MIT AgeLab



# FPA Annual Conference 2023

September 27-29  
Phoenix, Ariz.

Speaker

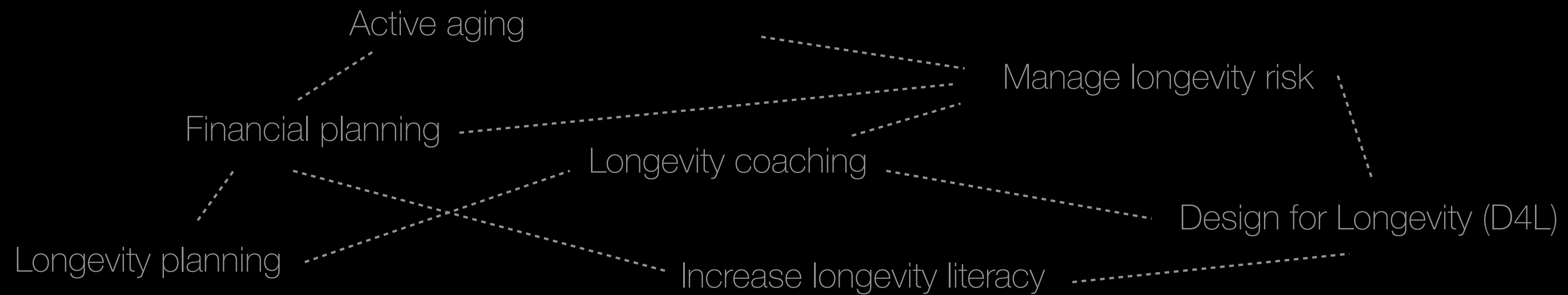
**Joseph Coughlin, PhD**  
Director, MIT AgeLab



MIT AGELAB

Life Tomorrow

# How do you better **prepare for your longevity?**



## Our Hypothesis

**Maintaining a  
good quality of life  
in later years  
relies on strategic  
financial planning [1]**

1. Richey, D., and Perry, S., 2022, *Finding Your Financial Advisor: How to Understand the Industry and Confidently Hire the Best*, Houndstooth Press, Austin, Texas.

# Literature Reviews



**Reference Materials**

1. Park, H. L., O'Connell, J. E., and Thomson, R. G., 2003, "A Systematic Review of Cognitive Decline in the General Elderly Population," *Int. J. Geriat. Psychiatry*, 18(12), pp. 1121–1134.
2. Fielding, R. A., Rejeski, W. J., Blair, S., Church, T., Espeland, M. A., Gill, T. M., Guralnik, J. M., Hsu, F.-C., Katula, J., King, A. C., Kritchevsky, S. B., McDermott, M. M., Miller, M. E., Nayfield, S., Newman, A. B., Williamson, J. D., Bonds, D., Romashkan, S., Hadley, E., Pahor, M., and for the LIFE Research Group, 2011, "The Lifestyle Interventions and Independence for Elders Study: Design and Methods," *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 66A(11), pp. 1226–1237.
3. Lavallière, M., D'Ambrosio, L., Gennis, A., Burstein, A., Godfrey, K. M., Waerstad, H., Puleo, R. M., Lauenroth, A., and Coughlin, J. F., 2017, "Walking a Mile in Another's Shoes: The Impact of Wearing an Age Suit," *Gerontology & Geriatrics Education*, 38(2), pp. 171–187.
4. Anderson, L. W., Krathwohl, D., Airasian, P., Cruikshank, K. A., Mayer, R. E., Pintrich, P., Raths, J., and Wittrock, M. C., 2023, "A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives."
5. Druin, A., 1998, "Participatory Design: Children Participation in Computer Design."

1. Golden, S., 2022, *Stage (Not Age): How to Understand and Serve People Over 60--the Fastest Growing, Most Dynamic Market in the World*, Harvard Business Review Press, Boston, Massachusetts.
2. Ward, S., 2021, "Plan for a Retirement That Could Last 8,000 Days," *U.S. News & World Report*.
3. Golden, S. W., and Carstensen, L., 2019, "How Merrill Lynch Is Planning for Its Customers to Live to 100," *Harvard Business Publishing (HBP)*.
4. Parker, W., 2021, *2021 Impact Report - Warby Parker*.

1. Jones, P. H., and Ael, K. van, 2022, *Design Journeys through Complex Systems: Practice Tools for Systemic Design*, BIS Publishers, Amsterdam, The Netherlands.
2. Catalanotto, D., "The Swiss Innovation Academy" [Online]. Available: <https://store.swissinnovation.academy/>.
3. Holmlid, S., and Evenson, S., 2008, "Bringing Service Design to Service Sciences, Management and Engineering," *Service Science, Management and Engineering Education for the 21st Century*, B. Hefley, and W. Murphy, eds., Springer US, Boston, MA, pp. 341–345.
4. Mager, B., 2009, "Service Design as an Emerging Field," *Designing Services with Innovative Methods*, University of Art and Design Helsinki, p. 17.
5. Mager, B., 2013, "Introduction to Service Design - What Is Service Design?"

