



Complexity Management

How to cope with the unpredictable future

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5th Global Drucker Forum
Vienna 2013



Peter Drucker on coping with the future

«We need a discipline that explains events and phenomena in terms of their direction ... a philosophy of purpose, a logic of quality and ways to measure qualitative change ... a methodology of potential and opportunity, of turning points and critical factors, of risk and uncertainty, constant and timing, «jump» and continuity.»

Peter Drucker, Landmarks of Tomorrow, 1957, p. 15



Other quotes on predicting the future

«... economic theory is confined to describing **kinds of patterns** which will appear if certain general conditions are satisfied, but can rarely if ever derive from this knowledge any **predictions** of specific phenomena.»

Friedrich von Hayek, The Theory of Complex Phenomena, 1964

«Instead of **predicting** future earnings and valuations separately, we should try to assess the future course of the entire initially **self-reinforcing but eventually self-defeating process**».

George Soros, The New Paradigm for Financial Markets, 2008

«(Financial) markets exhibit pockets of **predictability** associated with **pockets of order** – just like any complex system should»

Neil Johnson, Simply Complexity, 2009



From prediction to optimal simplification

If predicting the future falls short as an option for complexity management, how to succeed in turbulent times?

Definitely not by collecting evermore data and details about the issue at hand.

The quality of «pattern recognition» and «optimal simplification» in the face of complexity characterizes good management.

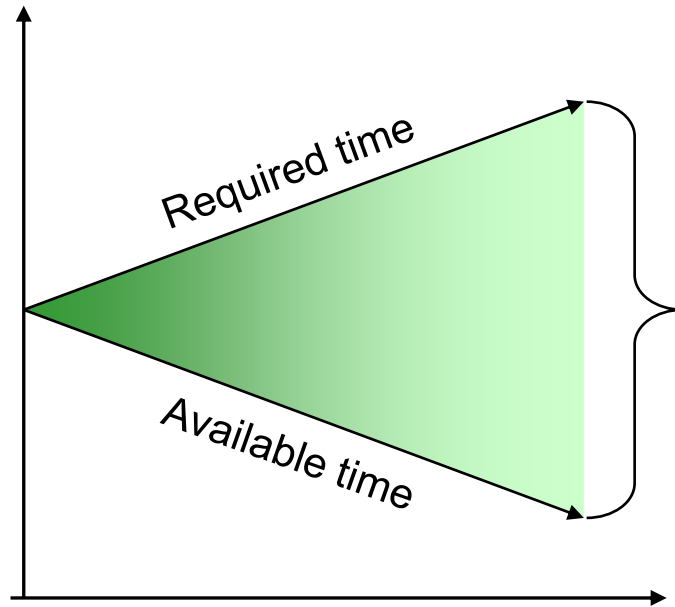
Einstein gave managers the basic clue how to precede:
«Everything should be made as simple as possible, but not simpler!»

How about the reality of today's management?



