system
service
smart
network
technology
environment
information
communication
device
energy
data
power
user
grid
mobile
development
framework
study
sensor
process
software
technique
security
distributed
support
analysis
resource
distribution
algorithm
integration
ubiquitous
health
dynamic
building
concept
efficiency
different
performance
quality
interaction
change
capacity
processing
use
cost
new
location
business
object
real
electricity
antenna
current
project
scheme
future
decision
scenario
web
operation
key
high
cloud
digital
time
monitor
area
signal
content
patient
physical
market
personal
level
measurement
storage
strategy
challenge
privacy
embedded
require
social
right
state
hybrid
recognition
healthcare
agent
intelligence
pattern
video
supply
middleware
semantic
ontology
hardware
ambient
networking
contextaware
serviceoriented
evaluation
protection
engineering
consumption
transportation
heterogeneous
simulation

Developing Service Science

Naples Forum on Service
Doctoral Consortium

Paul P. Maglio
Chair, Department of Management of Complex Systems
Director, Division of Management and Information
School of Engineering
University of California, Merced

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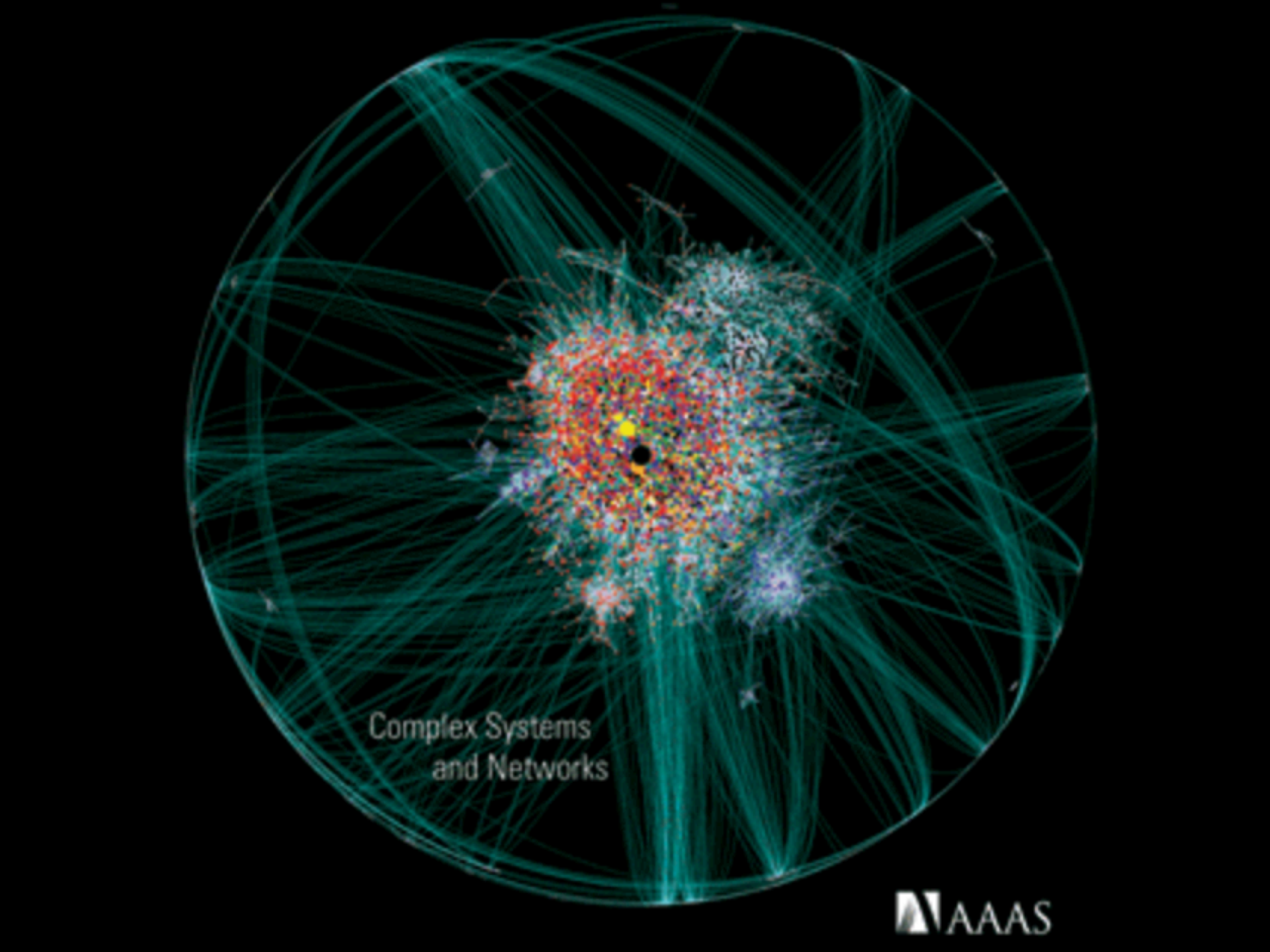
INNOVATION • SUSTAINABILITY • TECHNOLOGY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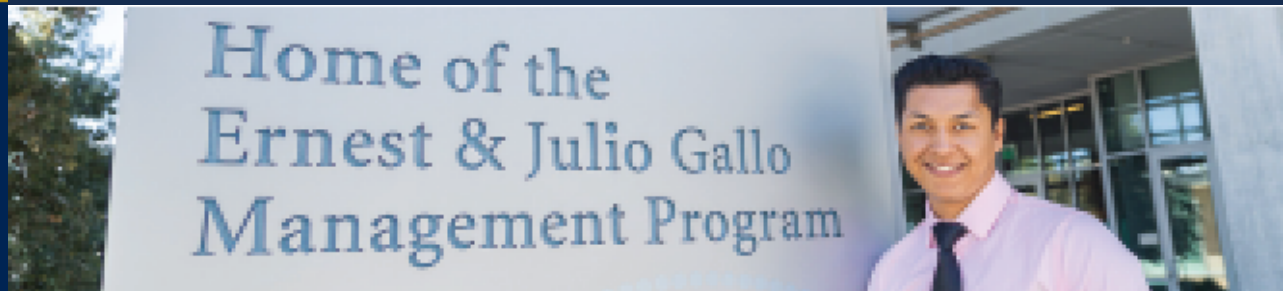
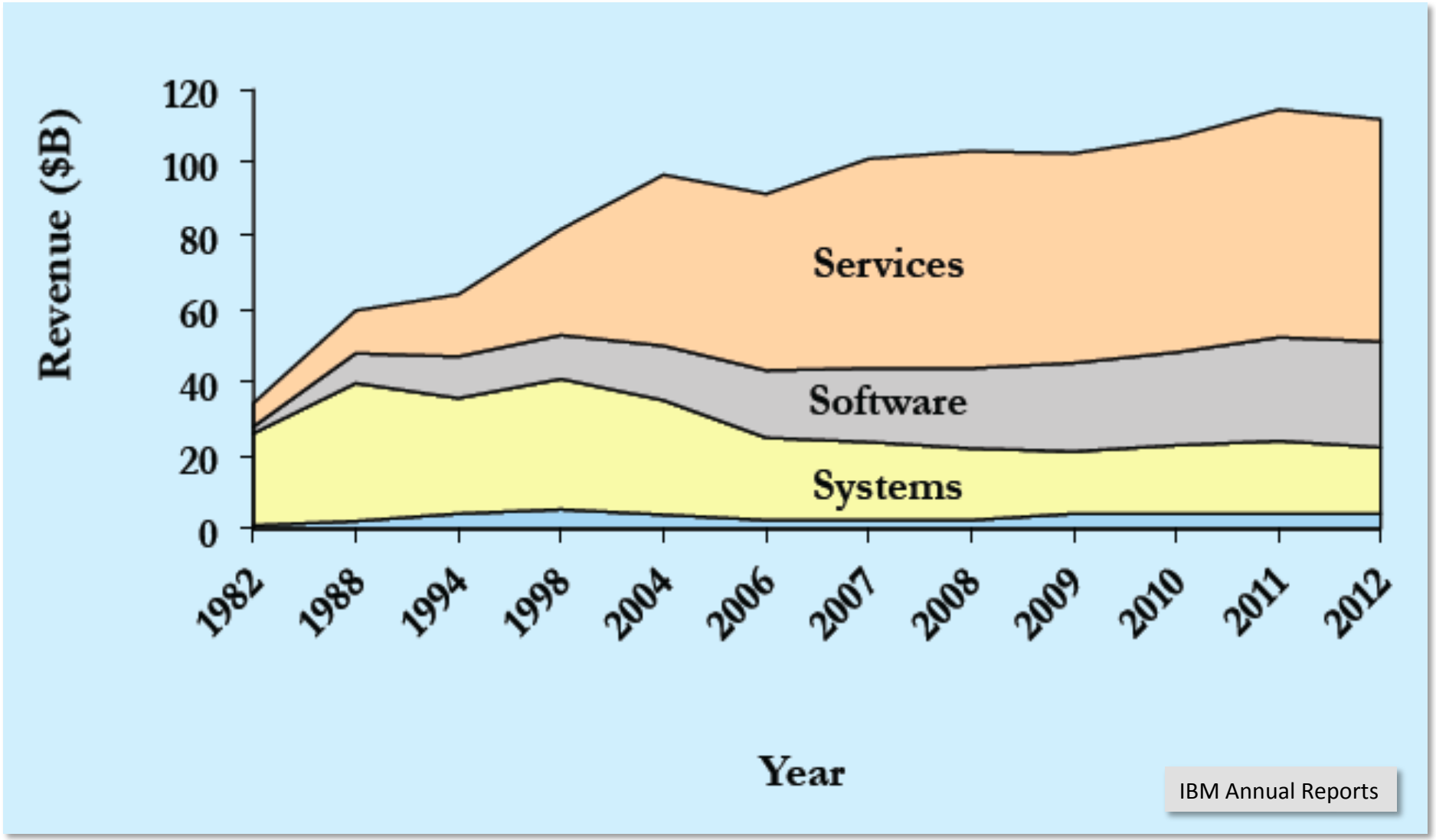
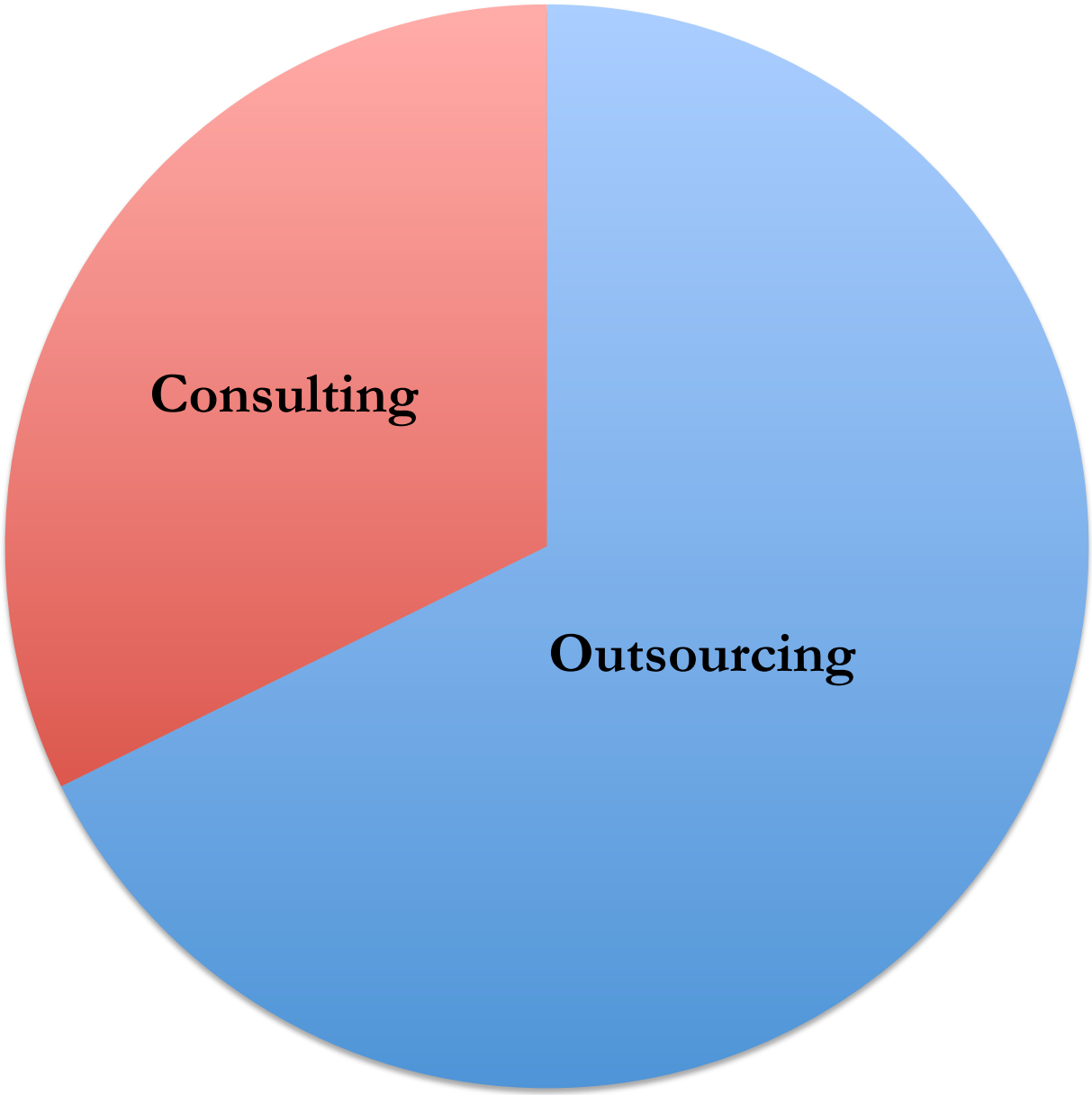




IBM Annual Reports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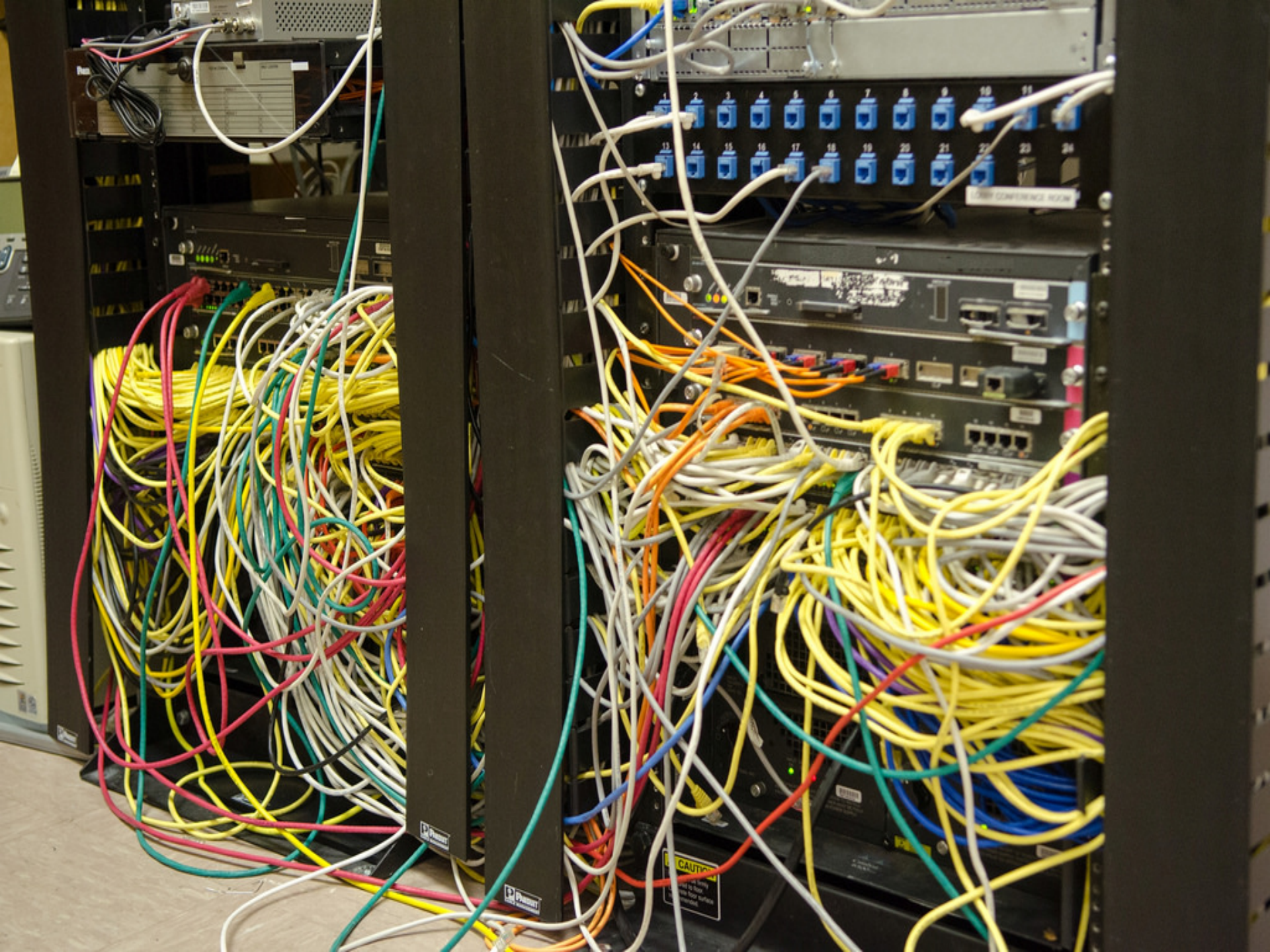
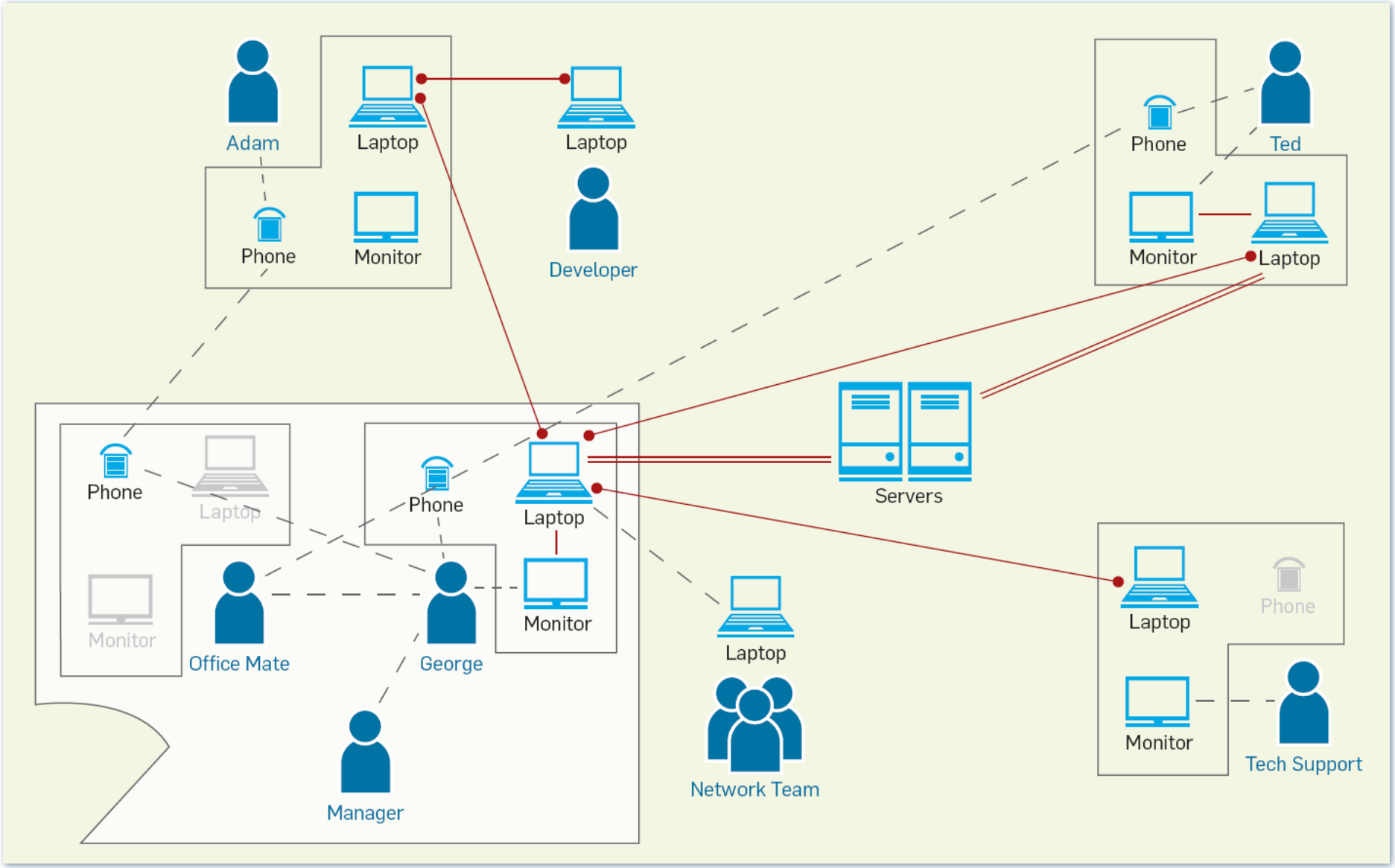
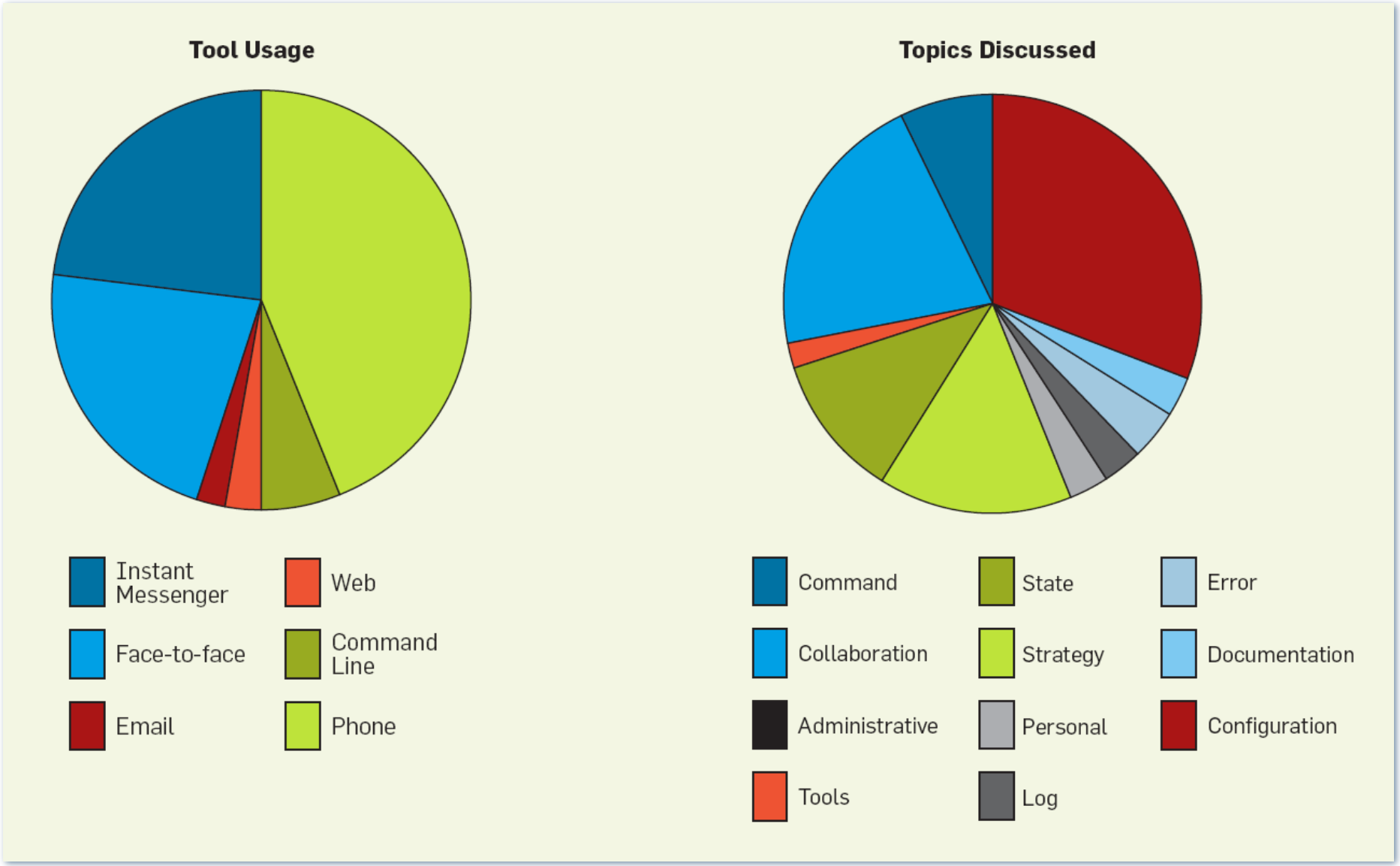