**Longevity planning framework 1 (Houston, 2014)**

Financial Security: Longevity Changes Everything

Product-centered



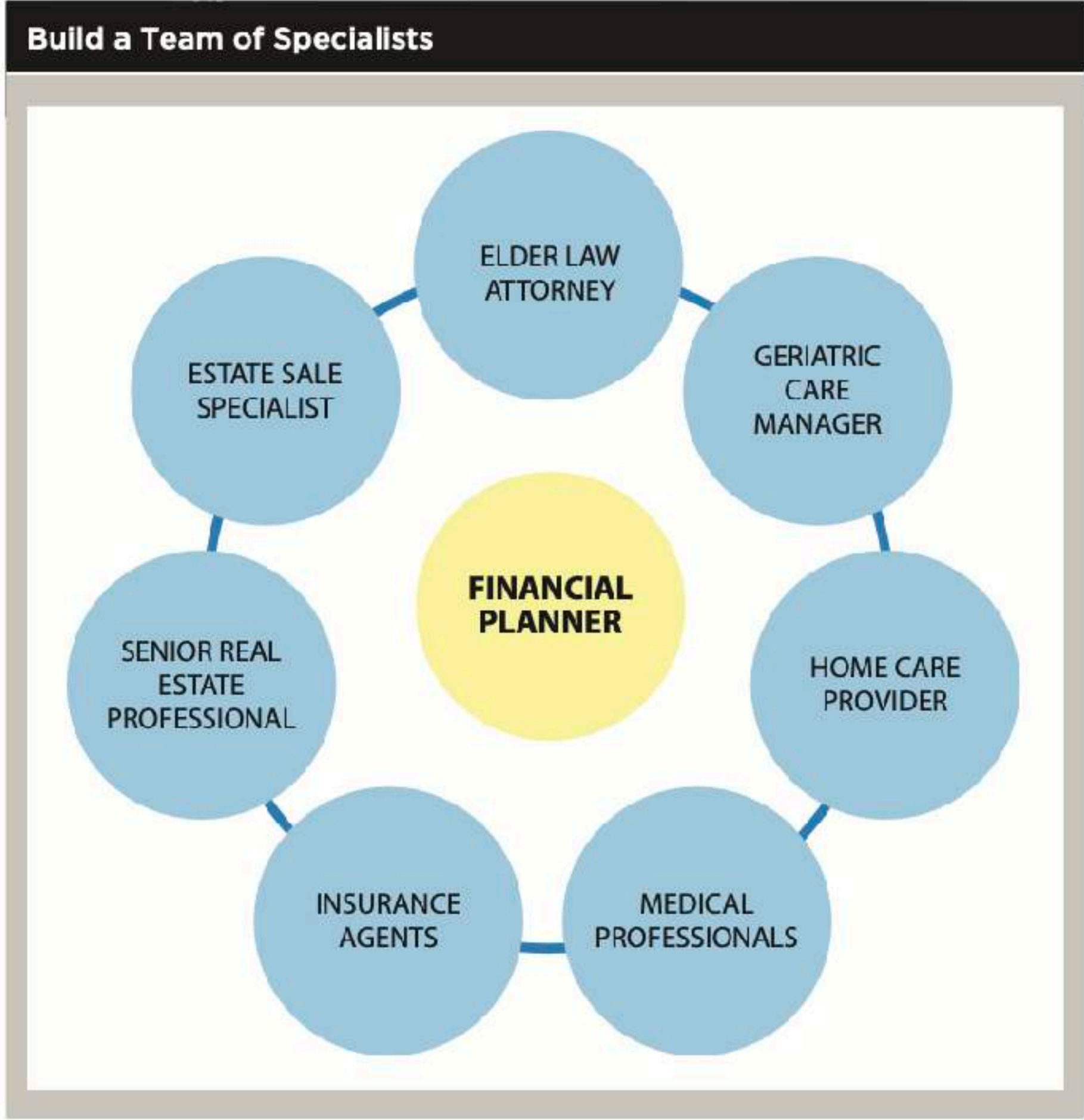
**Figure 14.1** The Retirement Ecosystem

• *Financial Security: Longevity Changes Everything (Houston, 2014)*

# Longevity planning framework 4 (Mauterstock, 2020)

## Making the Transition from Financial Planning to Longevity Planning

Advisor-centered



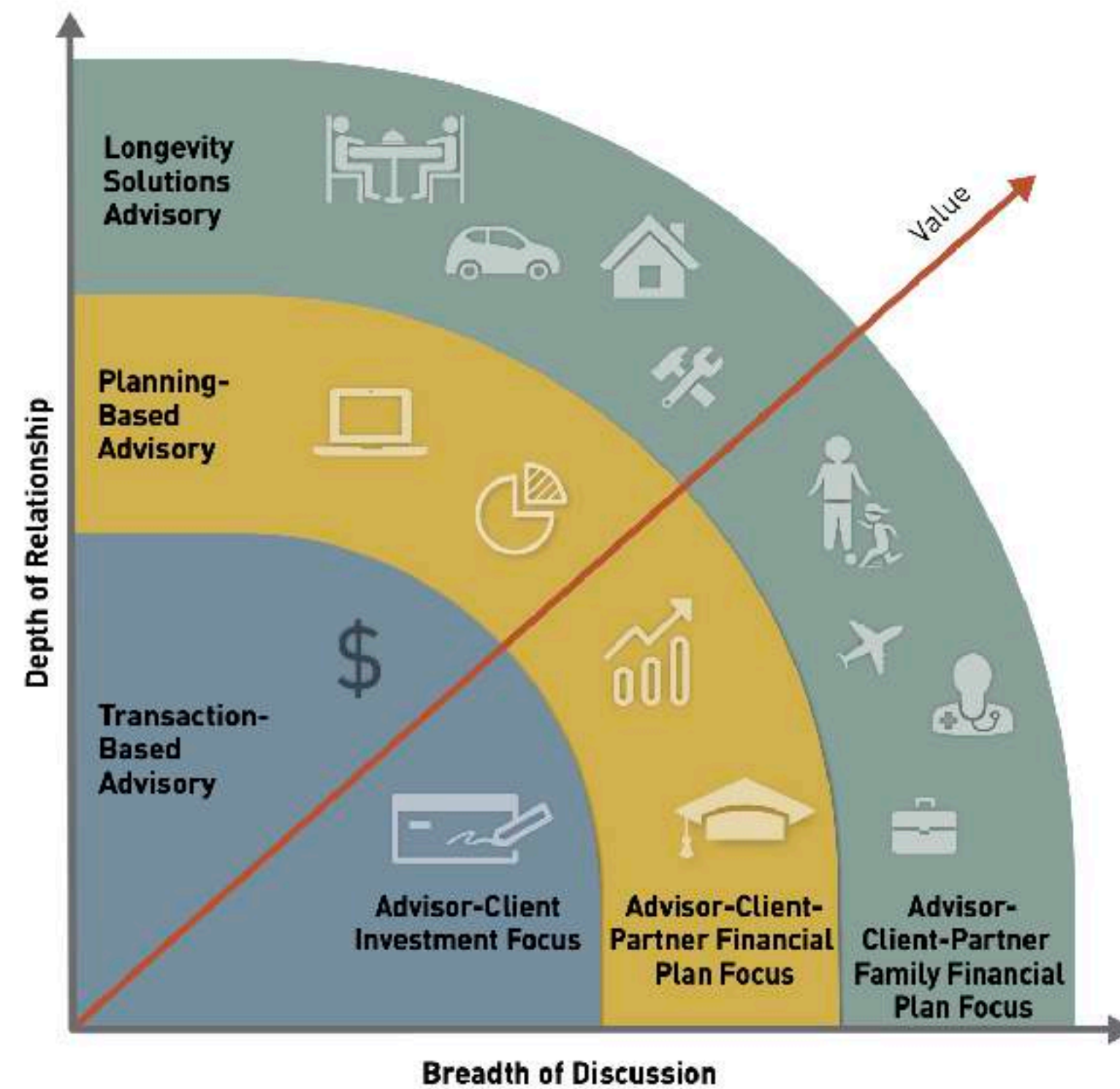
• Making the Transition from Financial Planning to Longevity Planning (Mauterstock, 2020)

