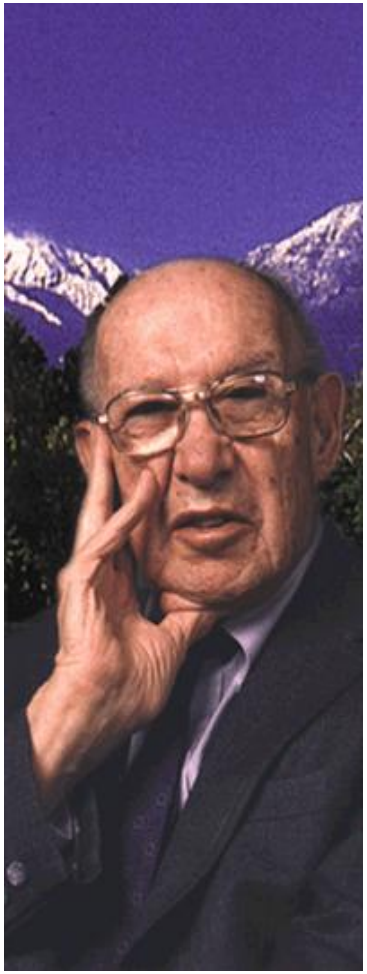
Knowledge-Worker Productivity –Peter Drucker revisited

By Klaus North
Wiesbaden Business School, Germany
Klaus.North@hs-rm.de
www.north-online.de

Knowledge worker productivity: The biggest challenge?



"The most valuable asset of a 21st-century institution will be its knowledge workers and their productivity."

(Peter F. Drucker 1999)

According to Drucker

Six major factors determine knowledge worker productivity

1. Knowledge worker productivity demands that we ask the question: What is the task ?
2. It demands that we impose the responisibility for there productivity on the individual knowledge worker themselves. Knowledge workers have to manage themselves. They have to have autonomy
3. Continuing innovation has to be part of the work, the task and the responsibility of knowledge workers
4. Knowledge work requires continuous learning…, but equally continuous teachning …

According to Drucker

Six major factors determine knowledge worker productivity

5. Productivity of the knowledge worker is not – at least primarily – a matter of the quantity output. Quality is at least important .
6. Knowledge worker productivity requires that the knowledge worker is both seen and treated as an „asset“ rather than a „cost“. It requires that knowledge workers want to work for the organization in preference to all other opportunities.

1. What is the task?

Expert Thinking: Solving problems for which there are no rule-based solutions.

Complex Communication: Interacting with humans to acquire information, to explain it, or to persuade others of its implications for action.

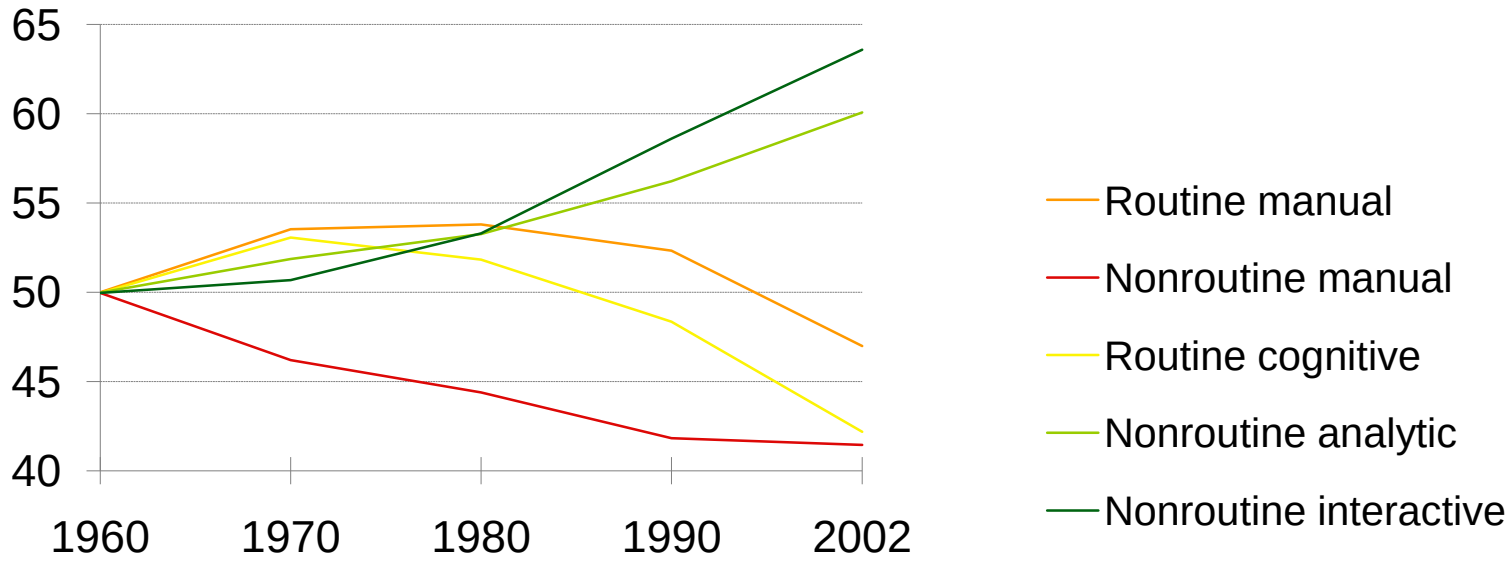
Routine Cognitive Tasks. Mental tasks that are well described by deductive or inductive rules.

