



Change Agents in Asset Management

- We are specialized in Asset Management (AM)
 - Life Cycle Management of complex technical systems
 - With many actors involved
 - With different perspectives and specialisms
- We believe in, and facilitate, co-creation and integral thinking
- That s why we are convinced System Dynamics (SD) can contribute a lot to Asset Management
- We are practitioners of SD in the field of AM





Program

- Introduction to Planned SIG Meeting => to found the SIG
- Introduction to Asset Dynamics
- Introduction to working process of this Planned SIG
- Conclusions in founding SIG



Scope of Asset Dynamics

Asset Dynamics

Asset Management Body of Knowledge

System Dynamics Body of Knowledge

Asset Dynamics is built on its foundation:

- Asset Management
- System Dynamics

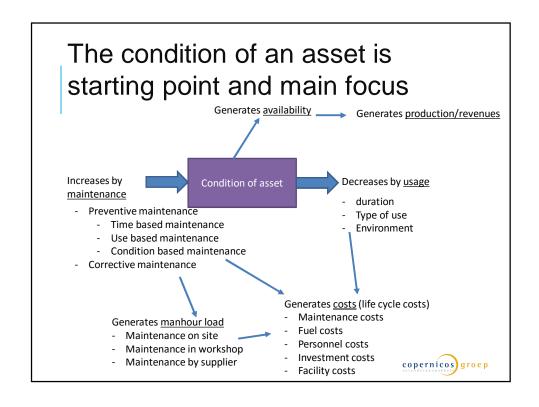


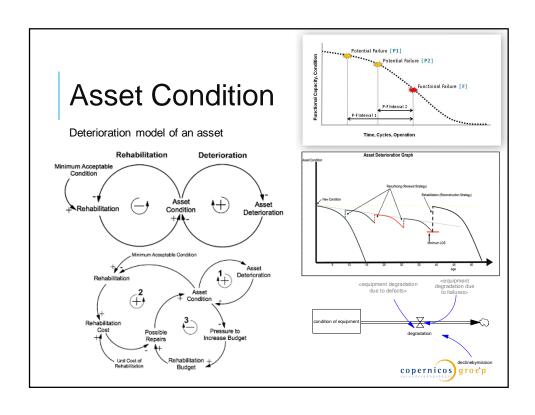
Scope of Asset Dynamics

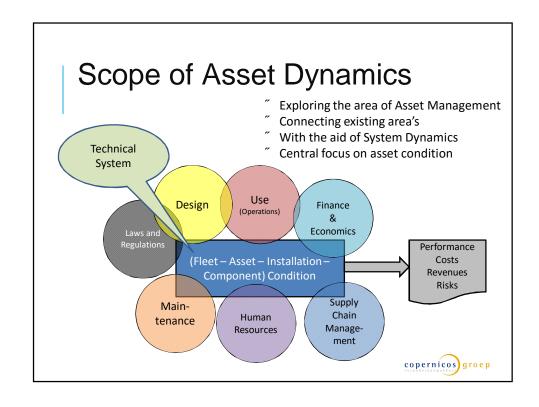


Connecting mental models in an organizational learning process





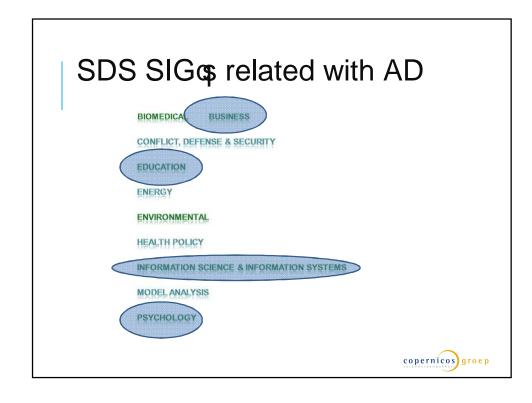




SDS Threads related with AD

- <u>Business</u> (System Dynamics applications in businesses and organizations)
 => assets contribute to goals of organizations
- Human Behavior: The dynamics of human behavior in organizations, culture, including individual and social psychology => assets are operated and maintained by humans
- <u>Learning and Teaching</u>: The manner in which system skills are taught and learned => <u>learning organization</u> is a <u>principle of Asset Management</u>
- Operations: Like capacity management, quality control, operations
 management, supply chains, workflow, queuing, and workforce planning =>
 in Asset Dynamics these issues are driven by the asset condition
- Resources: The understanding and management of resources including energy, electricity, fuels, food, metals and other renewable and nonrenewable resources => in Asset Dynamics the assetB condition is the driving resource
- <u>Stakeholder Engagement</u>: Engaging and influencing stakeholders through participatory activities such as group model building, facilitation, facilitated modeling, games and management flight simulators => is the basic approach to create models in Asset Dynamics





First proposed SIG products

- 1. Asset Dynamics Reference Model
- 2. Library of submodels
- 3. Asset Dynamics Knowledge Base (airtable)
- 4. Knowledge sharing events (virtual + real life)
- 5. Asset Dynamics Community



Mechanisms in current Asset Dynamics Reference Model