## Longevity planning framework 3 (Coughlin, 2019)

### Planning for 8,000 Days of Retirement: Advisor Value in Today's Longevity Economy

Relationship-centered

THE ADVISOR-VALUE CONTINUUM MODEL



LONGEVITY PLANNING ADVISORY TEAM MODEL



- *Planning for 8,000 Days of Retirement: Advisor Value in Today's Longevity Economy (Coughlin, 2019)*



# Longevity planning framework 2 (Hasling and Ræbild, 2017)

## Sustainability Cards: Design for Longevity

Product scale



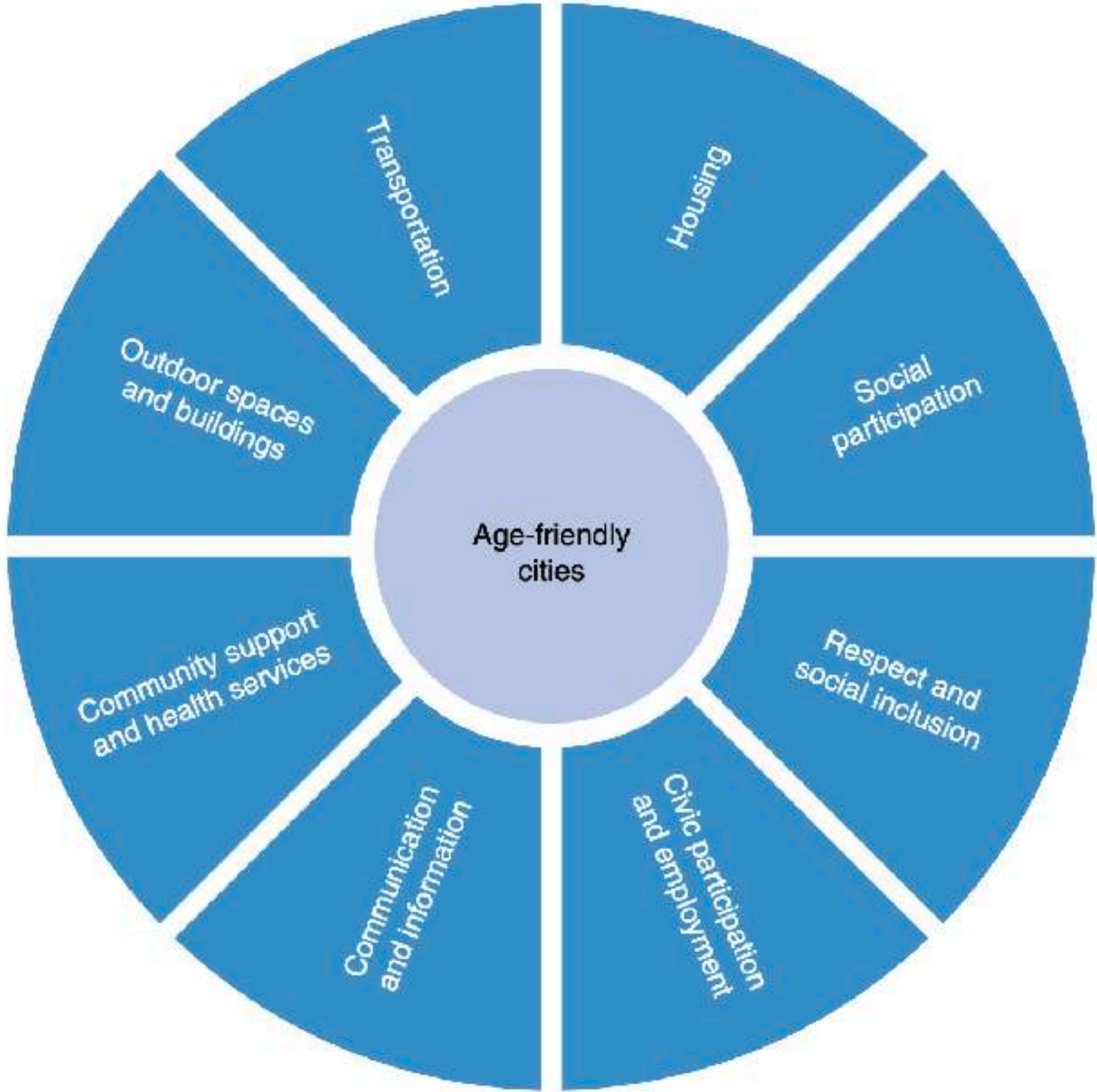
Figure 6. The six Design for Longevity categories: Material, Production, Transport and Retail, Practice and Use, Recovery, and Design and Concept in relation to a product life cycle.

- Sustainability Cards: Design for Longevity (Hasling and Ræbild, 2017)

# Longevity planning framework 5 (Wang, Sierra Huertas., et al, 2021)

Rethinking the urban physical environment for century-long lives: from age-friendly to longevity-ready cities

Experience scale



**Fig. 1 | Eight interconnected domains of the WHO’s age-friendly cities framework.** These domains reflect different aspects of urban physical environments, social environments, culture, and health and social services. Adapted from ref. 4.

• *Rethinking the urban physical environment for century-long lives: from age-friendly to longevity-ready cities (Wang, Sierra Huertas., et al, 2021)*