Haber, E., Kandogan, E. & Maglio, P. P (2011). Collaboration in system administration. *Communications of the ACM,* 54(1), 46-53.



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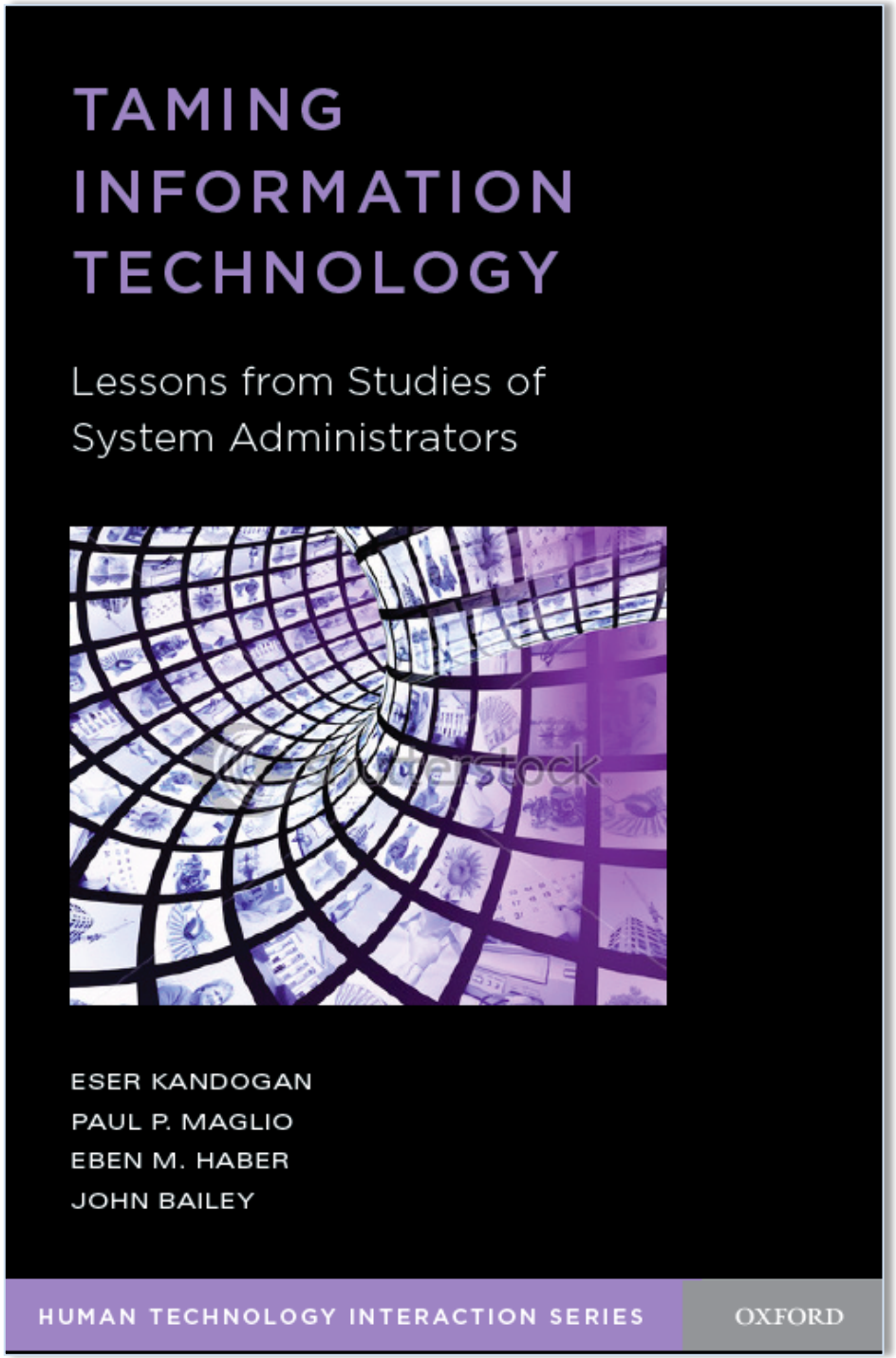
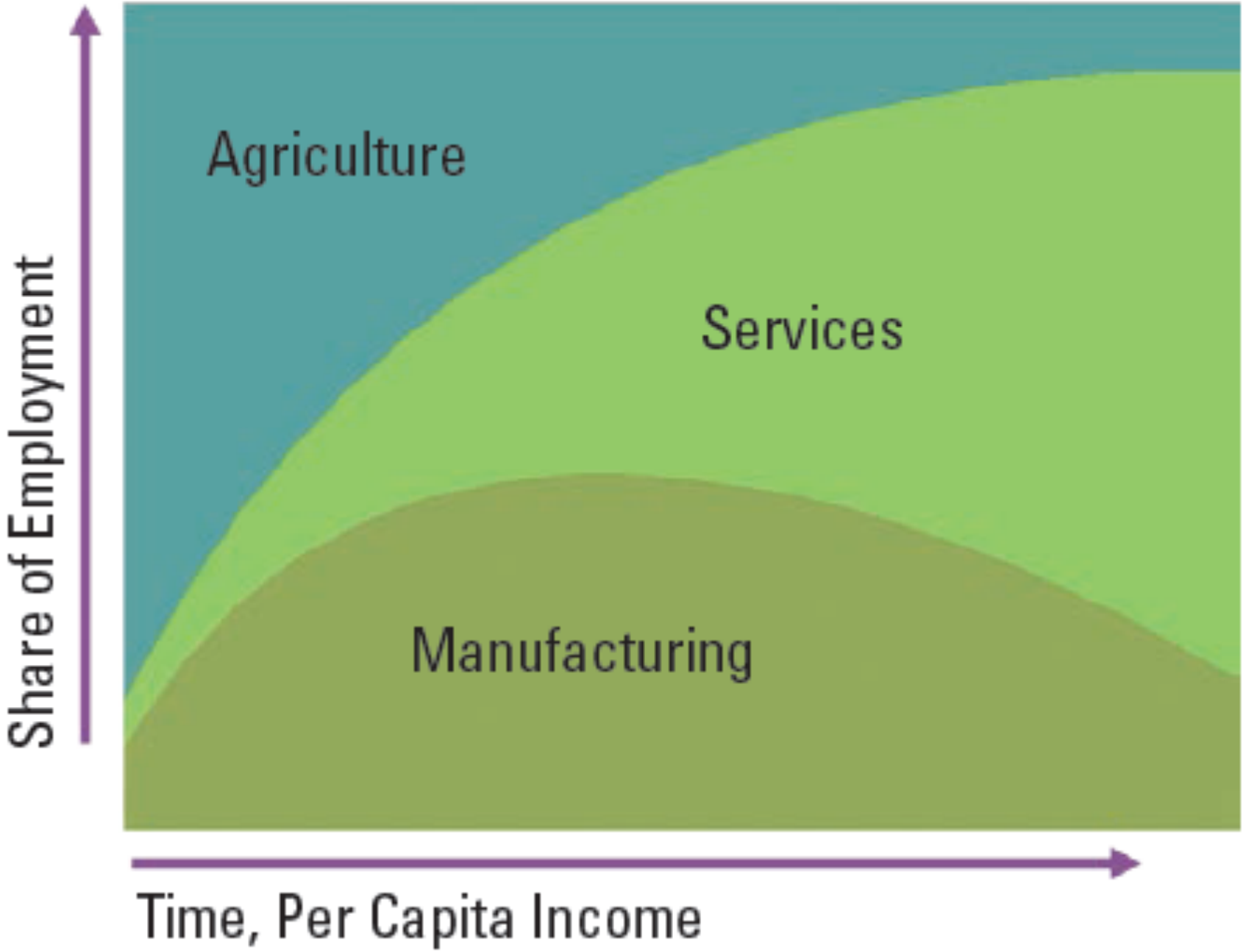


- System Administrators Depend on Collaboration
- System Administrators Create and Adapt Tools and Practice
- Organizations Orchestrate Information Flow and Work
- System Administrators Depend on their Communities
- Automation Cannot Replace System Administrators


Agriculture
Services
Manufacturing
Share of Employment
Time, Per Capita Income

Harvard Business Review

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THE HBR LIST

Our annual survey of emerging management ideas considers the downside of reliability and the upside of flip-flops; new directions for evolving technologies; and the persistent questions of who we are and what we fear.

Breakthrough Ideas for 2005

14. Toward a New Science of Services

Henry W. Chesbrough

Services contribute even more to the global economy than products do. So shouldn't the science of services be an academic field in its own right? Whether it becomes one may depend on the same criteria—including the extent of corporate support—that set computer science apart from engineering, math, and physics.

A failing grade for the innovation academy

Services dominate economic activity in developed economies, and yet understanding of innovation in this sector remains very limited

IBM RESEARCH

IBM Research

SERVICES SCIENCE: A NEW ACADEMIC DISCIPLINE?

SECTION ONE: OVERVIEW

I. Introduction

On May 17 and 18, 2004, IBM Research and Business Consulting Services (BCS) brought together academic participants from the fields of business, operations research and technology to examine the changing business environment and explore the case for the development of "services science," a new academic discipline capable of defining the skills needed by the 21st century workforce.

Some of the elements of the changing business environment noted were:

BY *HENRY CHESBROUGH* AND *JIM SPOHRER*

A RESEARCH MANIFESTO FOR SERVICES SCIENCE

The services sector has grown over the last 50 years to dominate economic activity in most advanced industrial economies, yet scientific understanding of modern services is rudimentary. Here, we argue for a services science discipline to integrate across academic silos and advance service innovation more rapidly.

century ago, most people in the U.S. and around the world worked on farms. During good times, food was plentiful. However, hard times meant starvation or dislocation as during the Irish potato famine. Today, agricultural employment is less than 5% in advanced economies. Despite these low percentages, there is plenty of food: mass starvation is a distant historical event in advanced economies. Why? The difference lies in the incredible productivity increases we have enjoyed in agriculture and more recently, in manufacturing. We are living longer and healthier lives at a higher standard of living because of these increases.

Let's be clear why most of us live in a "post agricultural" world today, while

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Business

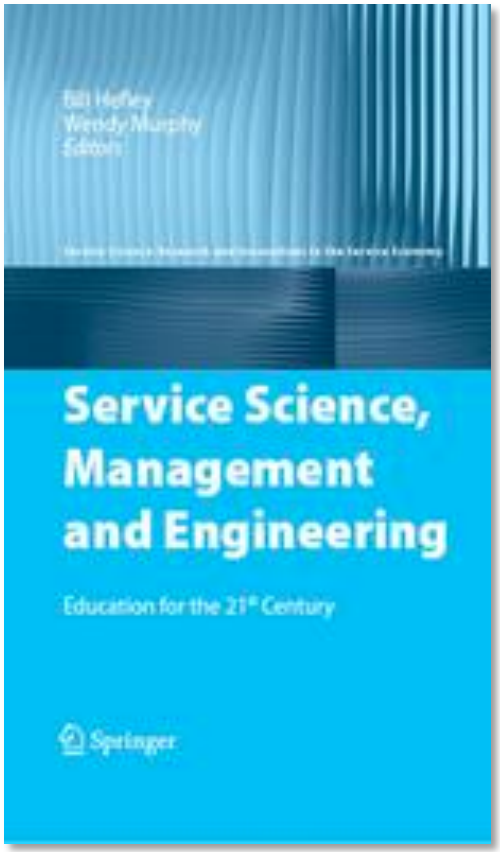
The New Discipline of Services Science

It's a melding of technology with an understanding of business processes and organization -- and it's crucial to the economy's next wave

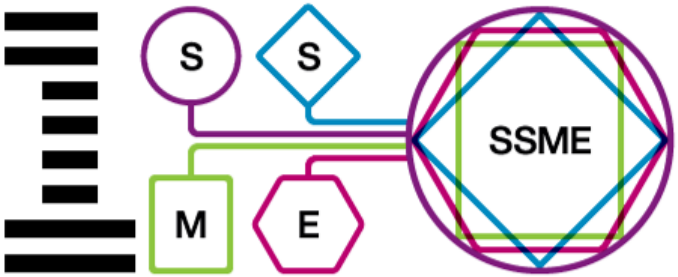
January 20, 2005, 9:00 PM PST

By Paul Horn

If the film *The Graduate* were remade today, the word of career advice whispered in Dustin Hoffman's ear might well be "services" instead of "plastics."



Invention of Service Science



The idea that there ought to be a new scientific discipline called service science had its genesis in a phone conversation in September of 2004. Jim Spohrer, who was starting up the IBM ® Research Service Research department, was on the line with Henry Chesbrough, a professor of business and innovation at the University of California at Berkeley. Spohrer complained to Chesbrough that he was having trouble finding job candidates who had the right mix of knowledge, including computer science, engineering, management and social science.

http://www.technologyreview.com/printer_friendly_article.aspx?id=14403
http://www.almaden.ibm.com/asr/resources/facsummit.pdf
http://www.businessweek.com/technology/content/jan2005/tc20050121_8020.htm

ON GOODS AND SERVICES

BY T. P. HILL

University of East Anglia, England

The paper is concerned with the concept, definition and measurement of a service. Although services are often dismissed as immaterial goods, they are not special kinds of goods and belong in a quite different logical category from goods. The search for appropriate units of quantity in which to measure services is not an idle metaphysical pursuit. Without quantity units there can be no prices, and most economic theory becomes irrelevant. Indeed, large parts of economic theory may be irrelevant to the analysis of services anyway, precisely because they are not goods which can be exchanged among economic units. Services are as important as goods in modern developed economies and they need to be identified and quantified properly if the measurement of economic growth and inflation is to have any meaning for the economy as a whole. The concept of a service is explained in some detail in the paper, and various ways in which services can be classified for purposes of economic analysis are elaborated. The distinction between private and public goods, or rather between private and collective services, is re-examined in the light of the general concept of a service proposed in the paper. Externalities are shown to be simply special kinds of services.

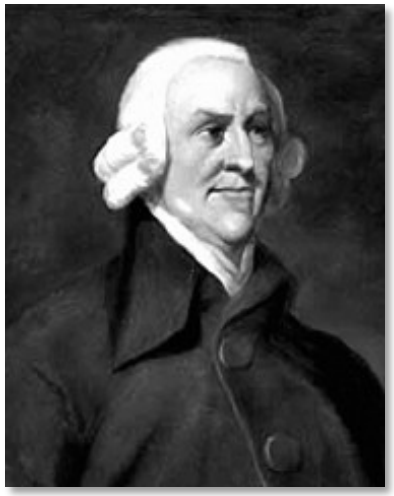
Hill, T. P. (1977). On Goods and Services. *Review of Income and Wealth*. 23(4), 314–339.