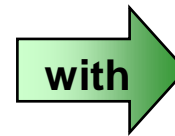
The practice of management

**Time
for decisions**

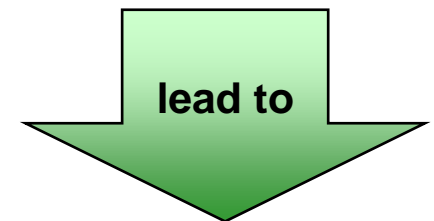


**Dynamics of
relevant environment**

Incompetent
simplification

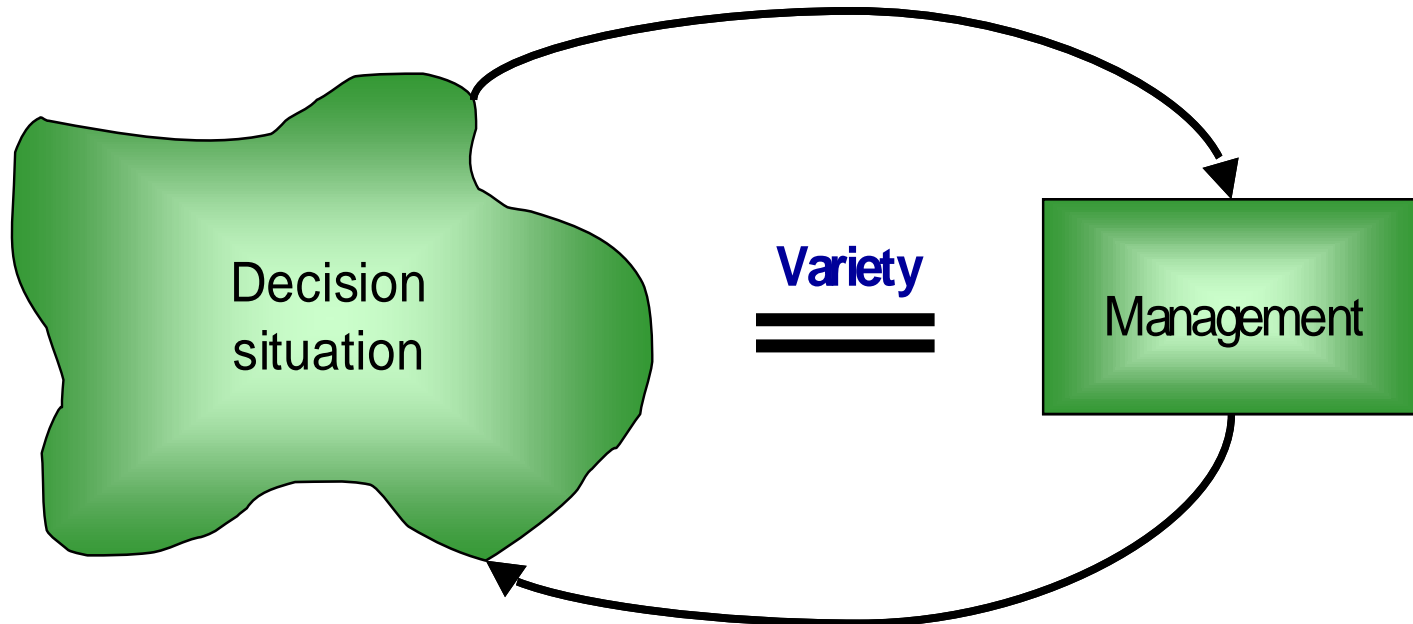


Inadequate
goal-setting
Inappropriate
segmentation
One-dimensional
action orientation



Neglect of side effects
Over-steering
Authoritative behavior

Coping with complexity: Ashby's Law

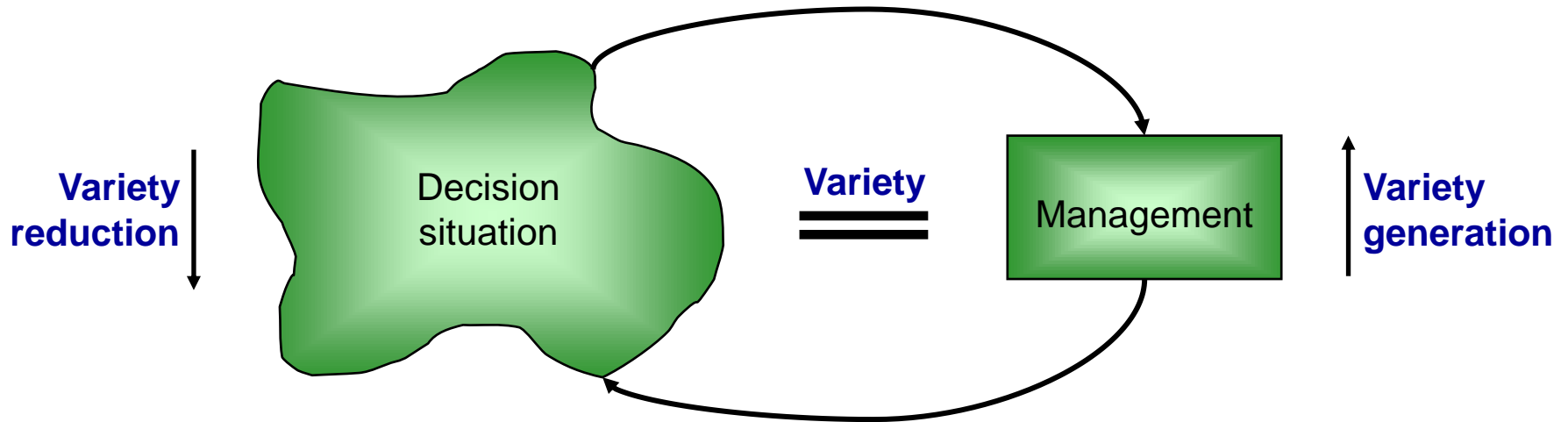


Drive on the right side!

From traffic lights
to road circles



Good management: Head, Hand and Heart



by:

**Detecting the
“rules of the game”**

Business logic

Environmental dynamics

Corporate culture

by:

**Proactive decision-making
and implementation**

Holistic mapping

“Jiu Jitsu” management

Accountable leadership



Guidelines for optimal simplification

In management, distinguish between simple, complicated and complex problems and apply the best problem-solving approach!

From a scientific point of view, distinguish between organized simplicity (analytics), unorganized complexity (statistics) and organized complexity (complexity sciences). Lay open your basic assumptions!

Draw the boundaries of your system anew to isolate generic patterns!

Find «pockets of order» in otherwise disordered situations!

Accept counterintuitive behavior of complex systems, don't fall in the «nothing else - butterfly»- trap!



Good managers can do without predictions about the future.

But only if they follow Einstein's guideline and live up to Ashby's law.

«Early movers» **shape** the future whereas «followers» can be moderately successful by copying them.

I do not expect wonders from Complexity Sciences as to strengthen my predictive power. But if they teach me new ways to recognize patterns and to optimally simplify, their insights are highly welcome.