## Longevity planning framework 6 (Carlsson, Mallalieu, et al, 2021)

### Design for Longevity: A Framework to Support the Designing of a Product's Optimal Lifetime

Service scale

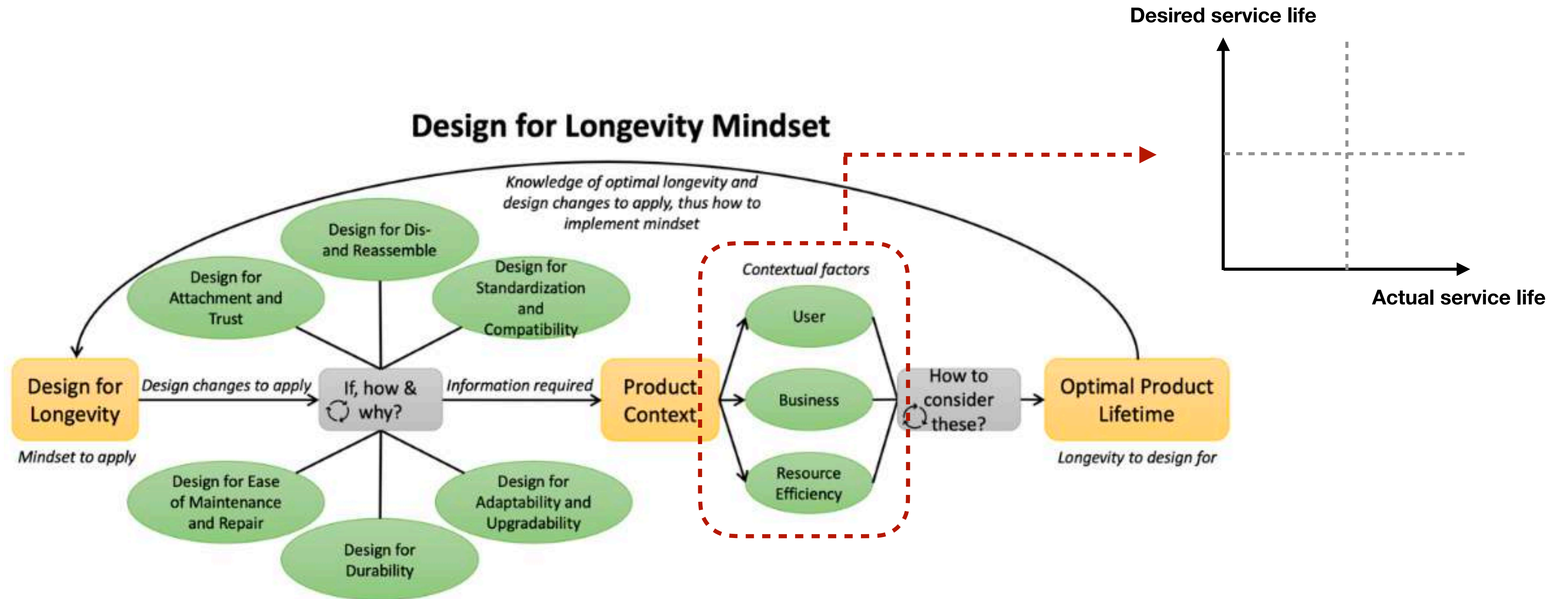


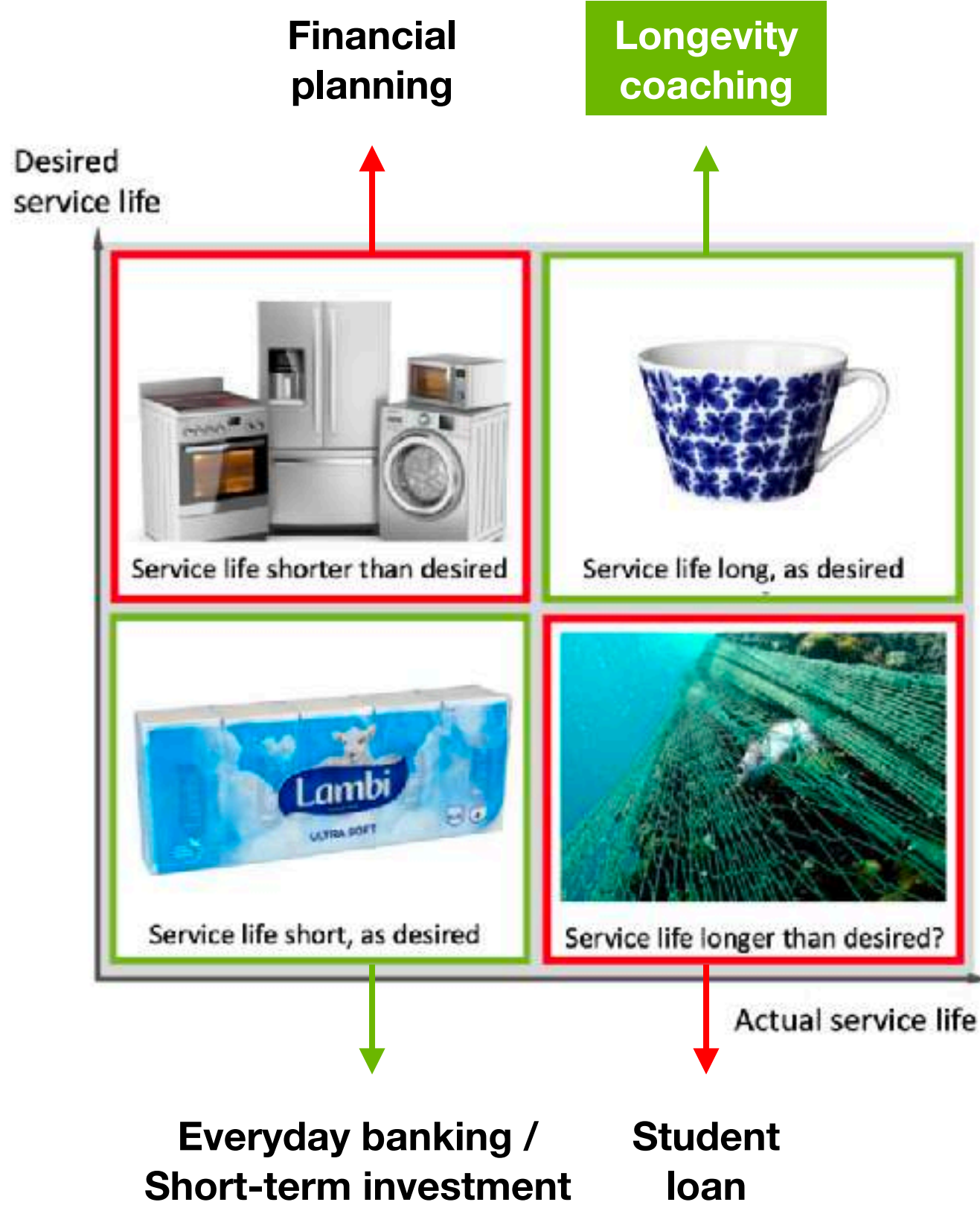
Figure 2. The flowchart illustrates the main blocks of the Design for Longevity Mindset and how it should be anticipated.

- Design for Longevity: A Framework to Support the Designing of a Product's Optimal Lifetime (Carlsson, Mallalieu, et al, 2021)