Routine Manual Tasks. Physical tasks that can be well described using deductive or inductive rules.

Non-routine Manual Tasks: Physical tasks that cannot be well described as following a set of If-Then-Do rules

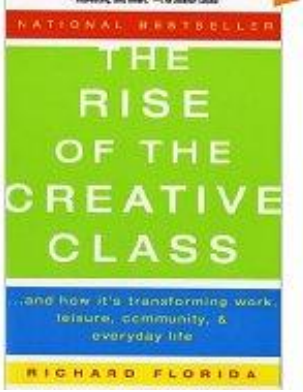
Sources: Levy & Mournane (2005): How Computerized Work and Globalization Shape Human Skill Demands and OECD PIAAC Programme 2007

Which types of jobs are growing in knowledge economies?



(OECD PIAAC Programme, 2007)

The Creative Class



Florida (2002) describes the 'Creative Class'

as 40 million workers - 30 percent of the U.S. workforce, and breaks the class into two broad sections

- Super-Creative Core: about 12 % percent of all U.S. jobs: science, engineering, education, computer programming, research,arts, design, and media workers Their primary job function is to be creative and innovative. “Along with problem solving, their work may entail problem finding” (Florida, 2002, p. 69).
- Creative Professionals: the classic knowledge-based workers : healthcare, business and finance, the legal sector, and education. They “draw on complex bodies of knowledge to solve specific problems” using higher degrees of education to do so (2002).

Knowledge intensive business services are increasingly off-shored

Estimated number of KIBS jobs off-shored from UK, 2006–2010

KIBS type	**2006–2010**
IT and software development	60,000
Financial services	25,400
Business process outsourcing, (including accounts, HR, data collection,contact centres)	90,500
Market research, legal research, consulting and professional services	4,100
Architecture, engineering design, R&D	4,100
Life sciences, pharmaceuticals, biotechnology	1,700
Art, design, web design, etc.	2,200
Sales-led generation and helpdesks	4,800
Total jobs offshored	191,900

Sources: *Evalueserve-NASSCOM, 2003, European Foundation for the Improvement of Living and Working Conditions (2007) Trends and drivers of change in the knowledge-intensive business services sector: Four scenarios*

India will account for 71% of Global Knowledge Process Outsourcing (KPO) Revenues by 2010

- The global KPO market will grow by 45 percent per annum (from USD 1.29 billion in FY 2003 to USD 17 billion by FY 2010).
- Revenues in the Indian service sector are expected to rise by 12 percent per annum (from USD 306 billion in FY 2003 to USD 675 billion in FY 2010), contributing 57 percent to India's GDP by FY 2010.

Source: Evalueserve 2005

X-rays outsourced to India

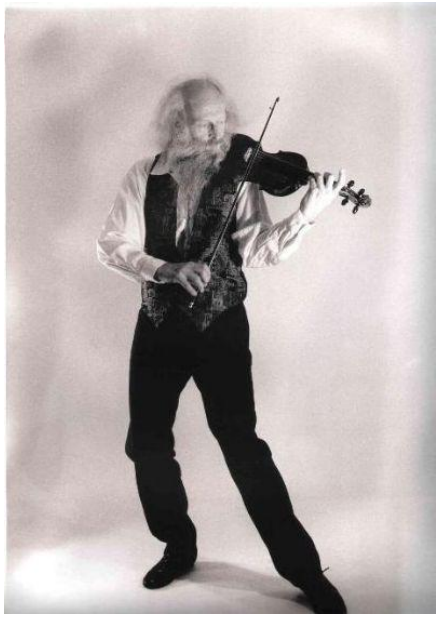
Results of X-rays sent electronically to India from Singapore will come back within 30 minutes under an outsourcing agreement that saves costs and benefits patients.