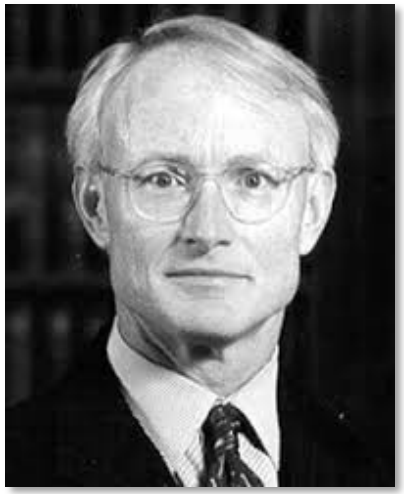
Stephen L. Vargo & Robert F. Lusch

Evolving to a New Dominant Logic for Marketing

Marketing inherited a model of exchange from economics, which had a dominant logic based on the exchange of "goods," which usually are manufactured output. The dominant logic focused on tangible resources, embedded value, and transactions. Over the past several decades, new perspectives have emerged that have a revised logic focused on intangible resources, the cocreation of value, and relationships. The authors believe that the new perspectives are converging to form a new dominant logic for marketing, one in which service provision rather than goods is fundamental to economic exchange. The authors explore this evolving logic and the corresponding shift in perspective for marketing scholars, marketing practitioners, and marketing educators.

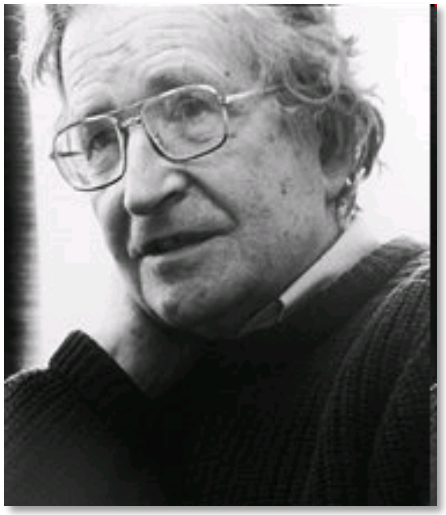
Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 1–17.





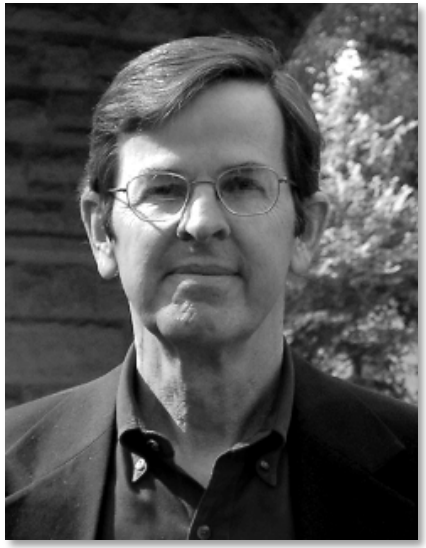
Services are things (or goods)
Value is put into goods and services by firms

Service is action (or interaction)
Value emerges from interactions of agents



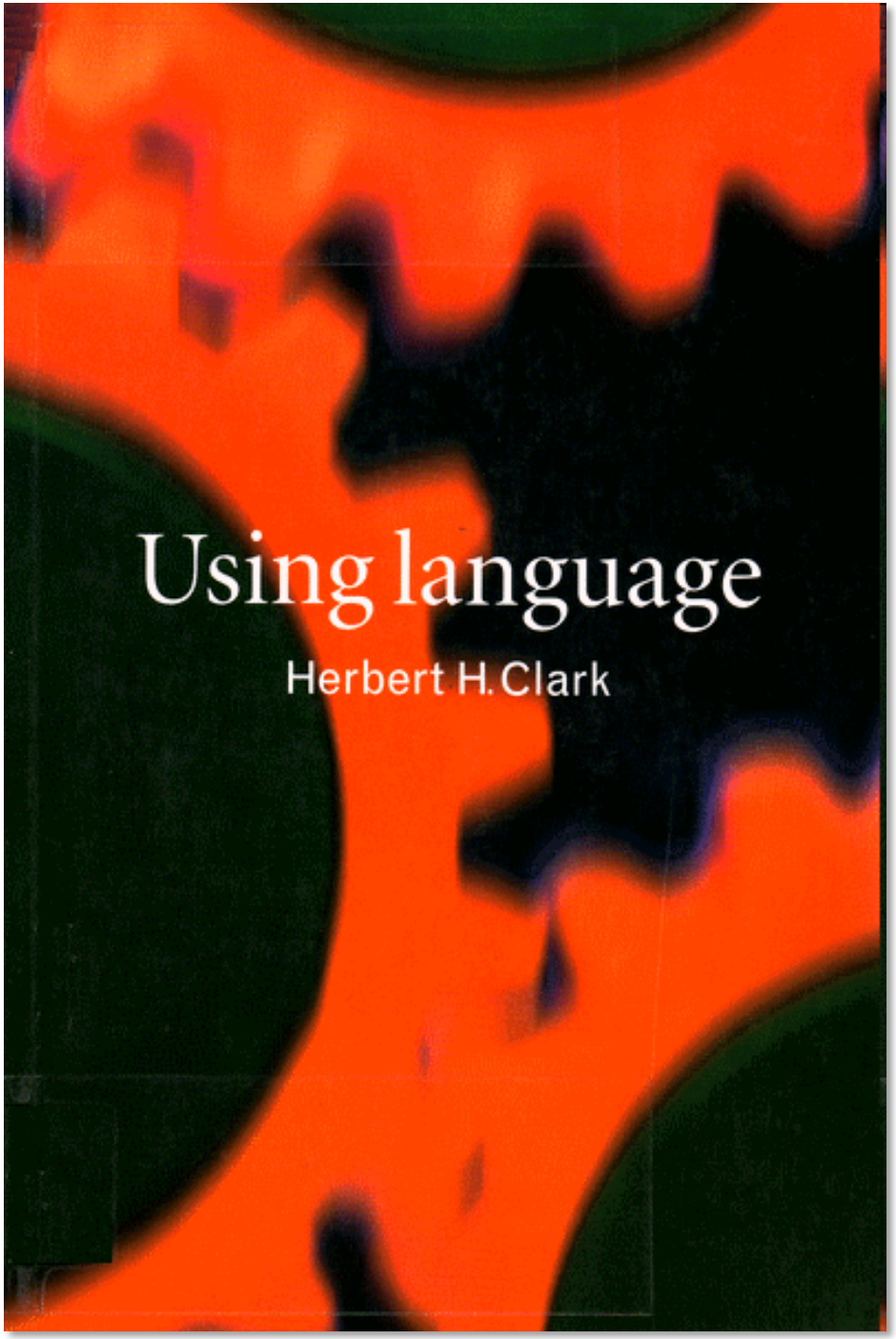
Language is a thing

Psychological reality of linguistic structures

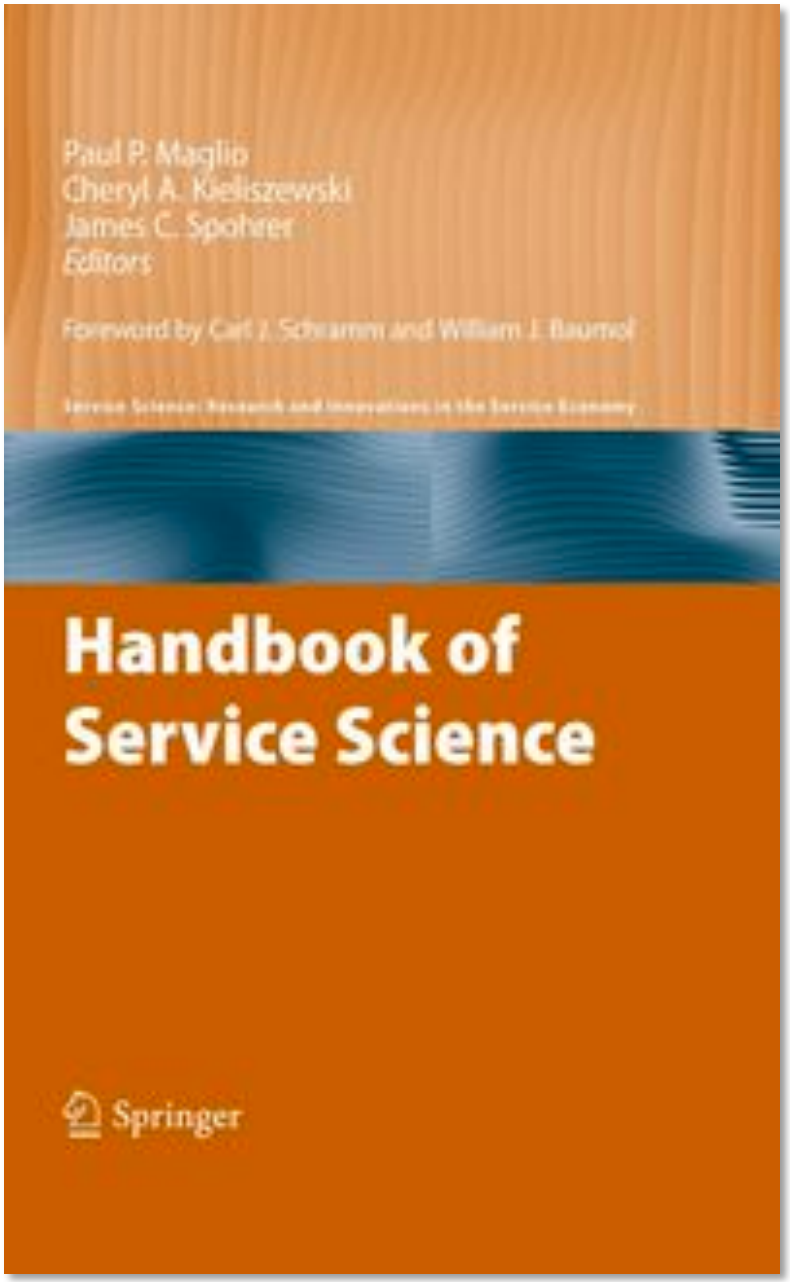


Language is action

How people use language to take action



Joint activities advance mostly through **joint actions**. In buying items at a drugstore, a customer joins a server in opening the transaction, settling on the items wanted, establishing the price, exchanging money, and closing.



Service is value cocreation – useful change that results from communication, planning, or other purposeful interactions between distinct entities.

Service science is the systematic search for principles and methods that can help us understand and improve all kinds of value cocreation.

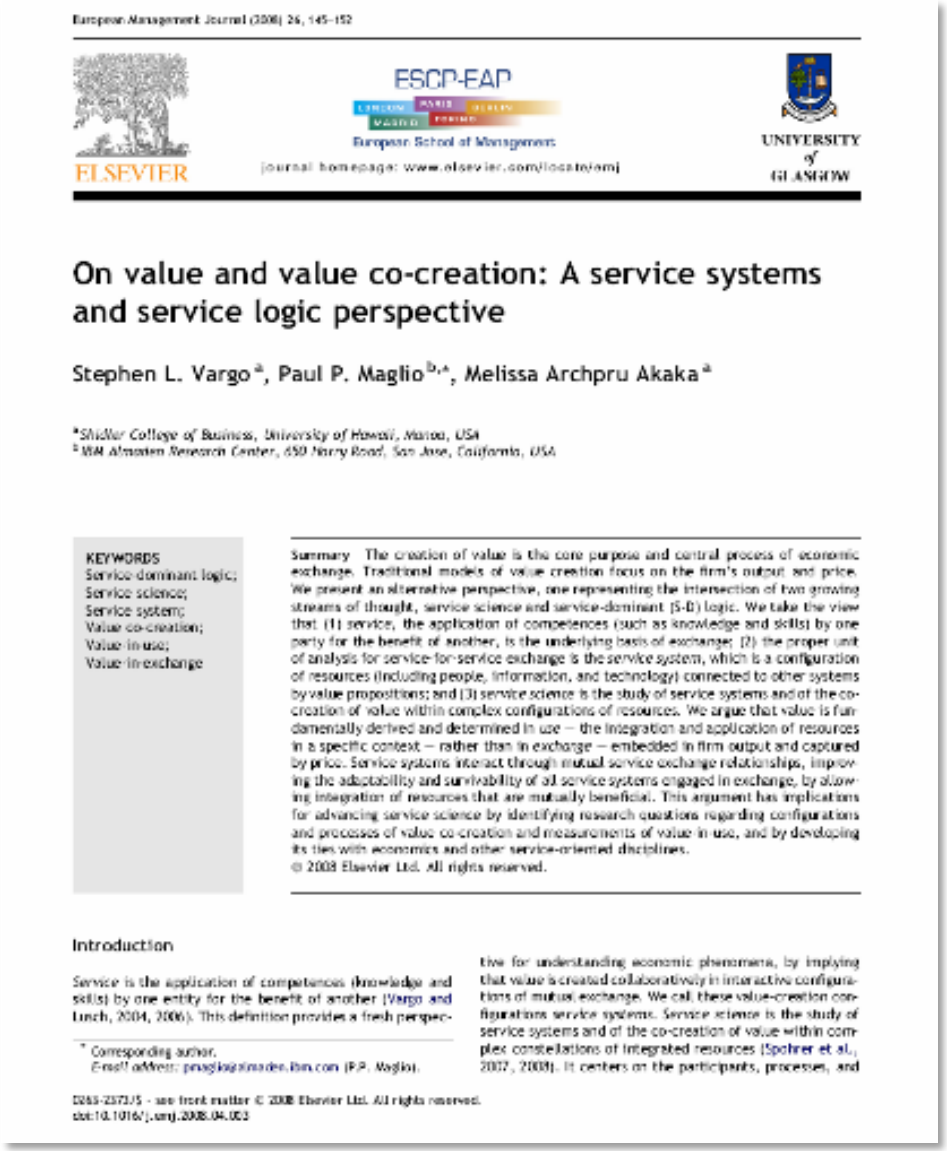
Maglio, P. P. Kieliszewski, C. A. & Spohrer, J. C. (2010). Why a handbook?. In P. P. Maglio, C. A. Kieliszewski & J. C. Spohrer (Eds.), *Handbook of Service Science*. New York: Springer.

Value can be defined as *system improvement* in an environment.

Value depends on capabilities a system has to survive and accomplish other goals.

Taking advantage of another system improves capabilities.

All ways that systems work together to improve or enhance capabilities can be seen as being value creating.



European Management Journal (2008) 26, 145–152

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UNIVERSITY of GLASGOW

On value and value co-creation: A service systems and service logic perspective

Stephen L. Vargo [a], Paul P. Maglio [b,*], Melissa Archpru Akaka [a]

[a] Shidler College of Business, University of Hawaii, Manoa, USA
[b] IBM Almaden Research Center, 650 Harry Road, San Jose, California, USA

KEYWORDS
Service-dominant logic;
Service science;
Service system;
Value co-creation;
Value-in-use;
Value-in-exchange

Summary The creation of value is the core purpose and central process of economic exchange. Traditional models of value creation focus on the firm's output and price. We present an alternative perspective, one representing the intersection of two growing streams of thought, service science and service-dominant (S-D) logic. We take the view that (1) service, the application of competences (such as knowledge and skills) by one party for the benefit of another, is the underlying basis of exchange; (2) the proper unit of analysis for service-for-service exchange is the service system, which is a configuration of resources (including people, information, and technology) connected to other systems by value propositions; and (3) service science is the study of service systems and of the co-creation of value within complex configurations of resources. We argue that value is fundamentally derived and determined in use – the integration and application of resources in a specific context – rather than in exchange – embedded in firm output and captured by price. Service systems interact through mutual service exchange relationships, improving the adaptability and survivability of all service systems engaged in exchange, by allowing integration of resources that are mutually beneficial. This argument has implications for advancing service science by identifying research questions regarding configurations and processes of value co-creation and measurements of value-in-use, and by developing its ties with economics and other service-oriented disciplines.

Introduction

Service is the application of competences (knowledge and skills) by one entity for the benefit of another (Vargo and Lusch, 2004, 2006). This definition provides a fresh perspective for understanding economic phenomena, by implying that value is created collaboratively in interactive configurations of mutual exchange. We call these value-creation configurations service systems. Service science is the study of service systems and of the co-creation of value within complex constellations of integrated resources (Spohrer et al., 2007, 2008). It centers on the participants, processes, and

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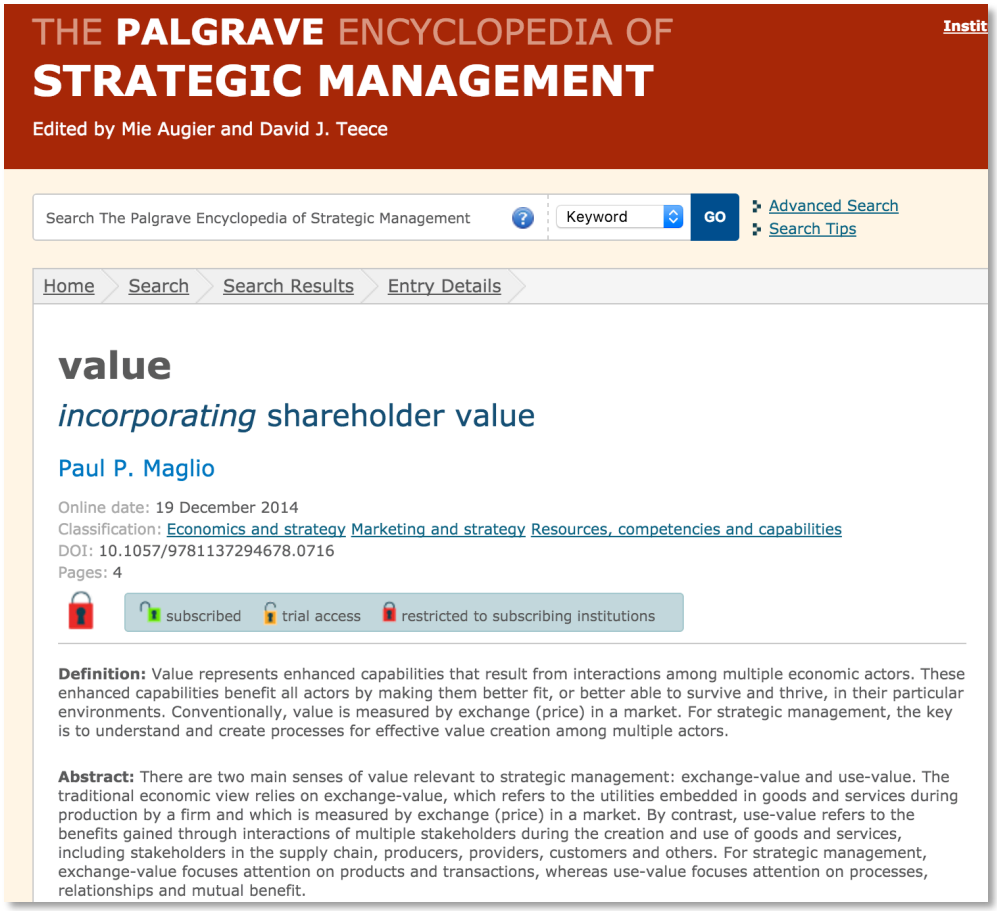
0263-2373/$ - see front matter © 2008 Elsevier Ltd. All rights reserved.
doi:10.1016/j.emj.2008.04.003

Vargo, S. L., Maglio, P. P., and Akaka, M. A. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, *26*(3), 145-152.

value: Enhanced capabilities that result from interactions among multiple economic actors. These enhanced capabilities benefit all actors by making them better fit or better able to survive and thrive in their particular environments. Conventionally, value is measured by exchange (price) in a market. For strategic management, the key is to understand and create processes for effective value creation among multiple actors.