# Longevity planning framework 6 (Carlsson, Mallalieu, et al, 2021)

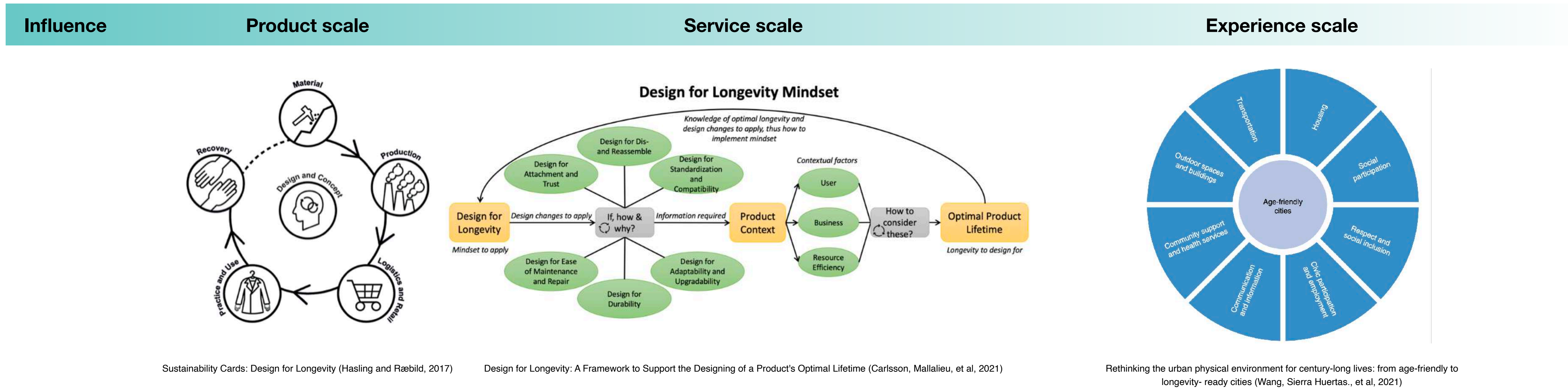
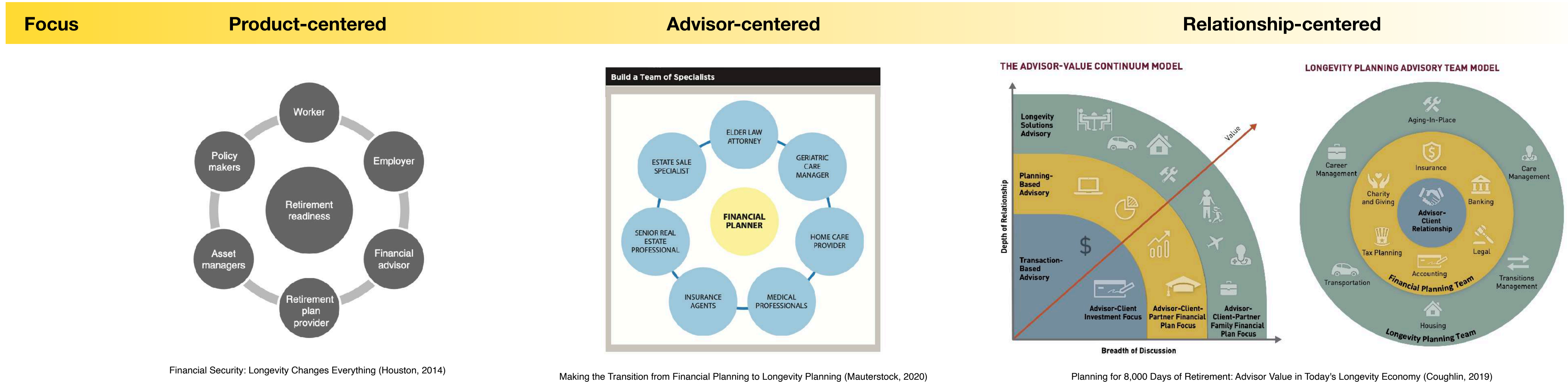
## Design for Longevity: A Framework to Support the Designing of a Product's Optimal Lifetime

Service scale



• Design for Longevity: A Framework to Support the Designing of a Product's Optimal Lifetime (Carlsson, Mallalieu, et al, 2021)

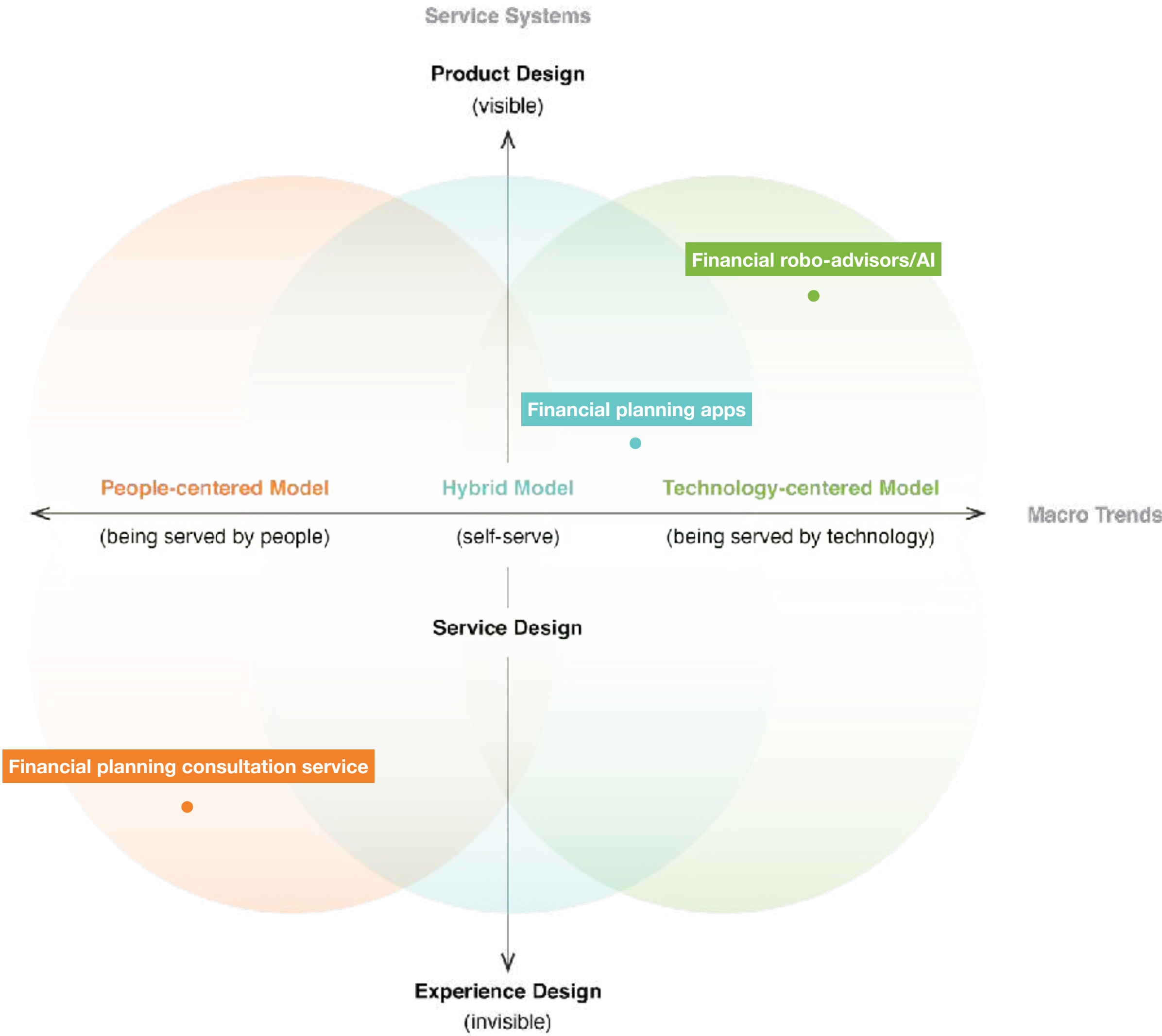
# Longevity planning frameworks overview