Under the National Healthcare Group's (NHG's) agreement with India's Teleradiology Solutions, a polyclinic has been sending about 700 X-rays a month to Bangalore.

Trained radiologists analyse each one, make diagnoses and send them back, reported the Straits Times.

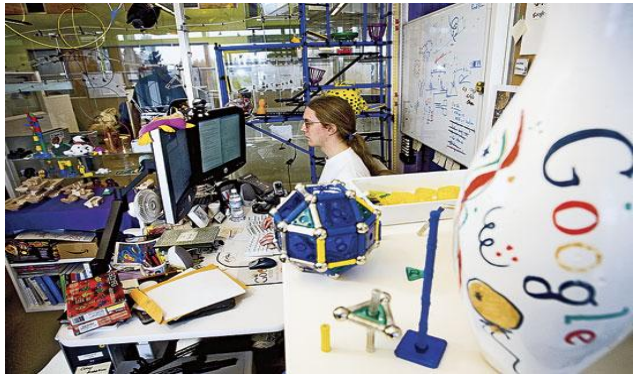
2. Knowledge workers have to manage themselves **– But how?**

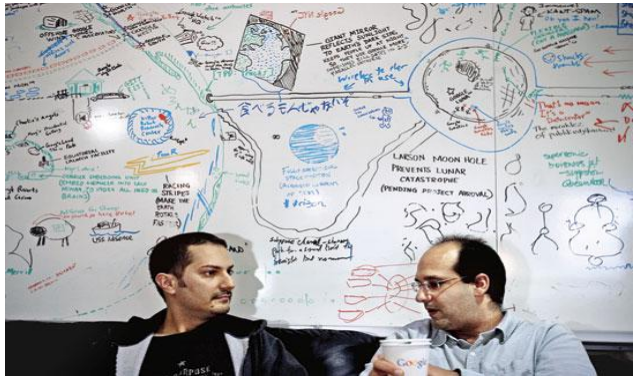
From individual expertise to joint value creation: knowledge workers have to learn to collaborate!





3. Continuing innovation……





Create sense and enable opportunities for non-routine interaction





Quelle: http://www.greatplacetowork.com

4….continuous learning…, but equally continuous teachning



Source: GEO 5/2009 : Gute Ärzte, schlechte Ärzte, S. 118 ff :
Surgery Team at Hospital in Scuol (GR, Switzerland) mentally walk through their roles before starting an operation

Jeder Fehler zählt! - Microsoft Internet Explorer

Datei Bearbeiten Ansicht Favoriten Extras ?

http://www.jeder-fehler-zaehlt.de/

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Herzlich willkommen beim Fehlerberichts- und Lernsystem für Hausarztpraxen

Man muss nicht jeden Fehler selber machen,

um daraus zu lernen - daher unser Motto:

"Jeder Fehler zählt!"





Aktuelles

- **Fünf Jahre Jeder-Fehler-zaehlt**
- **Kooperation von "jeder-Fehler-zaehlt.de" mit der Techniker Krankenkasse**
- Alle Meldungen im Überblick

General pratitioners openly discuss their errors and how to learn from them

Eigene Dateien | Microsoft PowerP... | Jeder Fehler zählt...

Knowledge work in manufacturing: The Daimler Production Learning System (PLS)

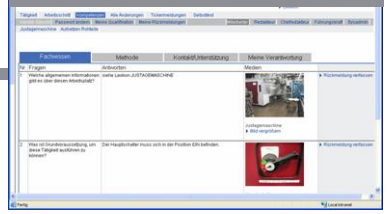
for training, standardization and processs improvement

Abbildung des Fachbereichs

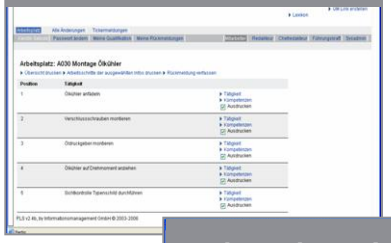




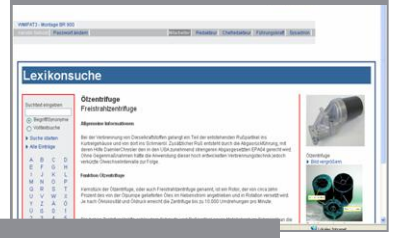
Kompetenzen



Tätigkeiten pro Arbeitsplatz



Lexikon



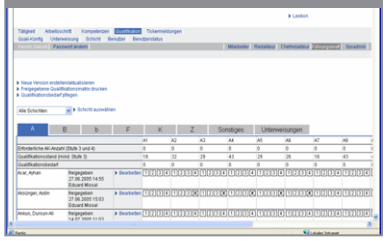
Arbeitsschritte als Netzbilder



Standardarbeitsblätter



Qualifizierungsmatrix



5. Quantity versus Quality – does productivity matter ?

- Productivity/efficiency : Achieve a standard specification/quality output at minimum ressource input
- Effectiveness: Achieve optimal solution with required resources
- Value added counts:

$$\frac{\text{Value added}}{\text{Total costs of workplace}}$$

Change (un)productive work behaviours...