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value

incorporating shareholder value

Paul P. Maglio

Online date: 19 December 2014
Classification: Economics and strategy; Marketing and strategy; Resources, competencies and capabilities
DOI: 10.1057/9781137294678.0716
Pages: 4

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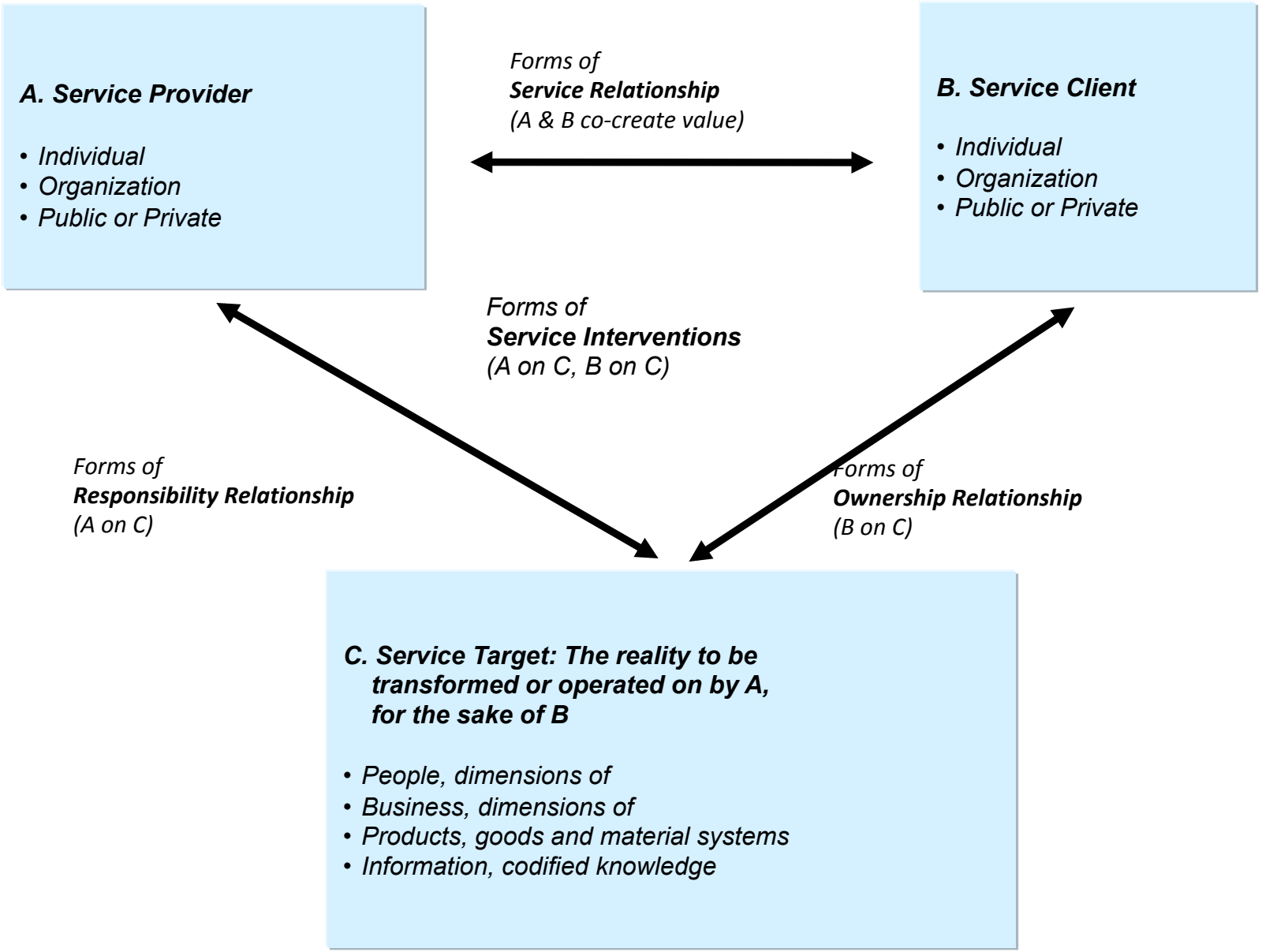
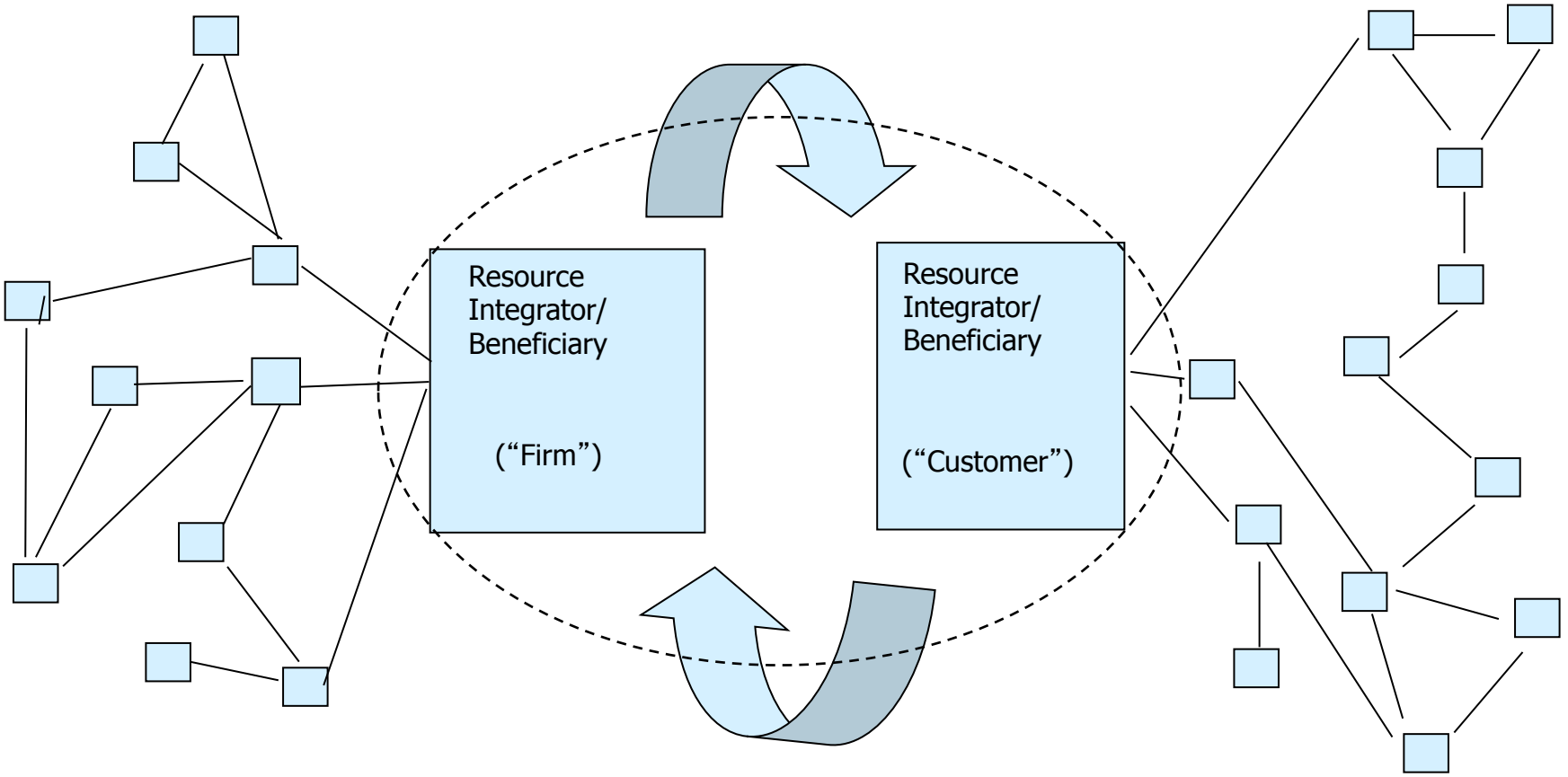
Definition: Value represents enhanced capabilities that result from interactions among multiple economic actors. These enhanced capabilities benefit all actors by making them better fit, or better able to survive and thrive, in their particular environments. Conventionally, value is measured by exchange (price) in a market. For strategic management, the key is to understand and create processes for effective value creation among multiple actors.

Abstract: There are two main senses of value relevant to strategic management: exchange-value and use-value. The traditional economic view relies on exchange-value, which refers to the utilities embedded in goods and services during production by a firm and which is measured by exchange (price) in a market. By contrast, use-value refers to the benefits gained through interactions of multiple stakeholders during the creation and use of goods and services, including stakeholders in the supply chain, producers, providers, customers and others. For strategic management, exchange-value focuses attention on products and transactions, whereas use-value focuses attention on processes, relationships and mutual benefit.

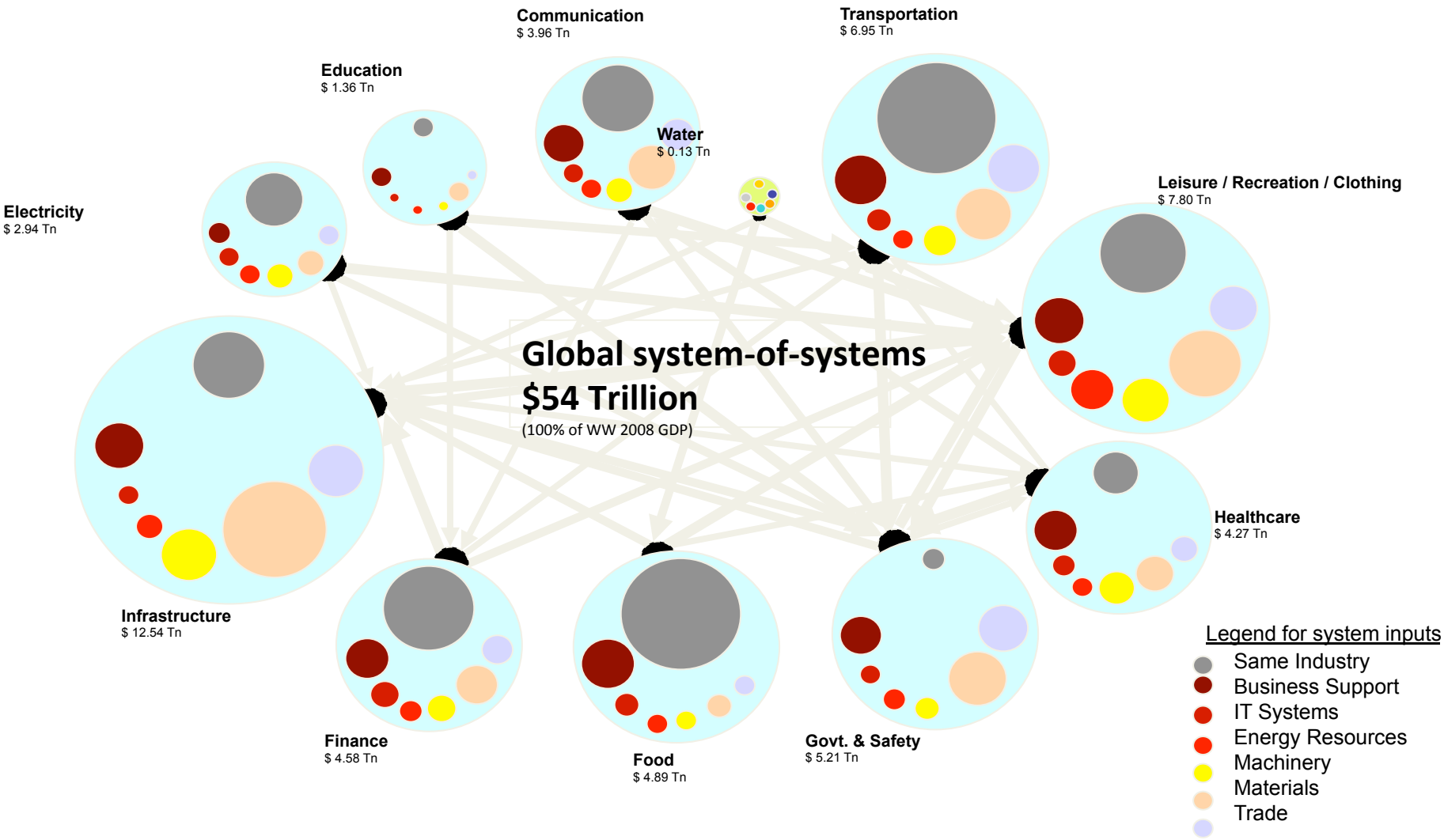
Maglio, P. P. (2014). value. In Augier, M. & Teece, D. J. (Eds.) *The Palgrave Encyclopedia of Strategic Management*.



Spohrer, J., Maglio, P. P., Bailey, J. & Gruhl, D. (2007). Steps toward a science of service systems. *Computer, 40*, 71-77.



Vargo, S. L. & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing, 68*, 1 – 17.



IBM analysis; OECD data.

Service system entities dynamically configure four types of resources

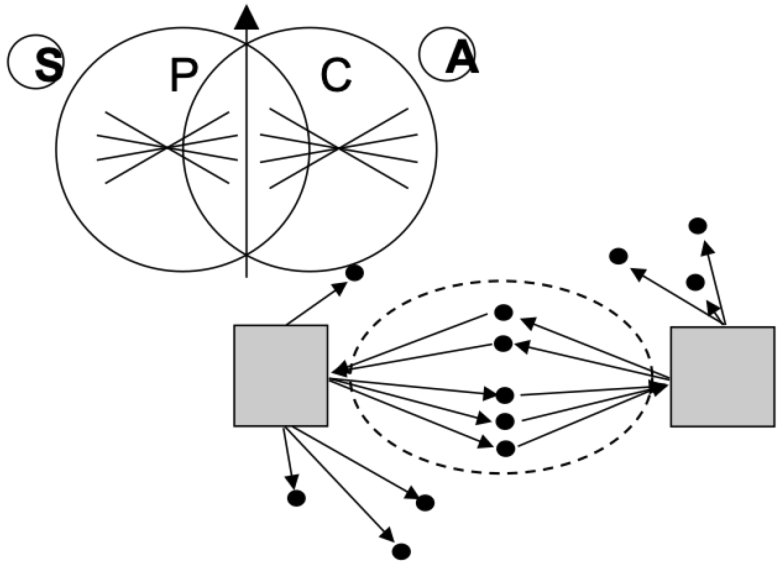
Service system entities compute value from multiple stakeholder perspectives

The access rights associated with entity resources are reconfigured by mutually agreed to value propositions

Service system entities compute and coordinate actions with others through symbolic processes of valuing and symbolic processes of communicating.

	Rights	No-Rights
Physical	1. People	2. Technology
Not-Physical	3. Organizations	4.. Shared Information

Stakeholder Perspective	Measure Impacted	Pricing	Questions	Reasoning
1.Customer	Quality	Value Based	Should we?	Model of customer: Do customers want it?
2.Provider	Productivity	Cost Plus	Can we?	Model of self: Does it play to our strengths?
3.Authority	Compliance	Regulated	May we?	Model of authority: Is it legal?
4.Competitor	Sustainable Innovation	Strategic	Will we?	Model of competitor: Does it put us ahead?



Maglio, P. P. & Spohrer, J. (2013). A service science perspective on business model innovation. *Industrial Marketing Management*, *42*, 655-670.

	Rights	No-Rights
Physical	1. People	2. Technology
Not-Physical	3. Organizations	4.. Shared Information

Value proposition design is service system design, rearrangements of resources that change how providers and customers realize value together

Value proposition design is a search by providers to improve existing offerings, create new offerings, and reconfigure systems

This search may involve looking for advantages based on

- resources (technology, people, organizations, information)
- stakeholders (provider, customer, authority, competitor)
- access rights (to resources and related capabilities)
- symbolic processes (for modeling value, for communication)

Business model evolution results from reconfigurations of internal operations and customer and supplier interactions

Stakeholder Perspective	Measure Impacted	Pricing	Questions	Reasoning
1.Customer	Quality	Value Based	Should we?	Model of customer: Do customers want it?
2.Provider	Productivity	Cost Plus	Can we?	Model of self: Does it play to our strengths?
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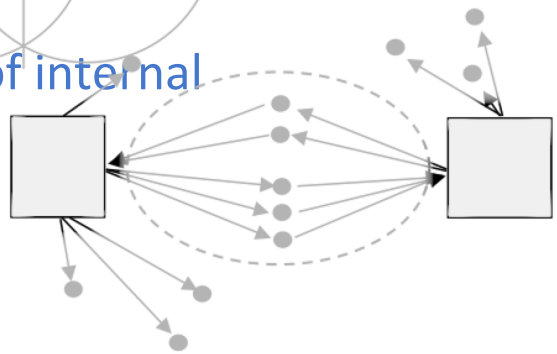

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Commentary

Toward a Research Agenda for Human-Centered Service System Innovation

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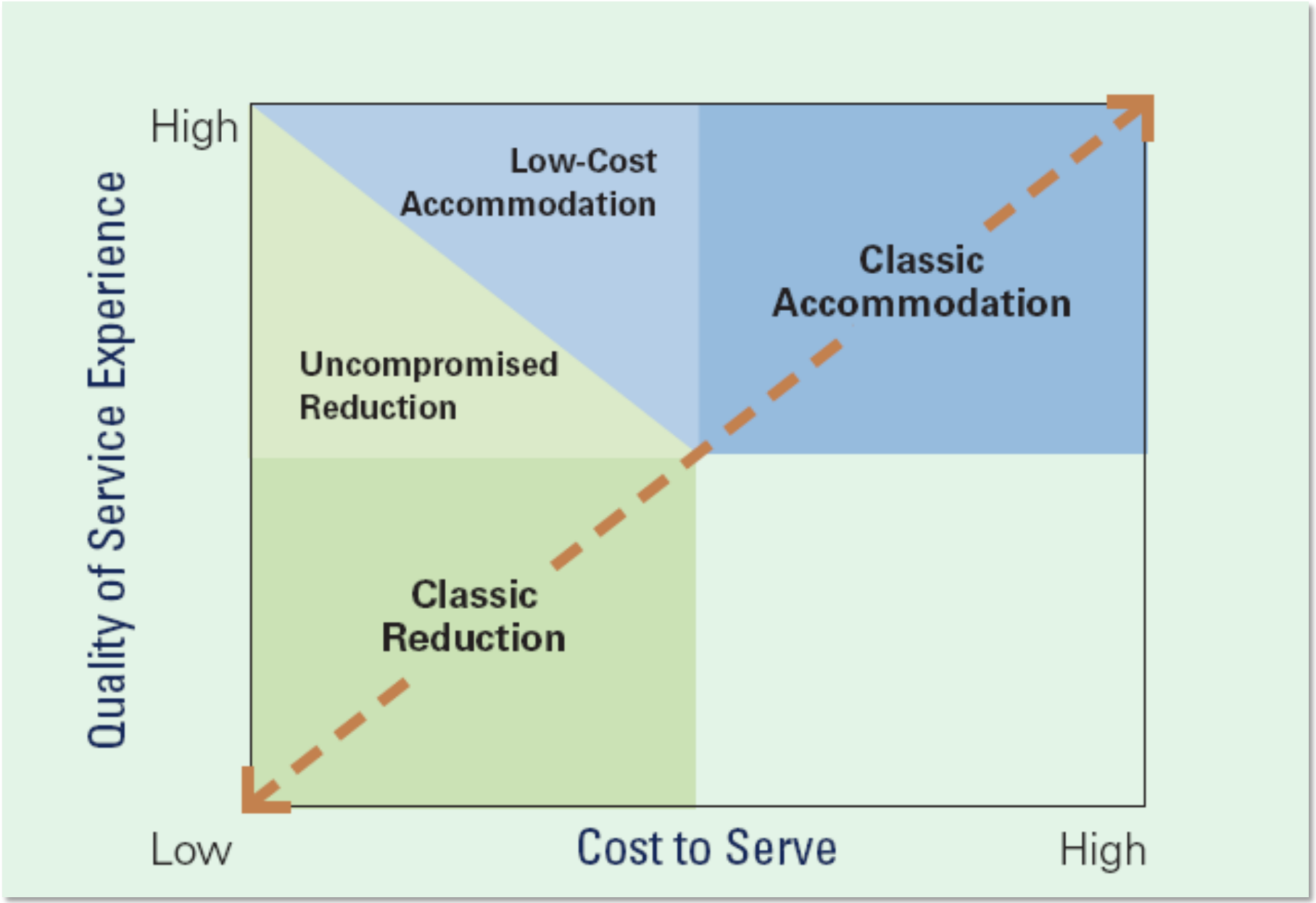
Stephen K. Kwan
Lucas Graduate School of Business, San José State University, San Jose, California 95192, stephen.kwan@sjsu.edu

Jim Spohrer
IBM Almaden Research Center, San Jose, California 95120, spohrer@us.ibm.com

Solving service problems has enormous practical consequences for the economy and society because (a) more than 80% of jobs in the United States are in the service sector, with most science, technology, engineering, and mathematics (STEM) graduates working in the service sector; (b) many complex service problems resist traditional optimization solutions; (c) private investments in platform technologies that underlie business and societal service innovations (smart service systems) are on the rise; and (d) the United States lags in public investment in service research behind countries such as Japan, China, Finland, and Germany. The search for service innovation requires new theories and new methods to address problems unique to services, and what little students are being taught about the service sector has not kept up with the rapid growth of STEM jobs in service or with modern entrepreneurial opportunities. We think that effective understanding of complex human-centered service systems requires a new approach that combines multiple methods, perhaps drawing from industrial engineering and operations research, social and behavioral sciences, information systems, and computer science and computational modeling. In this commentary, we outline a series of broad considerations and concerns, fundamental and applied questions, and specific research agenda items for service system innovation.