Human Behavior and Service Design

# Service Systems

Human Behavior and Service Design

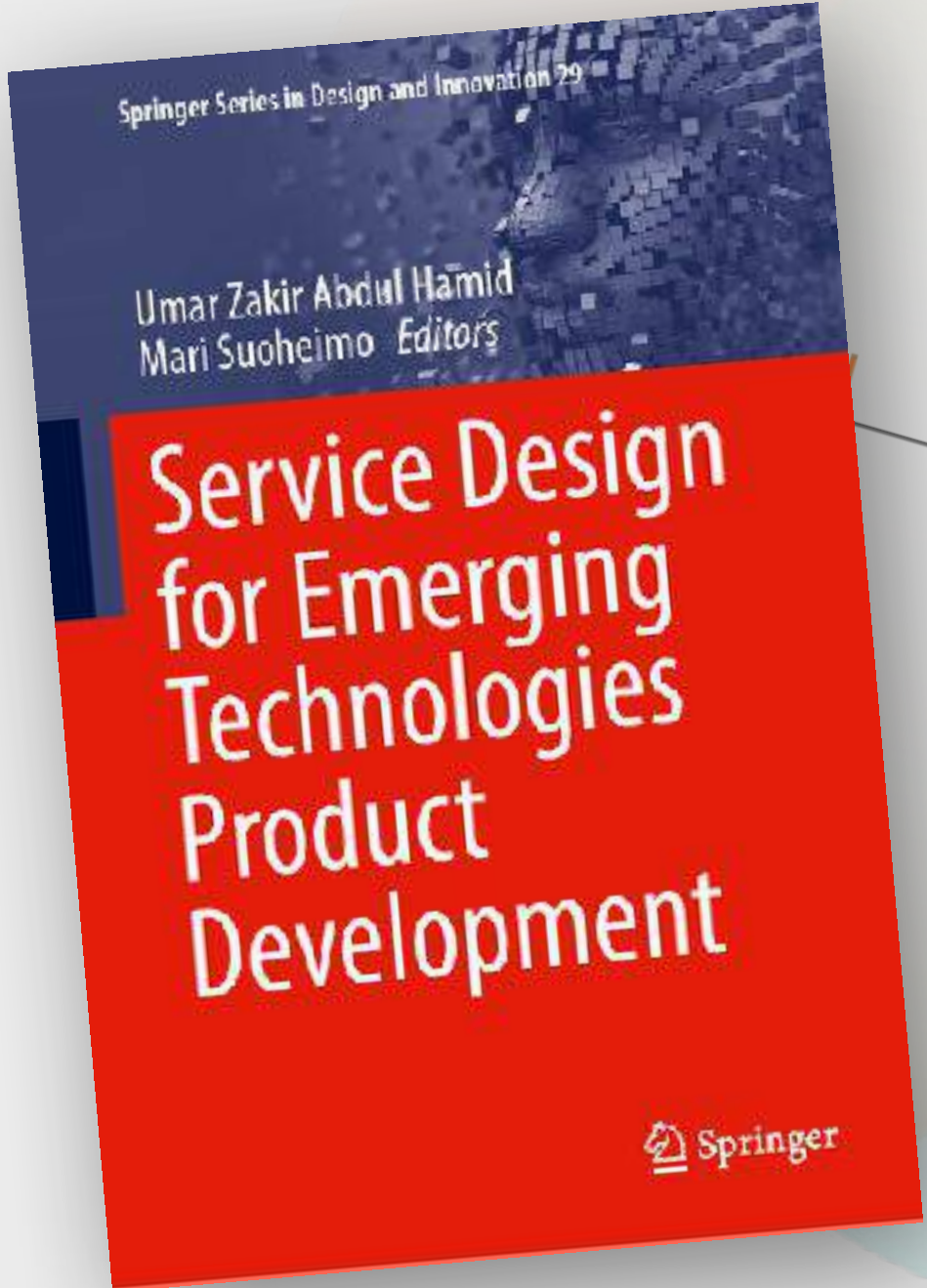


Lee, S.-H., Yang, M. C., de Weck, O. L., Lee, C., Coughlin, J. F., & Klopfer, E. (2023). Macro-Trend Study Under Service System: Preliminary Research in Service Innovation and Emerging Technology. In *Service Design for Emerging Technologies Product Development*. <https://link.springer.com/book/9783031293054>

**CHAPTER 4**

# Macro-Trend Study Under Service System: Preliminary Research in Service Innovation and Emerging Technology

Sheng-Hung Lee, Maria C. Yang, Joseph F. Coughlin, Chaiwoo Lee, Olivier L. de Weck, and Eric Klopfer



# Publishing and Preliminary Research Result

## 4 Book Chapter Articles

### Macro-Trend Study Under Service System: Preliminary Research in Service Innovation and Emerging Technology

Sheng-Hung Lee, Maria C. Yang, Olivier L. de Weck, Chaiwoo Lee, Joseph F. Coughlin, and, Eric Klopfer  
In: *Service Design for Emerging Technologies Product Development*, Publisher: Springer, 2023

### Inclusive Financial Planning Service Design Considerations for an Aging Population

Sheng-Hung Lee, Alexa Balmuth, and Joseph F. Coughlin  
In: *Design in Action*, Publisher: INTELLECT, 2023

### Inclusive Retail Banking Service Design Under System-Theoretic Process Analysis

Sheng-Hung Lee, Joseph F. Coughlin, and Eric Klopfer  
In: *Design in Action*, Publisher: INTELLECT, 2023

### Inclusive Retail Experience Transformation under Causal Analysis Based on System Theory (CAST)

Sheng-Hung Lee, Maria C. Yang, and Joseph F. Coughlin  
In: *Design in Action*, Publisher: INTELLECT, 2023

## 4 Conference Paper

### Applying Human-Centered System Design to the Development of a Tool for Service Innovation

Sheng-Hung Lee, Taylor Patskanick, Alexa Balmuth, and Joseph F. Coughlin  
In: *Cumulus Antwerp 2023 — Connectivity and Creativity in times of Conflict*

### Co-create Financial Planning Services for an Aging Population: Designers' Perspectives

Sheng-Hung Lee, Joseph F. Coughlin, Maria C. Yang, Olivier L. de Weck, Chaiwoo Lee, Eric Klopfer, and John Ochsendorf  
In: *ICED23 and The Design Society — 24th International Conference on Engineering Design: Design in a complex world*