- Productbreakdown structure of asset (multi level):
- Degradation/recovery behaviour of installations based on composition of type of installation
- Degradation of condition through use of asset
- Degradation of condition through TIME
- Recovery of condition of asset by maintenance
 - Preventive maintenance
 - Corrective maintenance to solve failures
- Priority mechanism for maintenance (risk based)
- Obsolescence of equipment in installations
- Redundancy of equipment in installations
- ELOT (Endlife Of Type) mechanism for installations



SD Conference Papers related to AD

Database (Airtable)



How to make the SIG Asset Dynamics work?

A SIG is (ref. SDS website):
A group of SDS members with a shared interest in a particular domain.

In this case the domain is: Asset Dynamics



How to make the SIG Asset Dynamics work => Preferences?

- Group:
 - LinkedIn Group Asset Dynamics
 - Webinars => platform to share knowledge on specific subjects
 - And/or ??
- Individual contribution
 - exchange knowledge
 - Comment on proposed additions to AD Reference Model
 - And/or ??
- Communication
 - Through SDS facilities
 - Sharepoint platform (moderated by Copernicos)
 - LinkedIn Group
- Close collaboration with Business SIG and support of SDS

Conclusions of SIG Kick-off

- Topics to be scheduled in SIG AD?
- Subjects of interest to be adressed in SIG AD?
- Priorities to take in SIG AD?
- Registration of membership/interest to SIG Asset Dynamics
- Proposal SDS Policy Council



SIG Asset Dynamics: Registered Participants

Registration of participants to Planned SiG i	Organitation	email	Wents to become member of SIS AD (Yes/No)	is interested in SIG AD (Yes/No)
1 Henk Aleman,	wam/Till	hoouty.	4	
2 Oction Zhu	T:U	ganauve nl	4	7
1 Bason Lissy	TOWN GE	bradd libby Pdary) am	4	4
1 / ds van Rasmolen	EMSD	nrosmalen@gmils	2	Y
5 Jorge Daniel Uniga Silva	EMSD	juneya silna @gmail.com	2	y
· Inguna Rogar	N7984	Ibroghe Con line no	1	4
7 Yan Wang	Tubere/Til	ywang 124 @ gmail com	2	Y
« Guido Veldhais	TNO	9. vallhuis of governor	7	9
o Christian W. Kail	University Daisbog Bus	christian Karl president	Y	7
10 Daniel Jandt		- danielijandternbide		1
11 MARCOL VISSOR	min Defence	AS. Vises Chineful	y	4
22 Barneyd Tembre	UCL	beround tember 1260 MC1 MC W	Y	4
11 KASper Kifes		Star Star	Y	Y
11 Yole Kiona Effendi	Tu Delyt	who time O holmail .com	Y	Y
mark de Bel	Dellar, mut delat & de		Mary and	Y
Sich lech	Dellars sakolo dellars.			4
John Weekers	Rights weles cheen John weaters a		THE	ne y