Keywords: service modeling; service theory and principles; service transformation and innovation
History: Received November 30, 2014; Accepted January 9, 2015 by Robin Qiu, former editor-in-chief.

Maglio, P. P., Kwan, S. J. & Spohrer, J. (2015). Toward a research agenda for human-centered service system innovation. (Commentary) *Service Science*, 7(1), 1-10.



Frei, F. X. (2006). Breaking the trade-off between efficiency and service. *Harvard Business Review*, 84, 93 – 101.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42

Seasonal Tax-Preparation Jobs

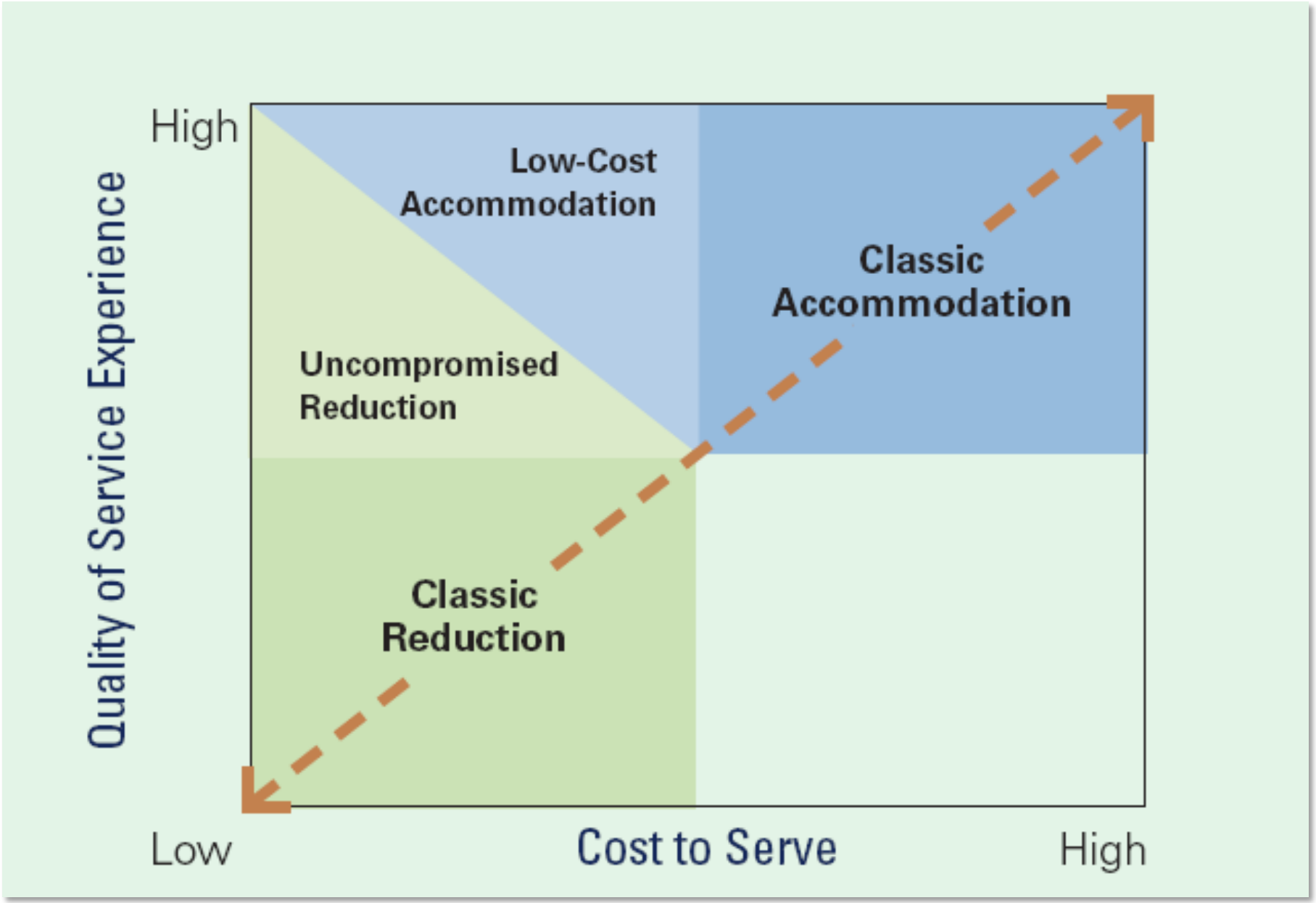
Dona DeZube, Monster Finance Careers Expert

Interested in keeping money out of the government's hands? Consider a seasonal job as a tax-preparation professional. Each year, large tax-preparation firms such as H&R Block and Jackson Hewitt train and employ thousands of people to prepare tax returns in their storefront offices.

H&R Block hires 80,000 tax professionals to work from January until the end of April. Ninety percent of them have taken the company's income tax course, which is offered every September and is available in both English and Spanish, says Kathy Burlison, director of tax implementation for H&R Block. The cost varies by location, and many offices offer early-bird registration specials and weekend classes. Although the course typically runs 11 weeks, an accelerated version can be completed in less time. The entire course is 69 hours.

Seasonal Tax-Preparation Jobs

Are you leaving money on the table? H&R Block with Watson can help.



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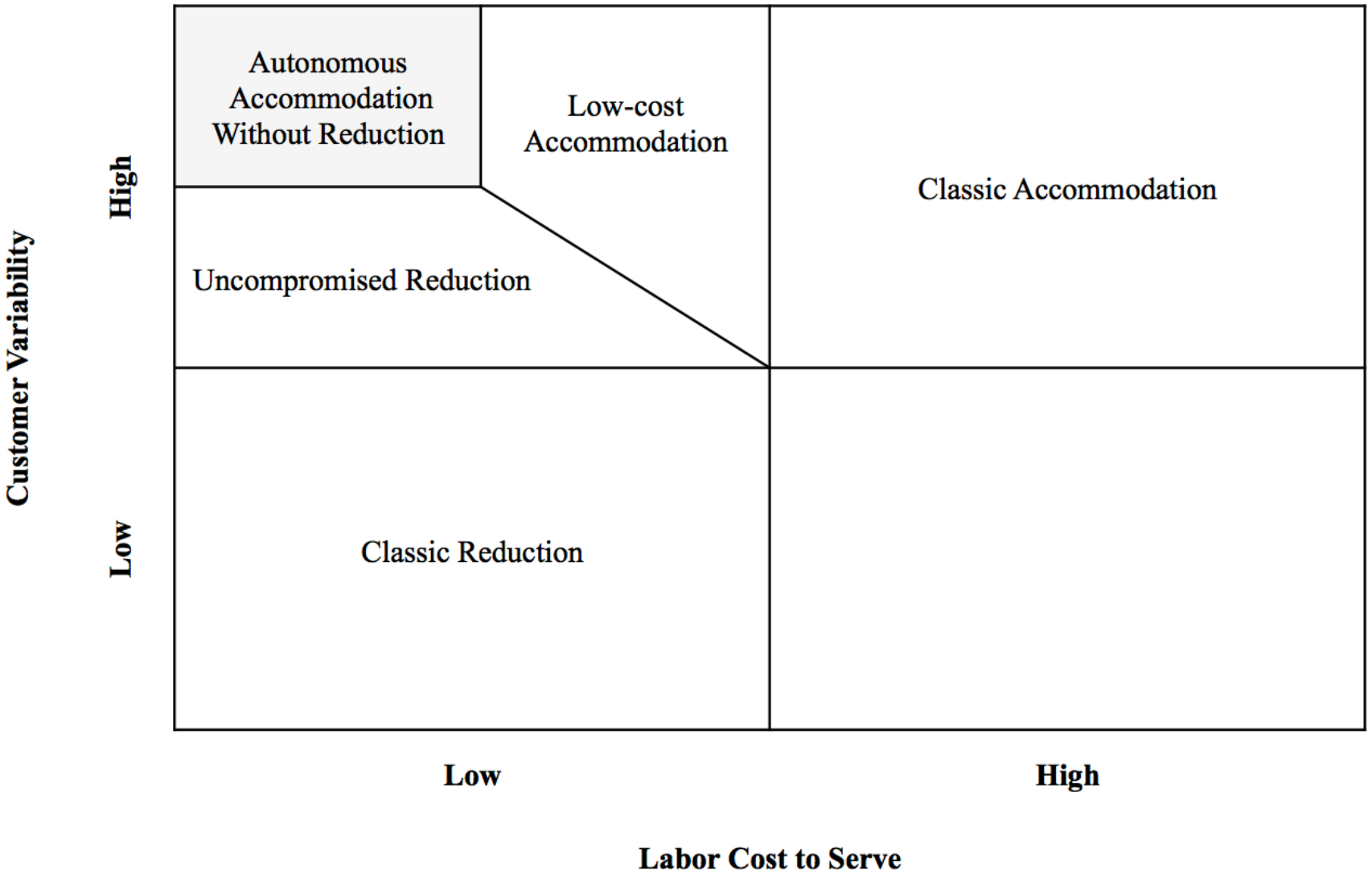

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Evidence That Robots Are Winning the Race for American Jobs

Claire Cain Miller @clairecm MARCH 28, 2017

Robot arms weld a vehicle at the General Motors plant in Lansing, Mich. Automakers are the biggest users of industrial robots, which have decreased employment and wages in local economies.
Bill Pugliano/Getty Images

Who is winning the race for jobs between robots and humans? Last year, two leading economists described a future in which humans come out ahead. But now they've declared a different winner: the robots.

The industry most affected by automation is manufacturing. For every robot per thousand workers, up to six workers lost their jobs and wages fell by as much as three-fourths of a percent, according to a new paper by the economists, Daron Acemoglu of M.I.T. and Pascual Restrepo of Boston University. It appears to be the first study to quantify large, direct, negative effects of robots.

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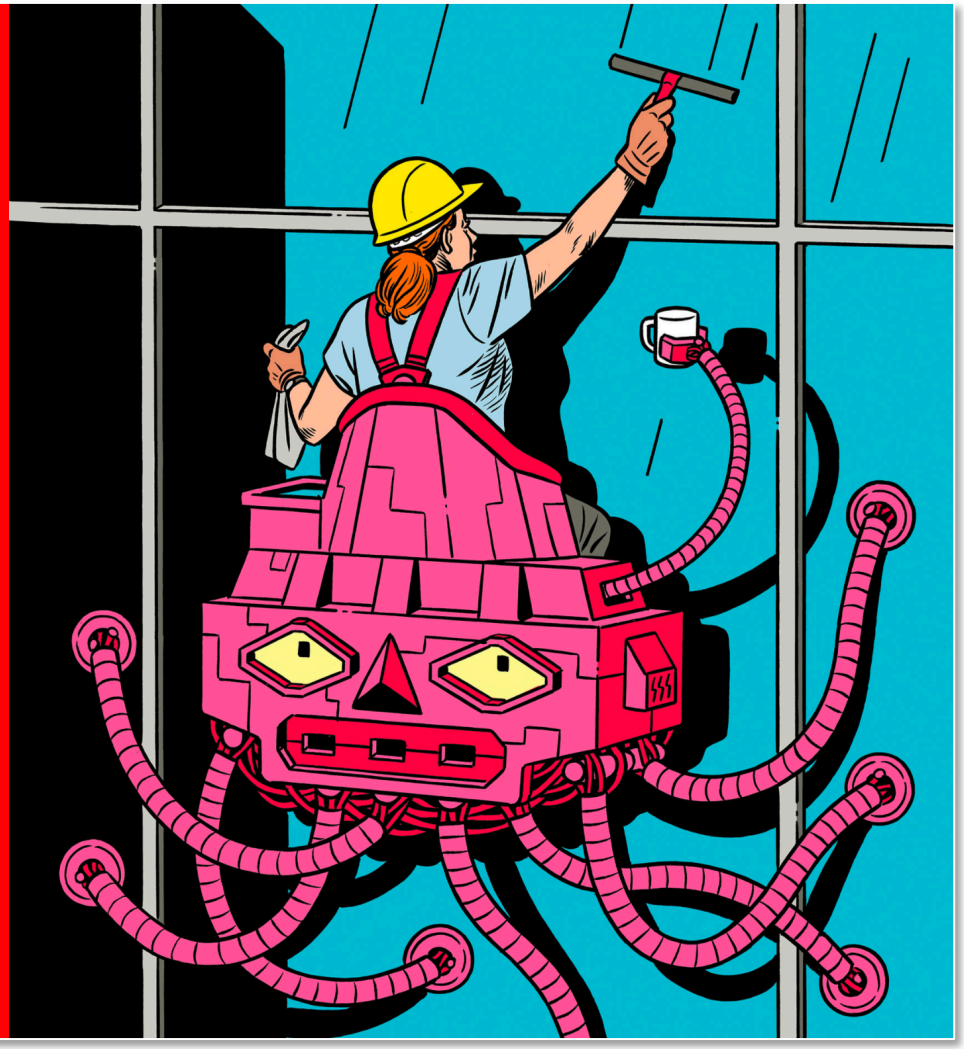
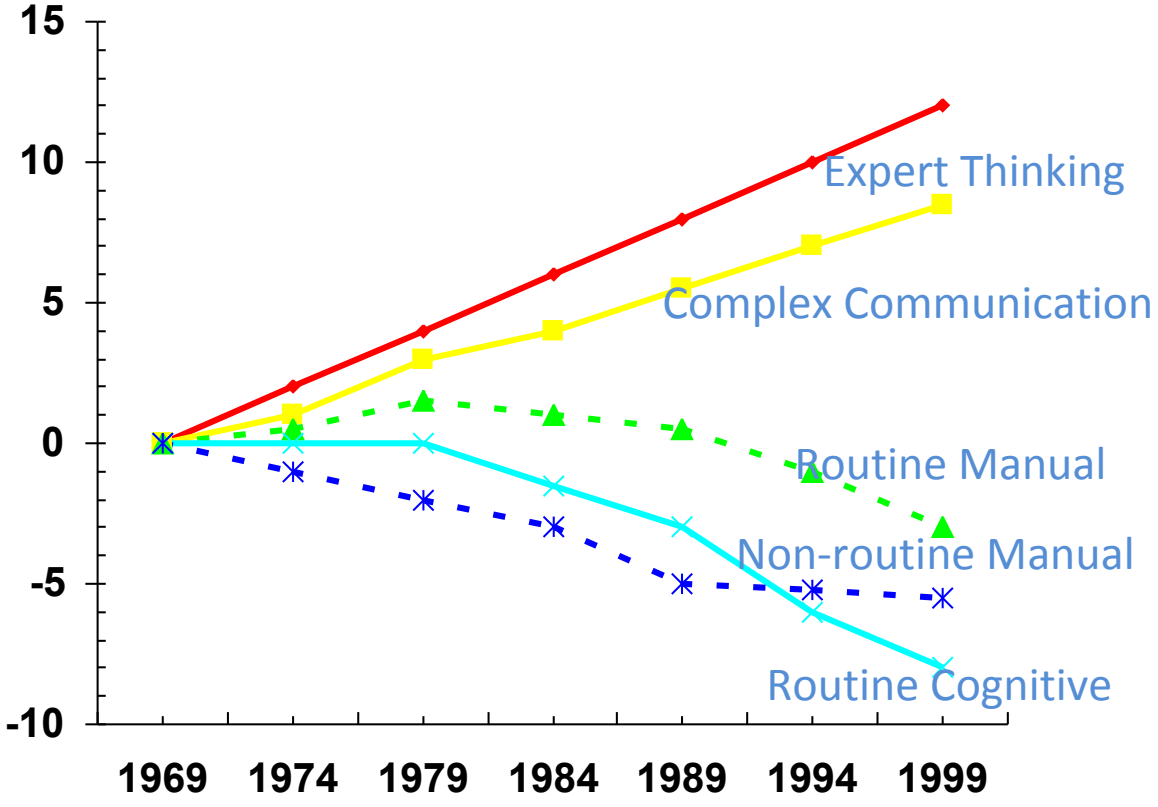
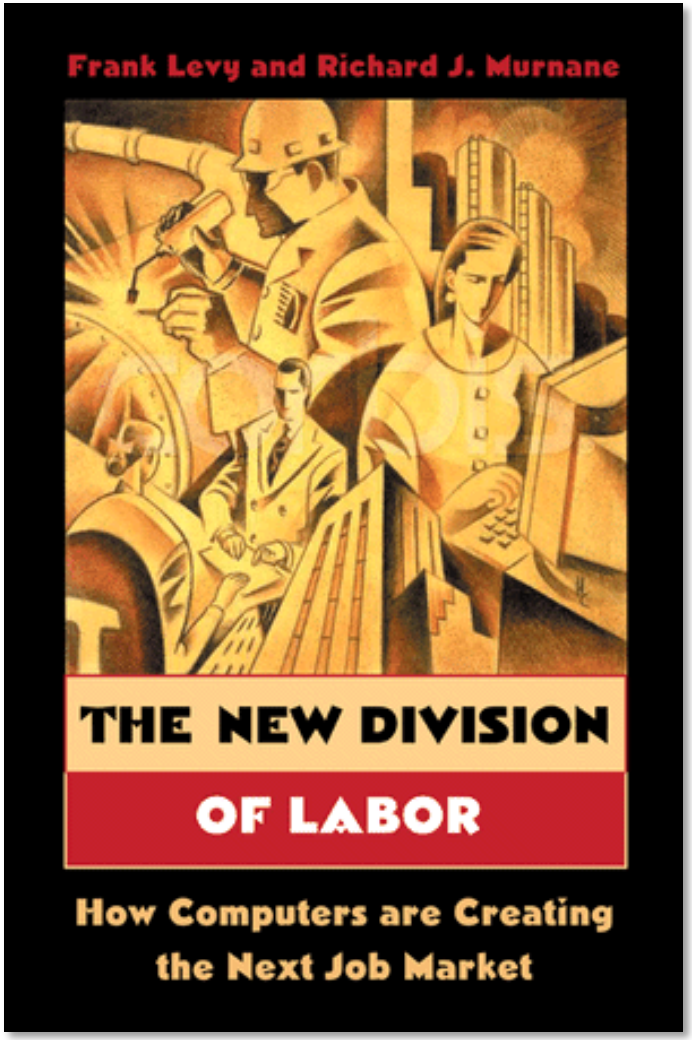
LEARNING TO LOVE OUR ROBOT CO-WORKERS

The most important frontier for robots is not the work they take from humans but the work they do with humans — which requires learning on both sides.