### Service Design in Action: Transformation, Consideration, and System Thinking

Sheng-Hung Lee, Maria C. Yang, Olivier L. de Weck, Chaiwoo Lee, Joseph F. Coughlin, Eric Klopfer, and John Ochsendorf  
In: *ICED23 and The Design Society — 24th International Conference on Engineering Design: Design in a complex world*

### Retail Banking and Financial Service Under System Analysis

Sheng-Hung Lee, Joseph F. Coughlin, and Eric Klopfer  
In: *Arte, entre paréntesis*, December 19, 2022

## 1 Exhibition

### Envision Longevity Planning: Services, Systems, and Sustainability

Sheng-Hung Lee, Joseph F. Coughlin, Sofie Hodara, and MIT AgeLab  
In: *VID, Venice Innovation Design*, 2023

## 4 Personal Column

### Design for Longevity: Service, Systems, and Sustainability

Sheng-Hung Lee  
In: *DesignWanted*, April 12, 2023

### From Brainstorming to Bodystorming: an applied ethnographic perspective to view co-creation workshops

Sheng-Hung Lee  
In: *DesignWanted*, December 28, 2022

### Reshaping financial planning through a co-creation workshop

Sheng-Hung Lee  
In: *MIT AgeLab*, November 7, 2022

### Transformative Service Innovation and Design: From Touch Points to Data Points

Sheng-Hung Lee  
In: *MIT AgeLab*, July 5, 2022

## 3 Incoming Paper, 1 Journal, and 1 Book

### Systemic Service Design

Mari Suoheimo, Sheng-Hung Lee  
In: *Bloomsbury Publishing*, 2024

### Designing Longevity Planning Blocks through Experimental Participatory Observation and Interviews

Sheng-Hung Lee, Joseph F. Coughlin, Alexa Balmuth, Chaiwoo Lee, Lauren Cerino, Maria Yang, Eric Klopfer, Olivier L. de Weck, and John Ochsendorf  
In: *International Association of Societies of Design Research Congress — Life-changing Design*, 2023

### Design Gaming Transform Financial Planning Services

Sheng-Hung Lee, Joseph F. Coughlin, and Eric Klopfer  
In: *Journal of Financial Planning*, 2023

### Design Artifacts and Gaming Transform Financial Planning Services

Sheng-Hung Lee, Joseph F. Coughlin, and Maria Yang  
In: *Industrial Designers Society of America (IDSA) — International Design Conference (IDC)*, 2023

### From Brainstorming to Bodystorming: Co-creation Workshop Analysis Using Applied Video Ethnography

Sheng-Hung Lee  
In: *Industrial Designers Society of America (IDSA) — International Design Conference (IDC)*, 2023