…Knowledge workers spend 15-30% of their working time with actively searching for information, of which about 50% is considered to be successful

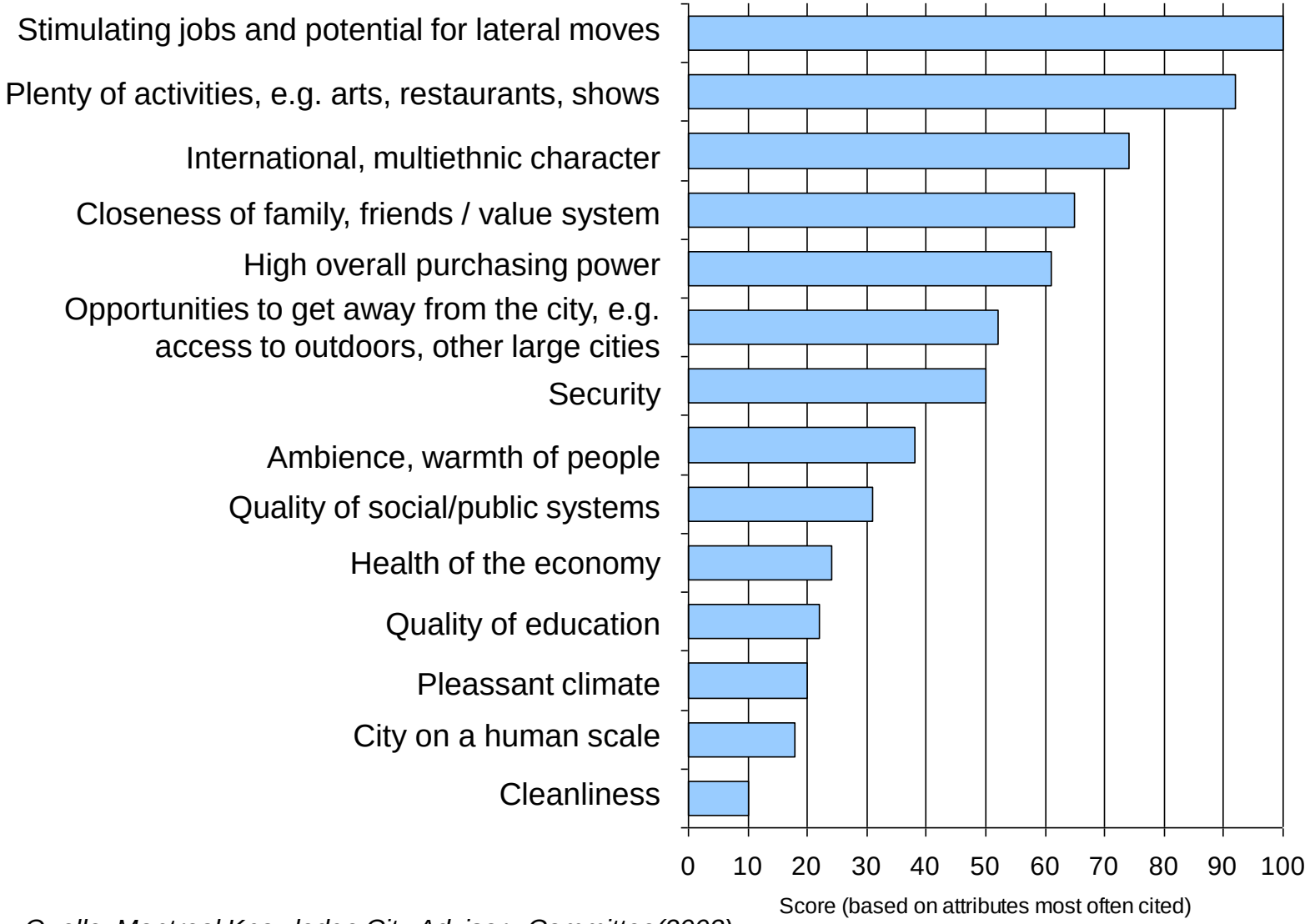
...2,1 hours per day are lost by interruptions and diverting attention in a multitasking environment (Basex 2006).