BY KIM TINGLEY FEB. 23, 2017







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	1996		Example
	Service	Goods	
Tightly Constrained	4%	10%	Call center, Fast food
Unrationalized Labor Intensive	26%	15%	Maid, child care
Semi-Autonomous	30%	35%	Admin., Manager
High-skill Autonomous	40%	40%	Executive, Engineer

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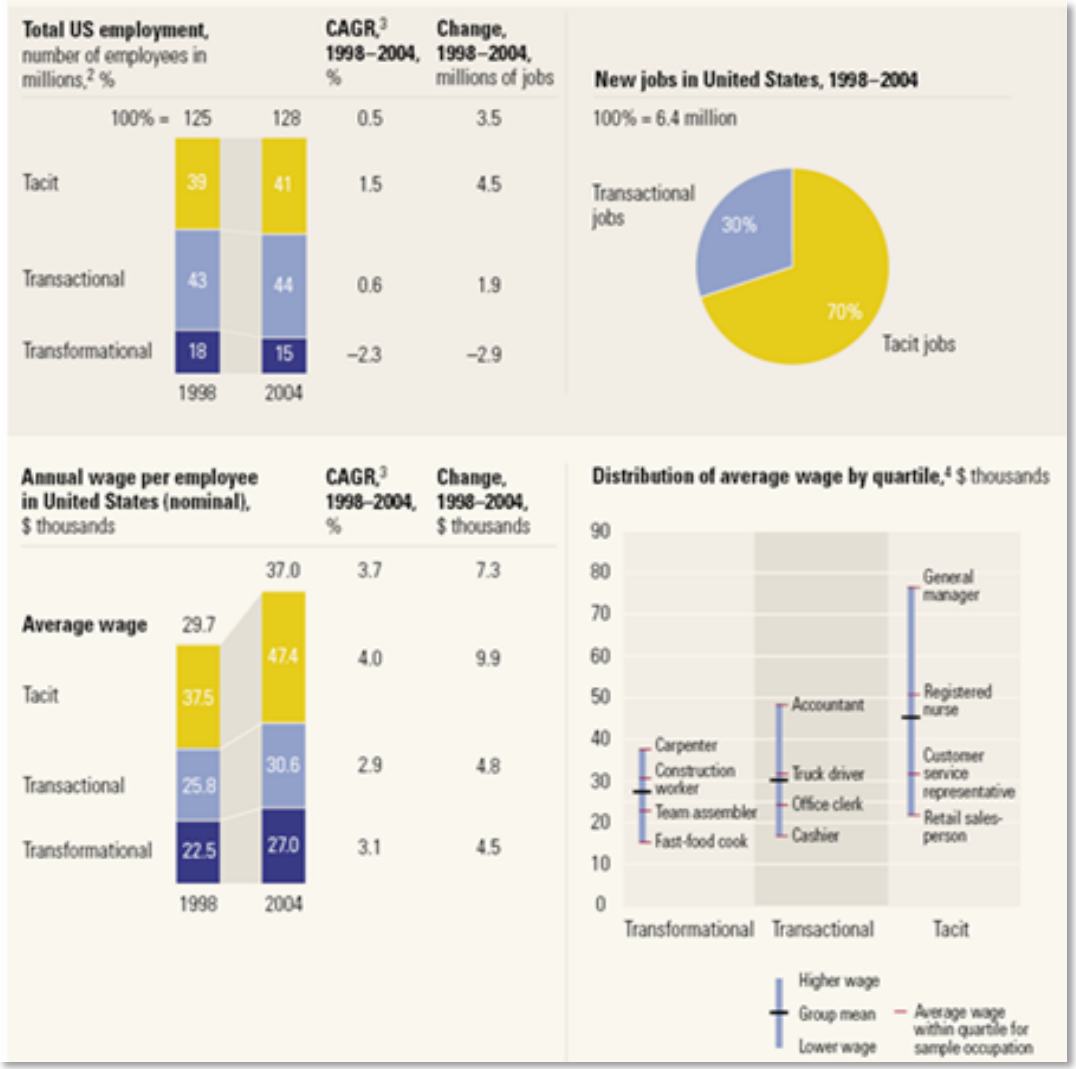
As more 21st century companies come to specialize in core activities and outsource the rest, they have greater need for workers who can interact with other companies, their customers, and their suppliers.

Raising the productivity of employees whose jobs can't be automated is the next great performance challenge – and the stakes are high.

Companies that get that right will build complex talent-based competitive advantages that competitors won't be able to duplicate easily – if at all.



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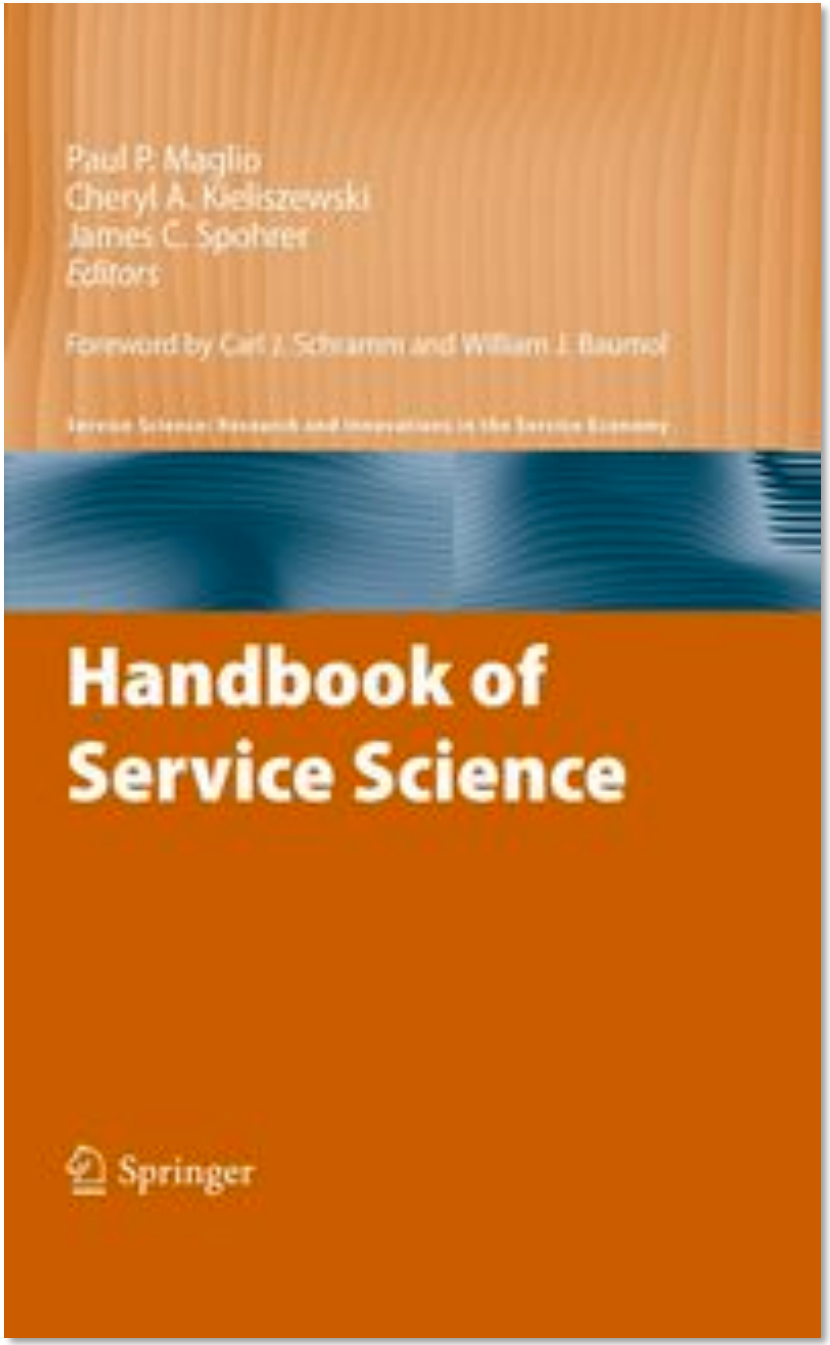
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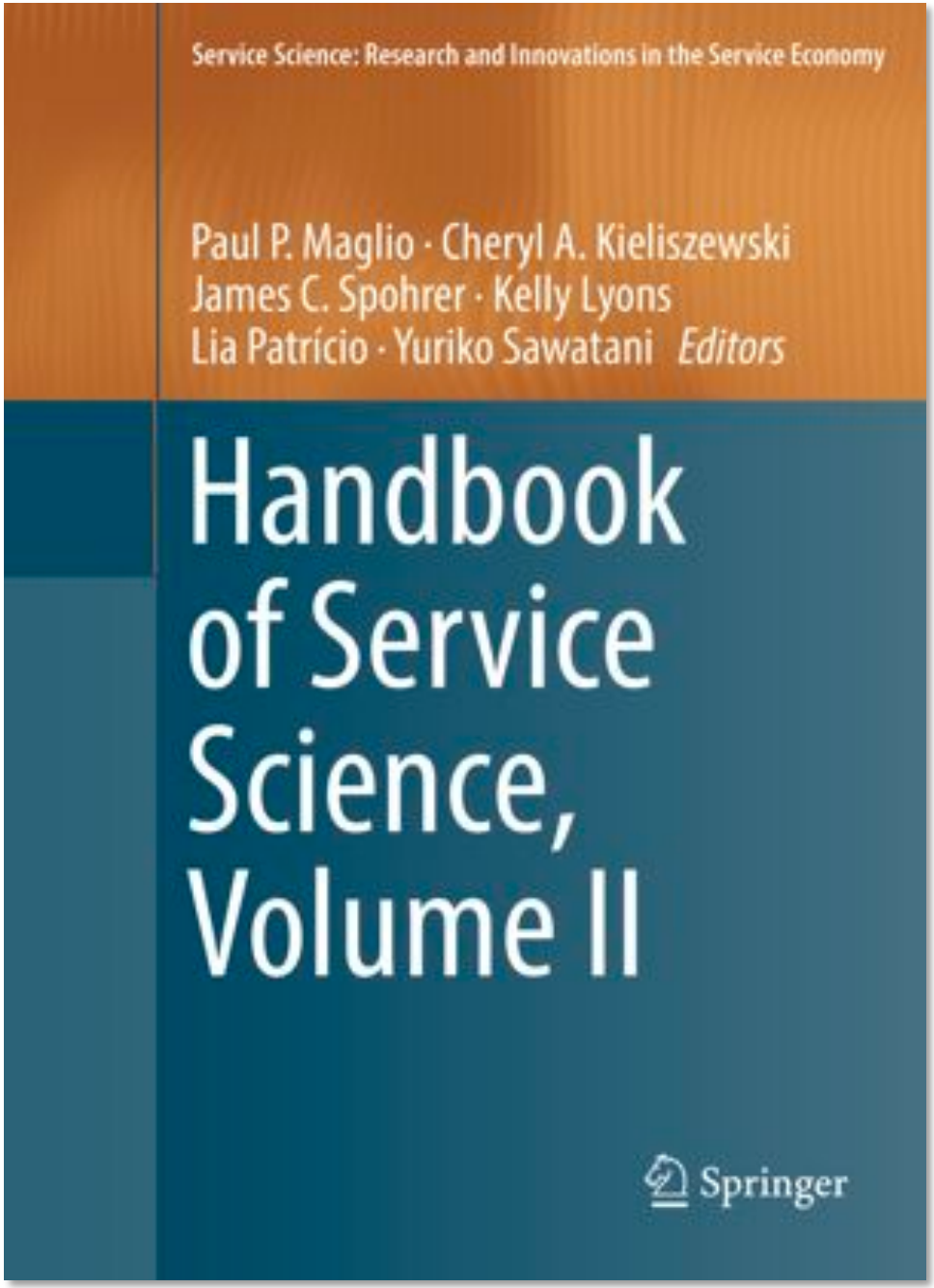
Service Science: Research and Innovations in the Service Economy
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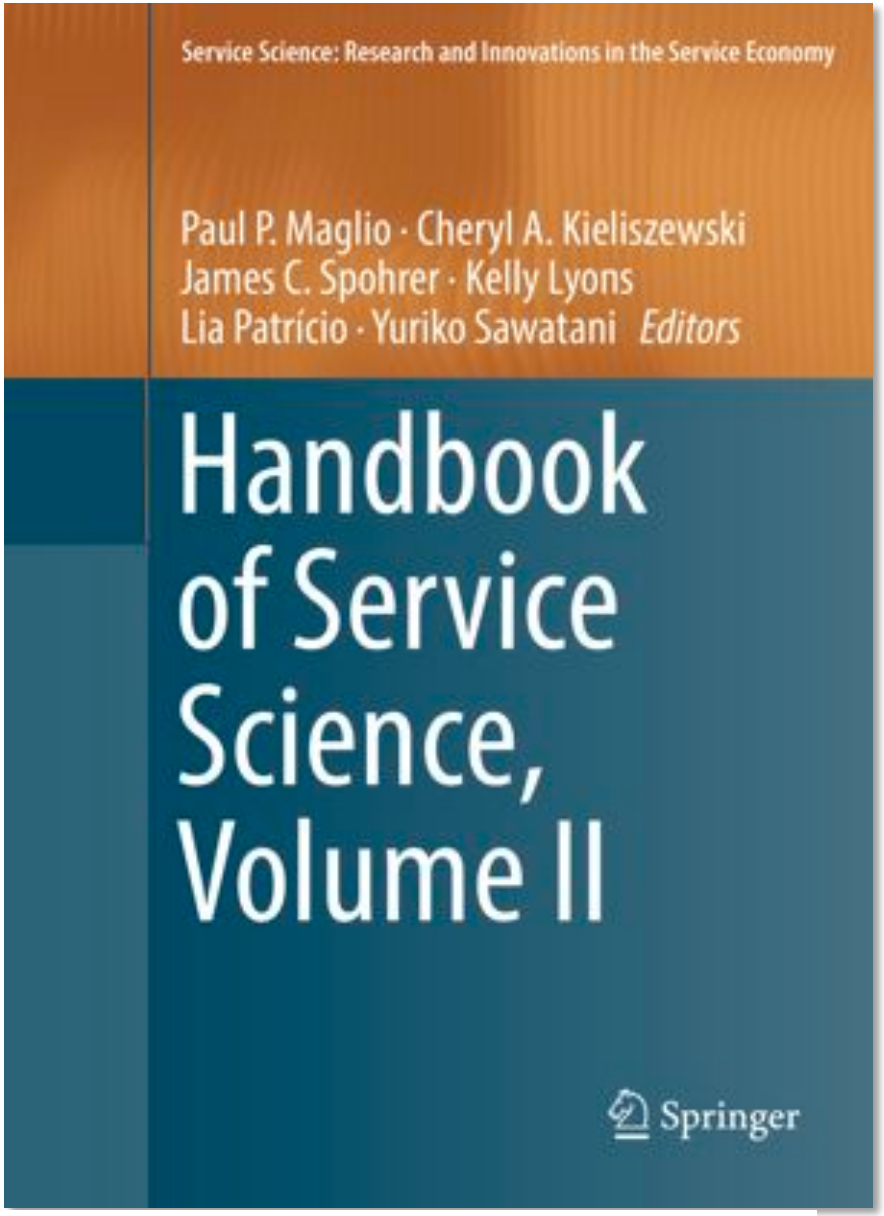
James C. Spohrer · Kelly Lyons
Lia Patrício · Yuriko Sawatani Editors
Handbook
of Service
Science,
Volume II
Springer

Key concepts now

- human-side of service systems
- networked service experience
- broader service ecosystem

Value creation necessarily involves people

Service science has evolved as the result of cross-pollination of ideas and methods from different academic areas and from the use of technology in modern service practice



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Data-Driven Understanding of Smart Service Systems Through Text Mining

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Abstract. Smart service systems are everywhere, in homes and in the transportation, energy, and healthcare sectors. However, such systems have yet to be fully understood in the literature. Given the widespread applications of and research on smart service systems, we used text mining to develop a unified understanding of such systems in a data-driven way. Specifically, we used a combination of metrics and machine learning algorithms to preprocess and analyze text data related to smart service systems, including text from the scientific literature and news articles. By analyzing 5,378 scientific articles and 1,234 news articles, we identify important keywords, 16 research topics, 4 technology factors, and 13 application areas. We define "smart service system" based on the analytics results. Furthermore, we discuss the theoretical and methodological implications of our work, such as the 5Cs (connection, collection, computation, and communications for co-creation) of smart service systems and the text mining approach to understand service research topics. We believe this work, which aims to establish common ground for understanding these systems across multiple disciplinary perspectives, will encourage further research and development of modern service systems.

History: Accepted by Robin Qiu, former Editor-in-Chief.

Funding: This work was supported by the National Research Foundation of Korea [Grant NRF-2017R1C1B1006614] and by "Human Resources Program in Energy Technology" of the Korea Institute of Energy Technology Evaluation and Planning, granted financial resource from the Ministry of Trade, Industry and Energy, Republic of Korea [No. 20164010201030].

Keywords: smart service • smart system • smart service system • text mining • data-driven understanding

Lim, C. & Maglio, P. P. (2018). Data-driven understanding of smart service systems through text mining. *Service Science, 10(2)*, 154-180.