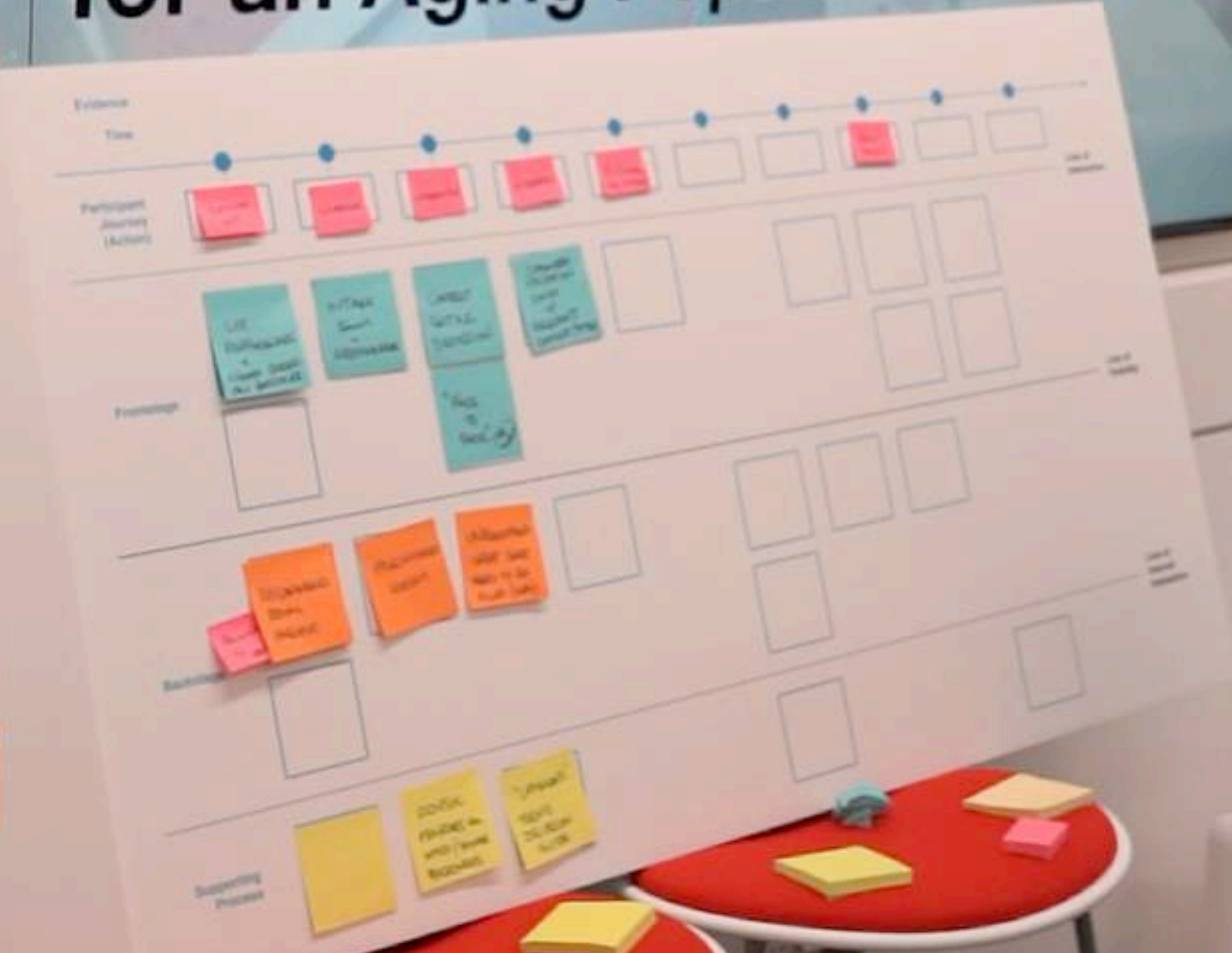


Co-creation Workshop

# Redesign Human-centered Financial Planning Toolkits and Services for an Aging Population

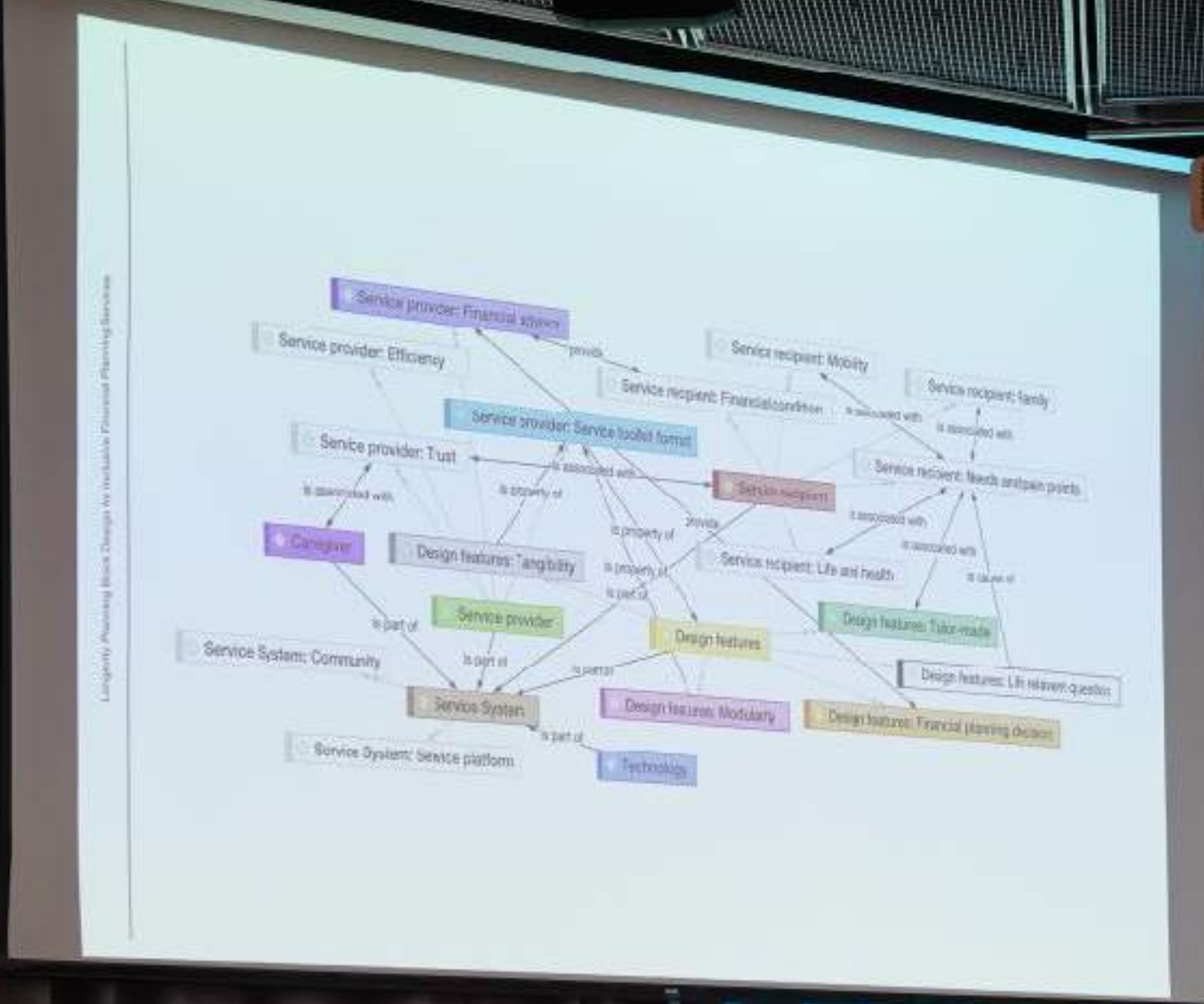
Whiteboard with sticky notes:

- Top: PINK DIAMOND: "FAMILY REVENUE"
- Left: BLUE DIAMOND: "SENSE OF..."
- Center: "HOW TO BE USED?"
- Right: "HOW TO USE FINANCIAL TOOL LIKE..."
- Bottom: "HOW TO USE FINANCIAL TOOL LIKE..."
- Bottom: "HOW TO USE FINANCIAL TOOL LIKE..."



Co-creation Workshop  
**Redesign  
Human-centered  
Financial Planning  
Toolkits and Services  
for an Aging Population**





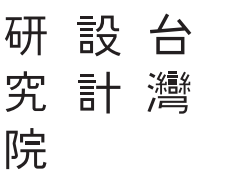
The only way to retire is to retire to something, not from something.



MIT AgeLab hosted the PLAN (Preparing for Longevity Advisory Network) conference and workshop at MIT on March 21, 2023



- **Topic:** Design Healthcare Service for Longevity
- **Date:** June 26, 2023
- **Location:** Taiwan Design Research Institute (TDRI) workshop space
- **Host:** Sheng-Hung Lee and Sofie Hodara



DRS 2024 Paper Track 2 

# Design for Longevity (D4L)

 Project Your Future Self through Service, Technology, and Design.

Paper Track 2 Chairs 

**Dr. Joseph F. Coughlin**  
 Director and Founder of the Massachusetts Institute of Technology AgeLab.

**Sheng-Hung Lee**  
 Board Director of Industrial Designers Society of America (IDSA) and Ph.D. Researcher at MIT AgeLab

**Prof. Sofie Hodara**  
 Assistant Teaching Professor in the College of Arts, Media, and Design at Northeastern University.

**Prof. Anna Meroni**  
 Deputy Dean of the School of Design of Politecnico di Milano.

**Prof. Carla Sedini**  
 Assistant Professor in the School of Design of Politecnico di Milano.

**(D4L)**

Project Your Future Self through Service, Technology, and Design.



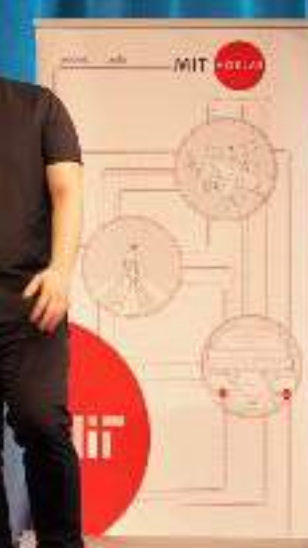


<https://www.drs2024.org/theme-tracks/#2>



Q&A

The only way to retire is to retire to something, not from something.





**Sheng-Hung Lee**

Board Director at IDSA • Ph.D. Researcher at MIT •  
Adjunct Associate Professor at SCU