...27 subjects reacted to 40% of the e-mails within 4 seconds. They needed 15 minutes to resume their tasks. (Iqbal & Horwitz 2007)

…57% of all work tasks are not terminated (Gonzales & Mark 2004).

6. knowledge worker as an „asset“

What knowledge workers like..



Quelle: Montreal Knowledge City Advisory Committee(2003)

"Increasingly, the ability of organizations to survive will come to depend on their "comparative advantage" in making the knowledge worker more productive.

The ability to attract and hold the best of the knowledge workers is the first and most fundamental precondition" (Peter F. Drucker 1999).

Klaus North | Stefan Güldenberg
Produktive Wissensarbeit(er)



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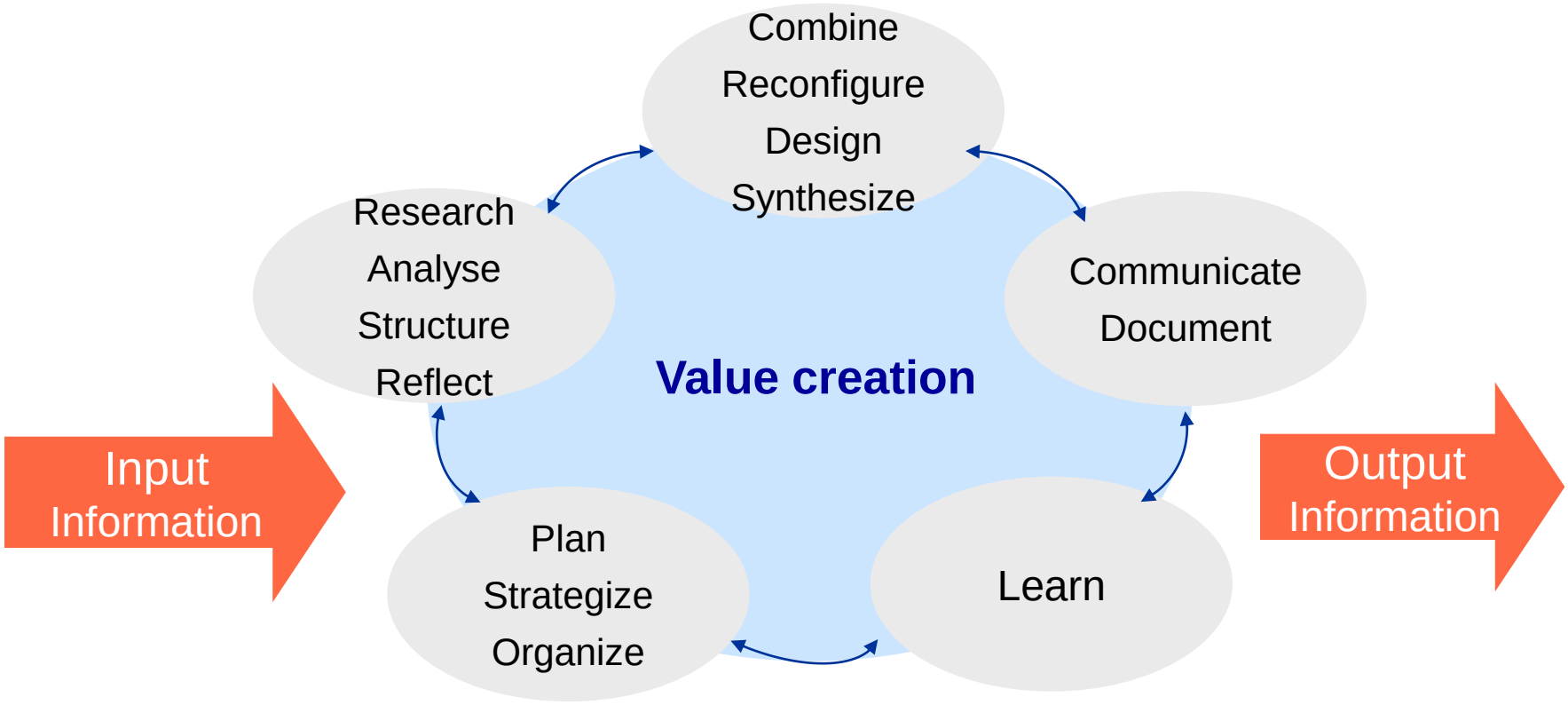
Value creation by knowledge



Knowledge work -definition

Knowledge work is an activity based on cognitive capabilities resulting in an immaterial output. Value creation is derived from information processing and creative processes resulting in the generation and communication of knowledge.

(North and Güldenberg 2008)