system
service
smart
network
technology
environment
communication
information
device
energy
data
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user
grid
mobile
sensor
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privacy
evaluation
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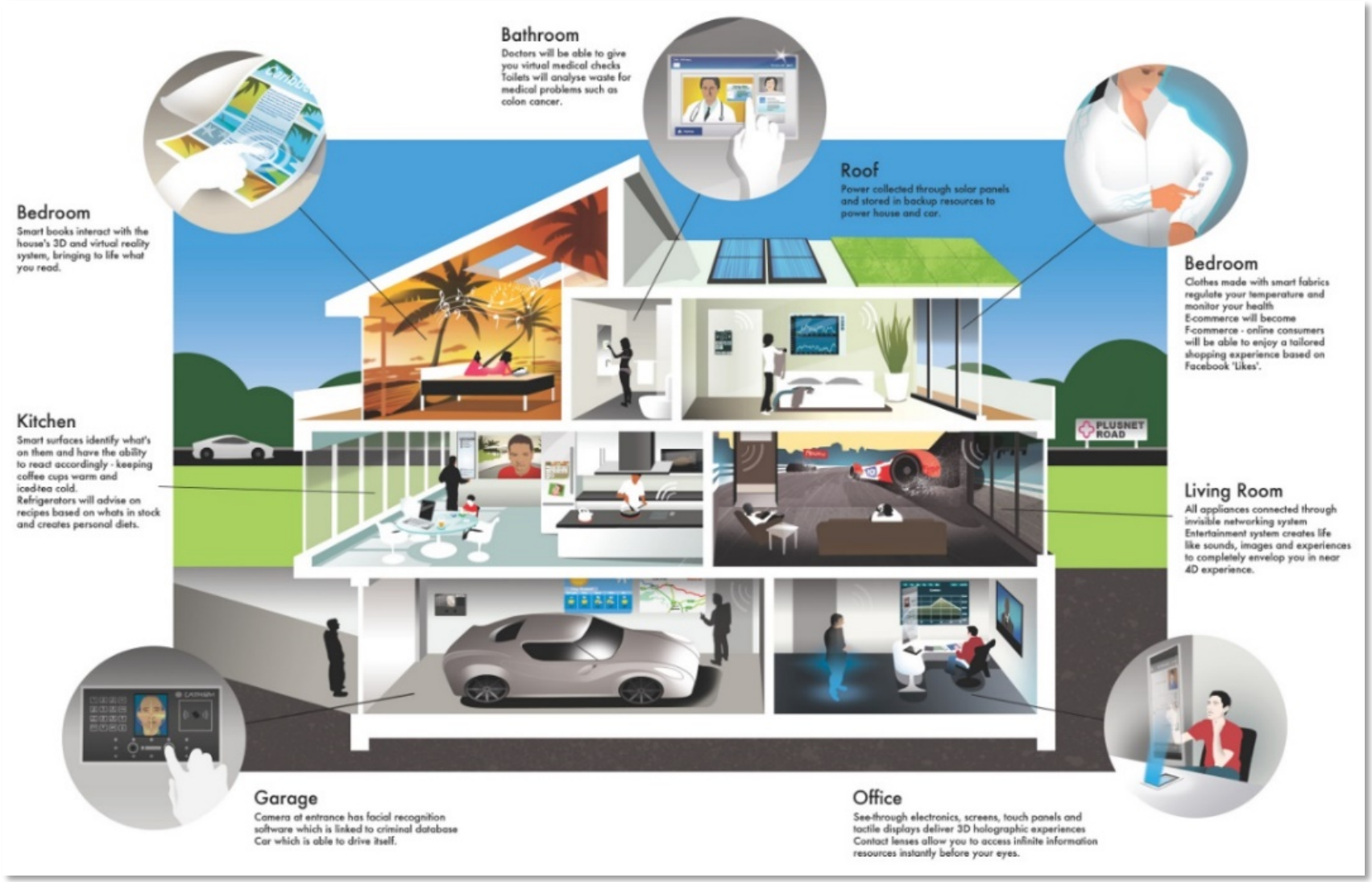
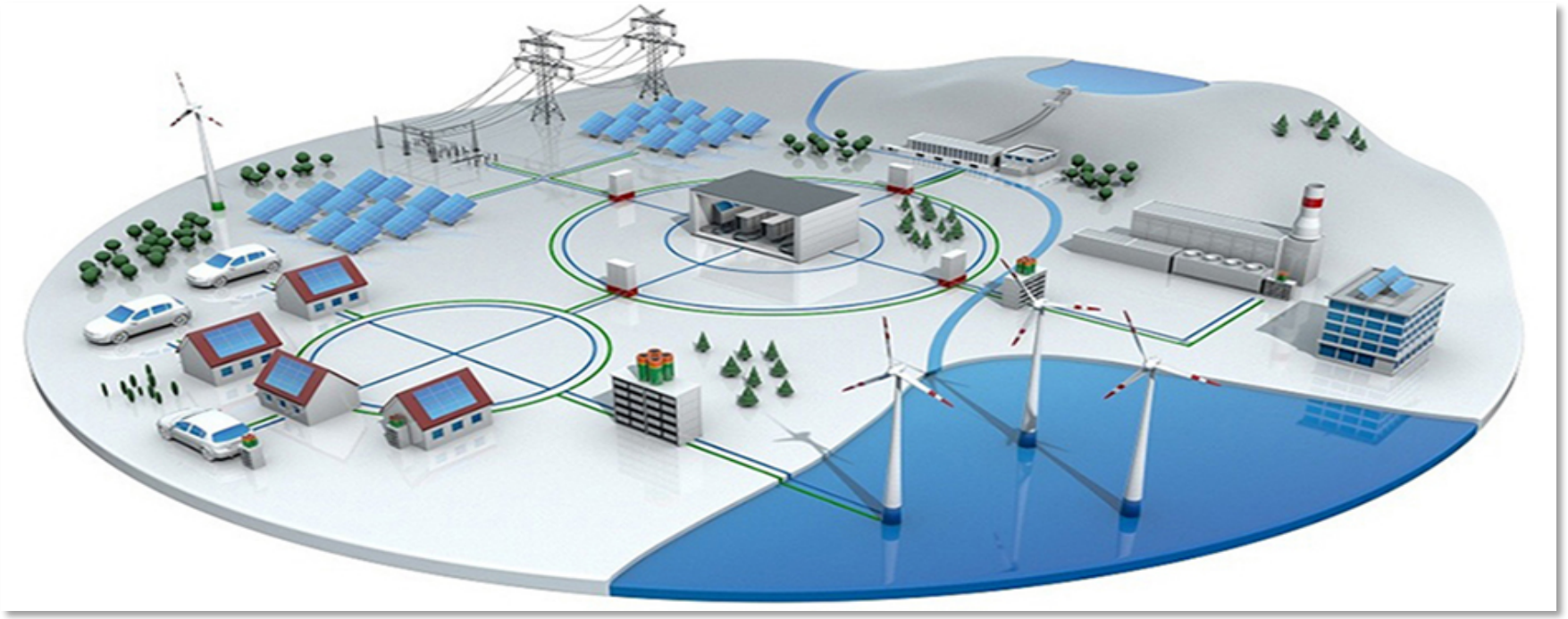
recognition

The 5C's of Smart Service Systems	
Connection	As we become more connected, opportunities for value co-creation increase
Collection Computation	As we collect and compute more data, the informational or intellectual resources for value co-creation increase
Communication	As we communicate more efficiently, the frequency and intensity of value co-creation increase
Co-creation	Value results from interactions of agents, computation, and data

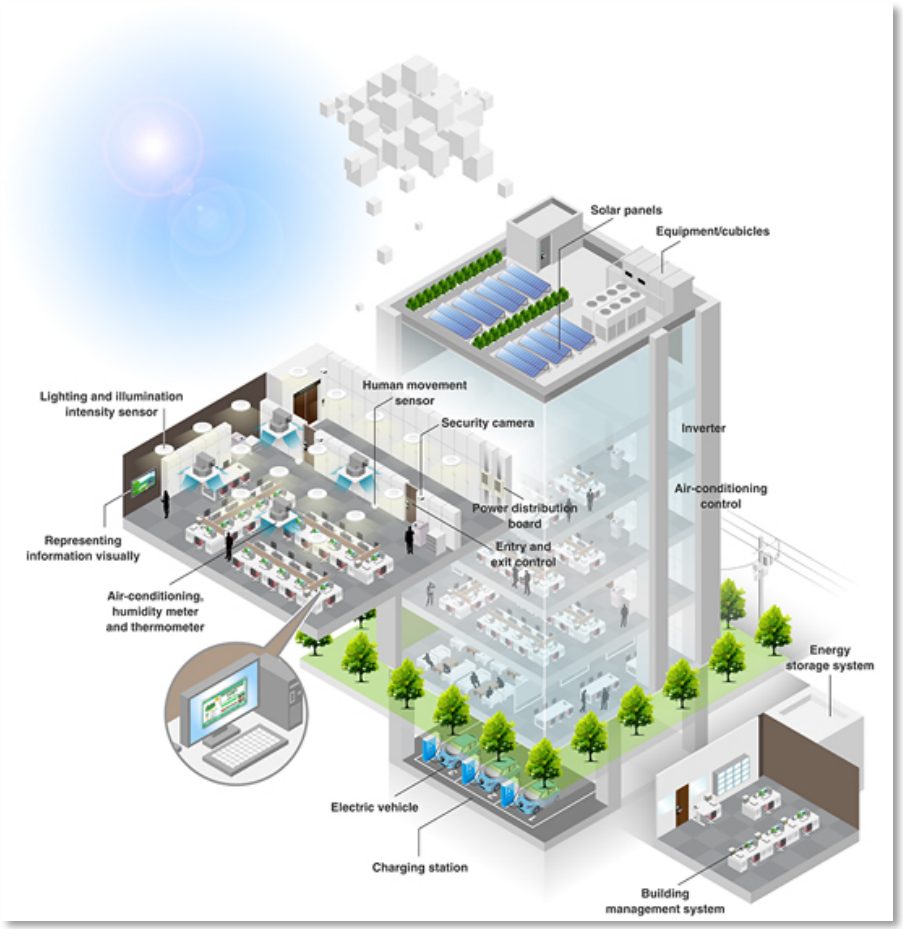
Lim, C. & Maglio, P. P. (2018). Data-driven understanding of smart service systems through text mining. *Service Science, 10(2)*, 154-180.



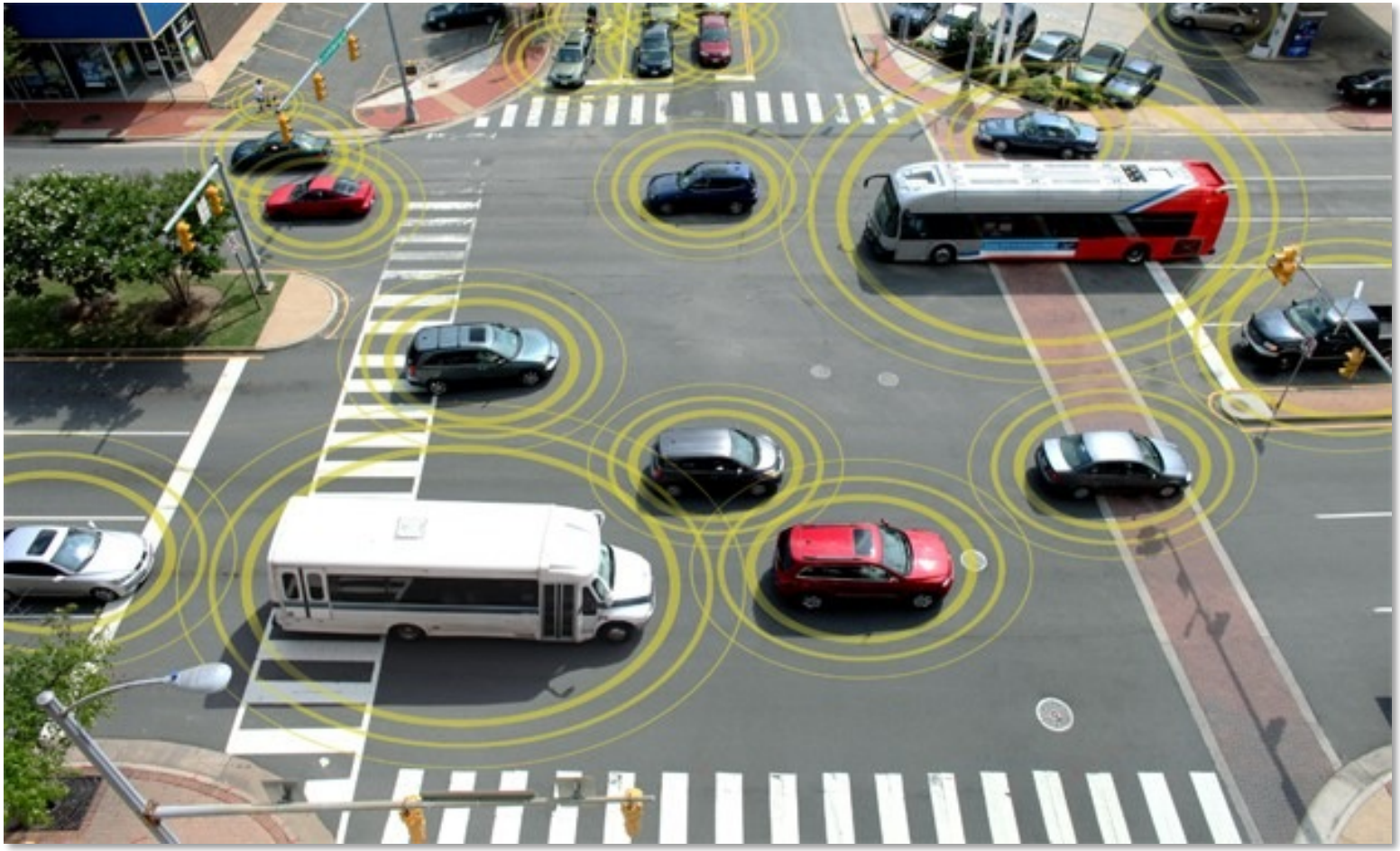
Smart home service systems facilitate value co-creation activities among residents and related stakeholders by connecting devices in and around the home, collecting living-related data, computing for context-awareness, and communicating in or through a technology-equipped house



Smart energy service systems facilitate value co-creation activities among energy users, producers, and other stakeholders by connecting and collecting energy operations data, computing for energy usage optimization, and communicating among machines, facilities, and more

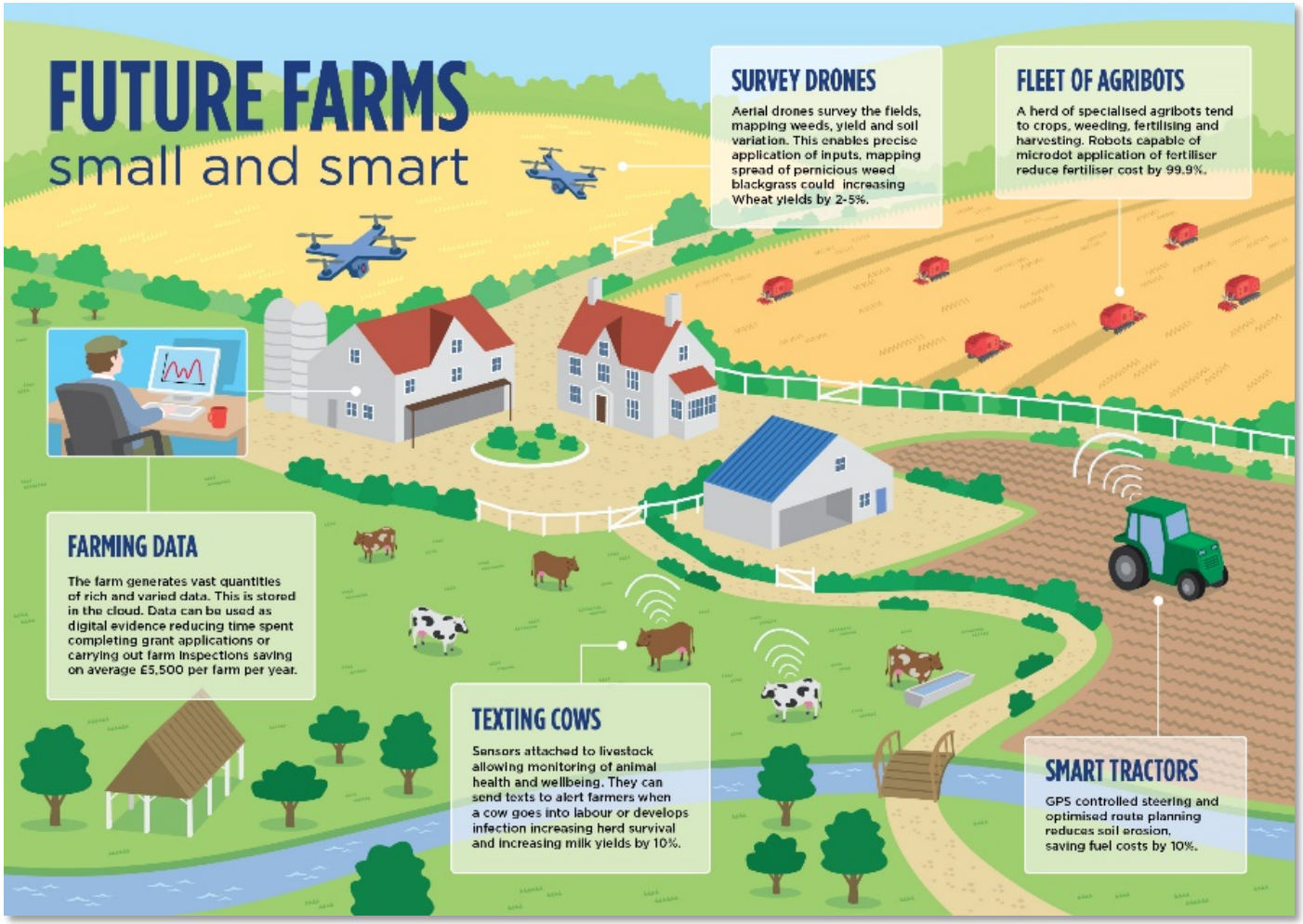


Smart building service systems facilitate value co-creation activities among building occupants, managers, and other stakeholders by the connecting and collecting work-related and building operations data, computing for comfort and performance optimization, and communicating in or through a technology-equipped building.

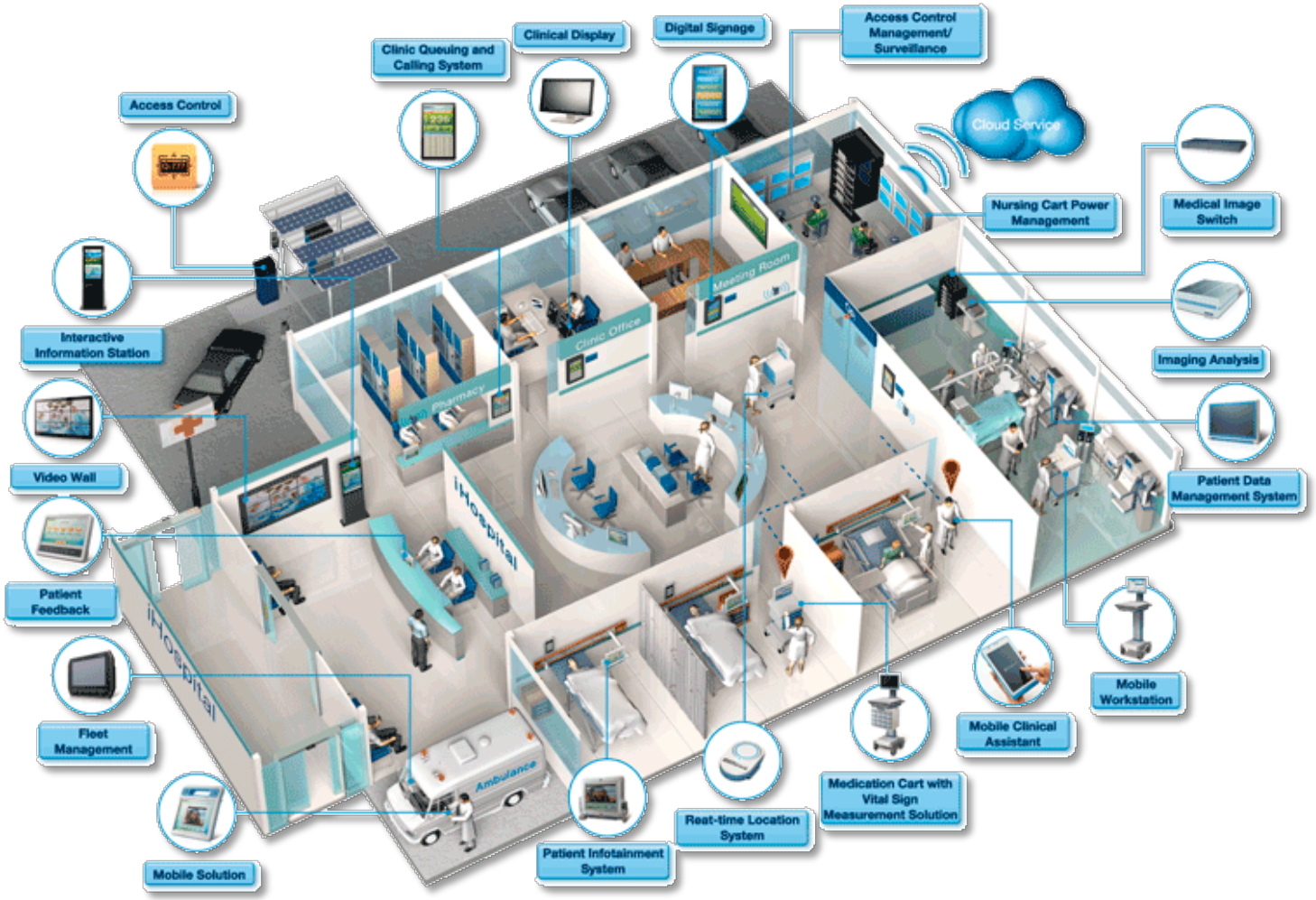


Smart transportation service systems facilitate value co-creation activities among drivers, riders, and other stakeholders by connecting vehicles, roads, and other infrastructure, collecting vehicle operations and health data, computing for safety and efficiency, and communicating among vehicles, people, and more

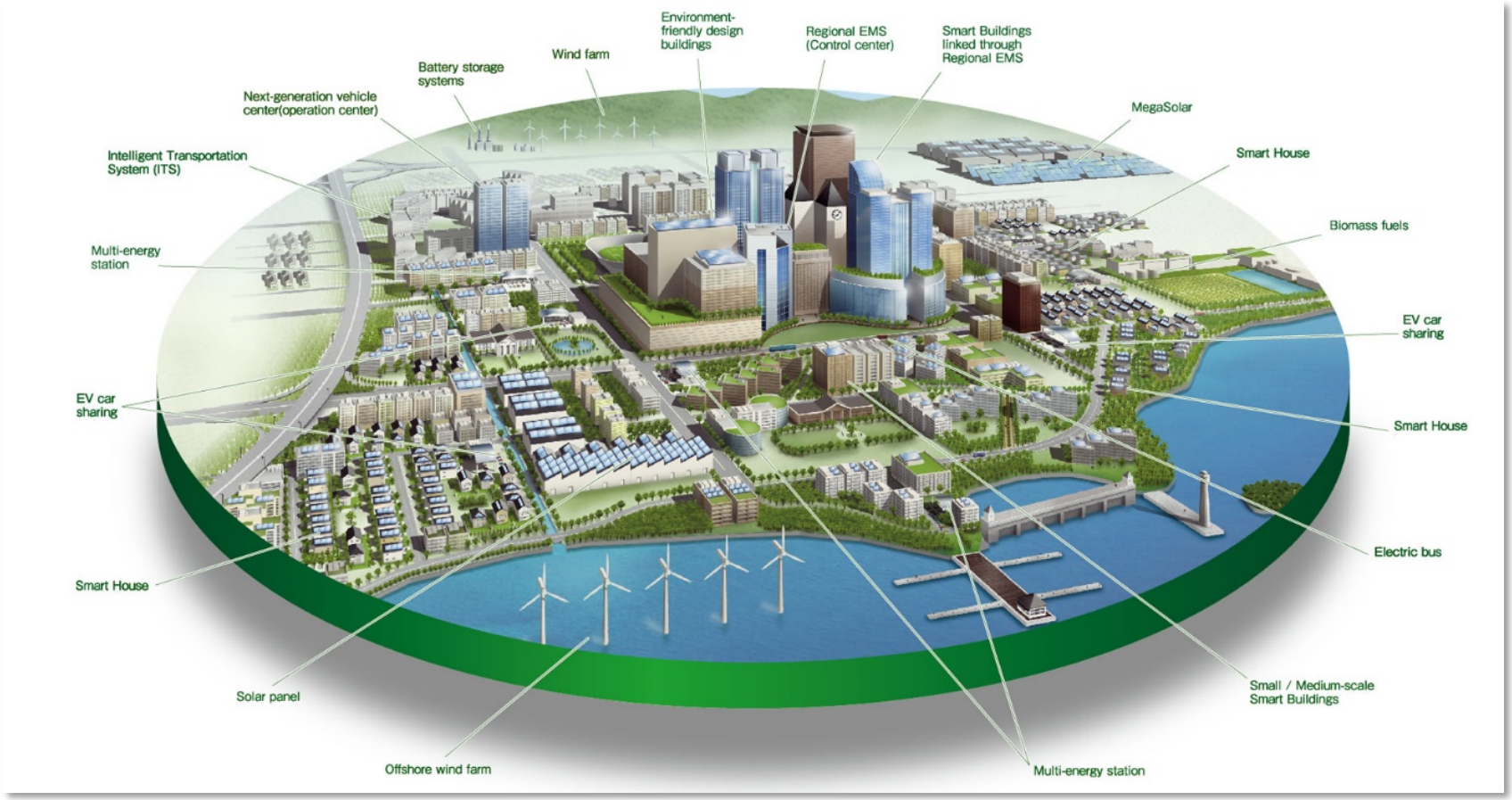
Smart logistics service systems facilitate value co-creation activities among manufacturers, distributors, and other stakeholders by connecting facilities, vehicles, and goods, collecting production and logistics data, computing for optimal operations management, and communicating between facilities, vehicles, people, and more.



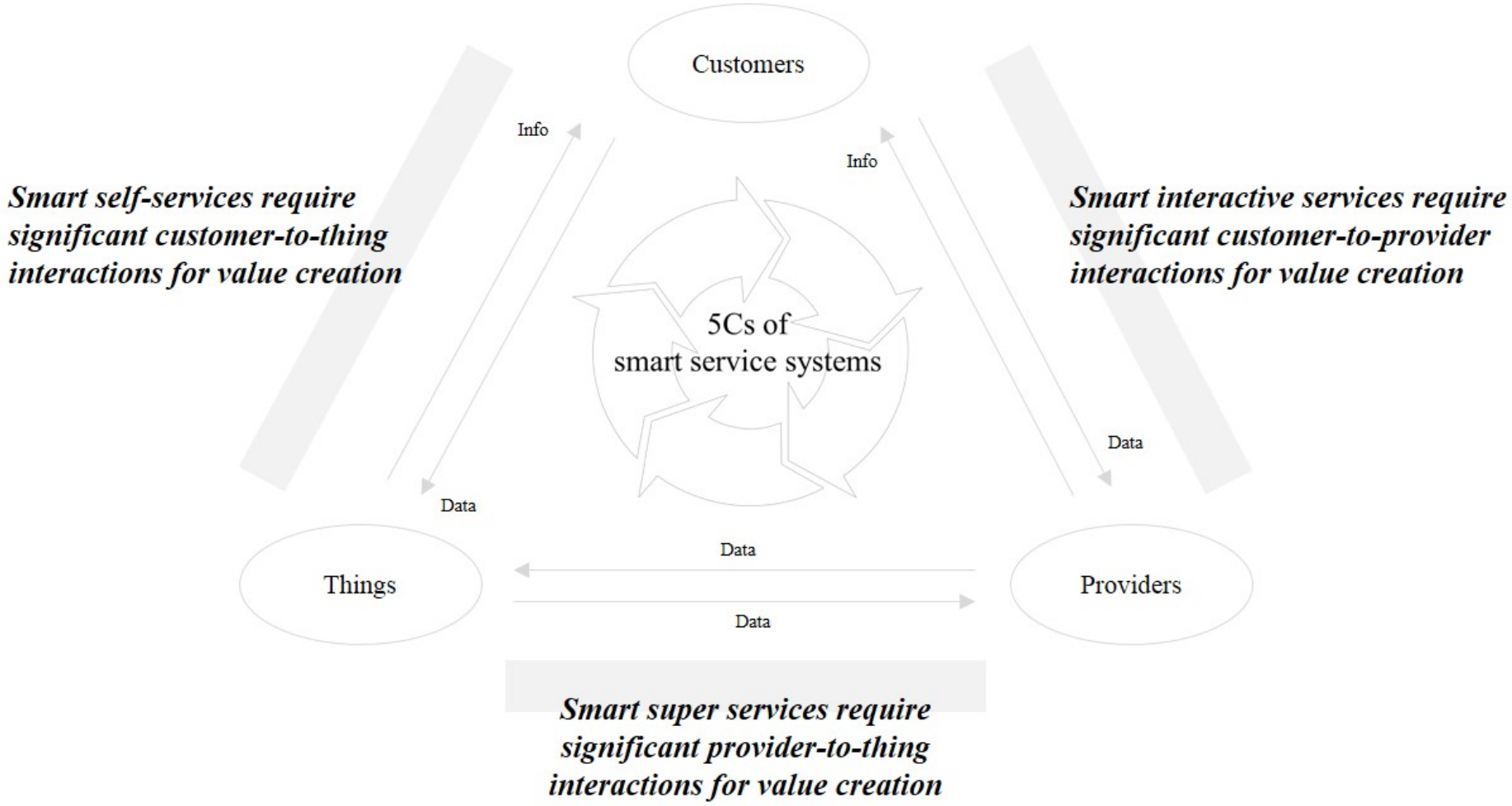
Smart farming service systems facilitate value co-creation activities among farmers, agriculture companies, and other stakeholders by connecting farming equipment, collecting condition and environment data, computing for optimal management, and communicating in or through a technology-equipped farm.



Smart health service systems facilitate value co-creation activities among patients, healthy people, health care providers, and other stakeholders by connecting people, devices and the health care environment, collecting health-related data, computing for diagnosis and prognosis, and communicating in or through technology-equipped people, living, and care environment



Smart city and government service systems facilitate value co-creation activities among citizens, public infrastructure, government agencies, and other stakeholders by connecting people and organizations, collecting public-purpose data, computing for optimal administration and citizen life, and communicating among stakeholders.



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6C's
The 5C's of Smart Service Systems

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Control	
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Editorial Column

New Directions in Service Science: Value Cocreation in the Age of Autonomous Service Systems

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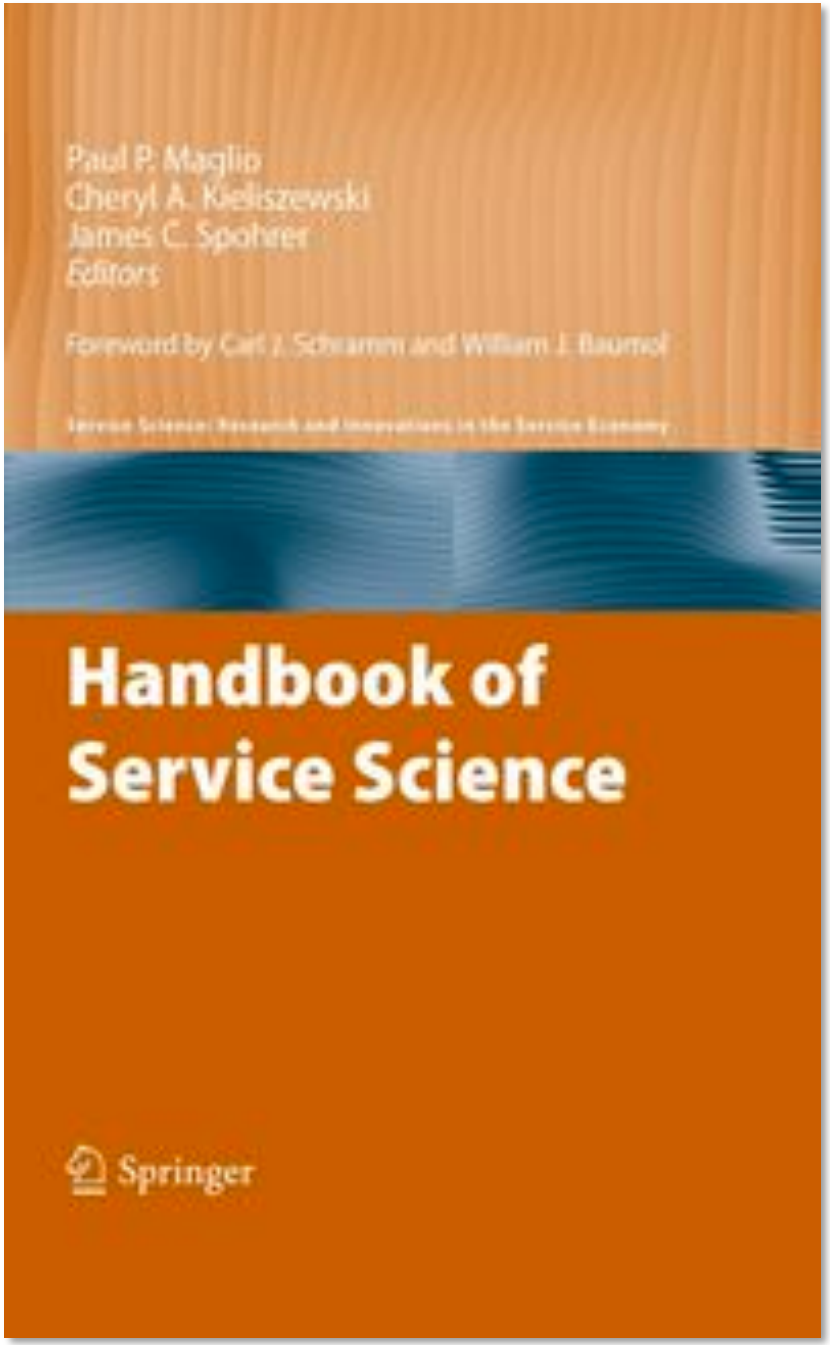
I recently found myself in a conversation on the nature of service, what makes service different, and what makes studying service difficult. Actually, I often find myself in these kinds of conversations. It can be hard to understand why there might be need for a discipline focused exclusively on service. It can be hard to understand what makes service unique. It can be hard to understand when tried-and-true methods may not apply to certain service settings. I have been at this for nearly 15 years, and I am sometimes weary of having these conversations. Yet this particular conversation opened up my thinking about service, particularly in the context of technologies that act autonomously and without human control.

- Autonomous service systems are service systems in which technologies can fully accommodate variability of people and environments by connecting, collecting, computing, and communicating for value co-creation
- Autonomous service systems are human-centered service systems, as autonomy aims to enhance efficiency and richness of human experience, shifting the roles and responsibilities of people, but not eliminating them.
- But how does value co-creation work in autonomous service systems?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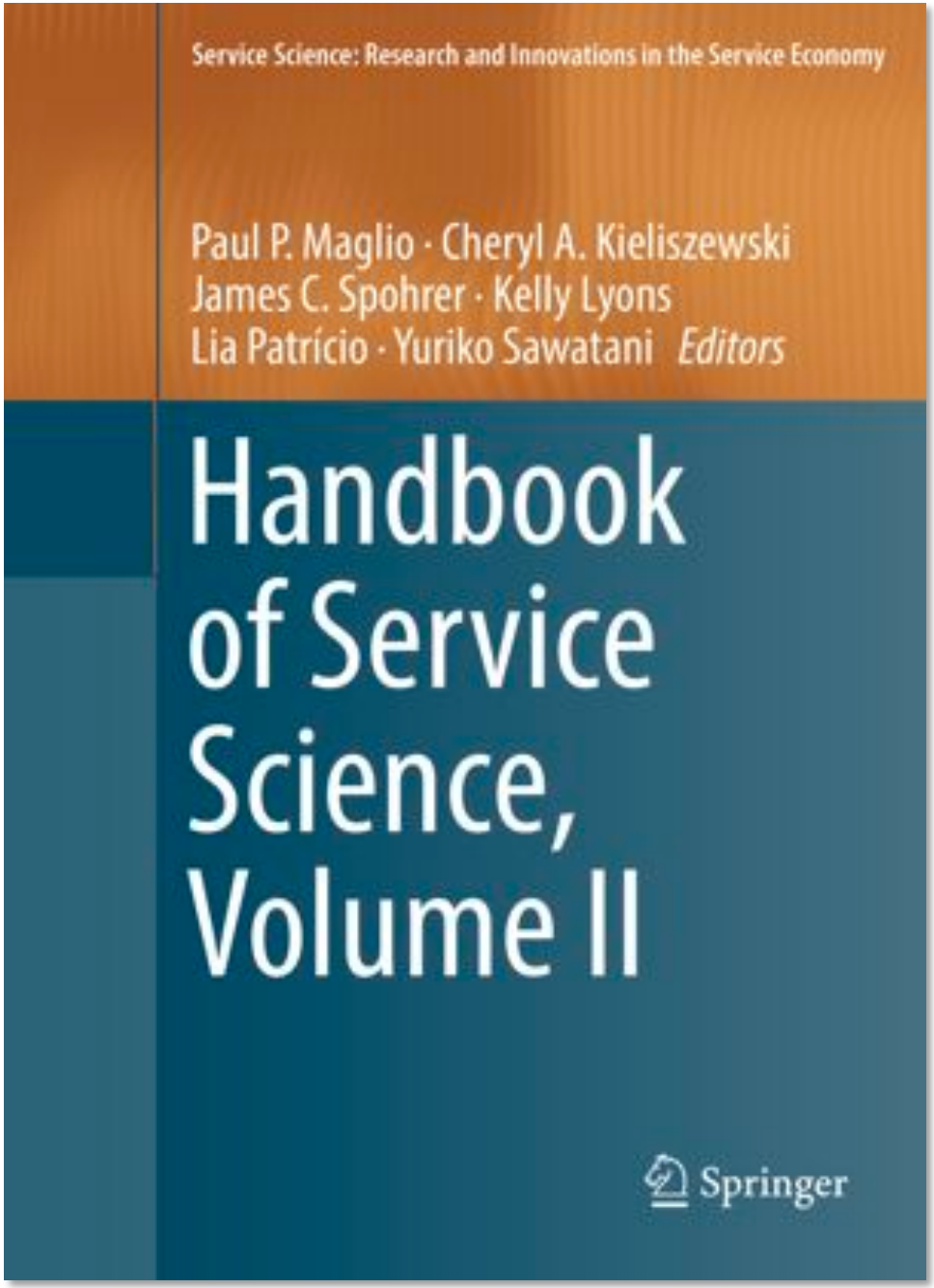
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Service Science publishes innovative and original papers on all topics related to *service*, including work that crosses disciplinary boundaries. The field is emerging as the study of complex service systems, and involves methods and theories from many disciplines (operations, industrial engineering, marketing, computer science, psychology, information systems, design, and more). Effective understanding of service and service systems often requires combining multiple methods to consider how interactions of people, technology, organizations, and information create value under various conditions.

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Editorial Column

Service

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https://doi.org/10.1287/serv.2018.0230

This column marks my 10th and last editorial as editor-in-chief of *Service Science*. My six years serving the INFORMS and service science communities in this role are nearly done. Looking over those prior editorials, I was struck by the number of them that elaborate or touch on the definition of "service"—five of nine explicitly define "service," and three of these contain substantial discussion on the nature of service, for instance, "Service comprises activities and technologies that create value through interaction of multiple stakeholders, often incorporating information and technology to enhance or enable effective human action and interaction," emphasizing that value results out of interactions among people, organizations, and technology sharing capabilities with one another. Service science is the interdisciplinary study of these kinds of value-creation activities.

Looking at it now, I am a little embarrassed to say that I have neglected another sense of service: the one that refers simply to doing good for others. It is not inconsistent with my definition, but this idea of the *greater good* is not emphasized either. One can *serve* in the army, in congress, on the INFORMS board of directors, and so on. In these roles, individuals share their capabilities and skills, interact with others, and aim ultimately to create mutual value in their particular settings. But there is also something *selfless* about many of these types of service; it is more about benefitting others or benefitting the community than benefitting oneself. This aspect of service—as public service, community service—has not been emphasized in the journal. Yet service science, the field, and *Service Science*, the journal, both depend on the service of many people and organizations; the journal could not function without the dedicated service of reviewers, editors, and many others.

Maglio, P. P. (2018). Service (Editorial). *Service Science*, 10(4), v.

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SERVICE SCIENCE MINITRACK

Service science deals with the design, development, and managerial issues concerning "service systems," integrated, value-creating configurations of service providers, their clients, their partners, and others. The best-performing service systems are IT-enabled, customer-centered, relationship-focused, and knowledge-intensive – yet span multiple formal and informal organizations. Because of this multidisciplinary context, researchers and practitioners in management, social sciences, and computer sciences are all working to increase service innovation. These multiple perspectives can be unified using the theoretical construct of the service system, in which entities (people, businesses, government agencies, etc.) interact to co-create value via value propositions that describe dynamic re-configurations of resources.

This minitrack intends to bring together researchers and practitioners working in the field of service science, the interdisciplinary study of service that combines perspectives from fields of science, management, engineering, and design to innovate service systems. It welcomes papers that connect rigorous disciplinary research with the emerging interdisciplinary framework of value creation in service systems, focusing particularly on service design, innovation, and technology. It seeks submission of research papers from a variety of disciplines and a variety of participating communities to address issues in service policies, service process modeling, service delivery management, innovated service technologies, and the role of the Internet, the digital economy, and information technology. Submissions related to autonomous service systems, the use data and information for value creation, and computational modeling of complex, human-centered service systems, particularly with applications for the digital economy are encouraged.

Minitrack Co-Chairs:

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Fu-ren Lin
National Tsing Hua University, Taiwan
frlin@mx.nthu.edu.tw

Michael Shaw
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Submissions: June 15

https://hicss.hawaii.edu/tracks-53/decision-analytics-mobile-services-and-service-science/#service-science-minitrack

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