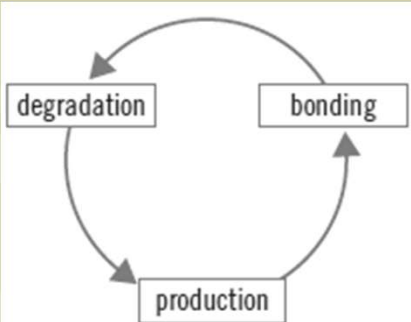
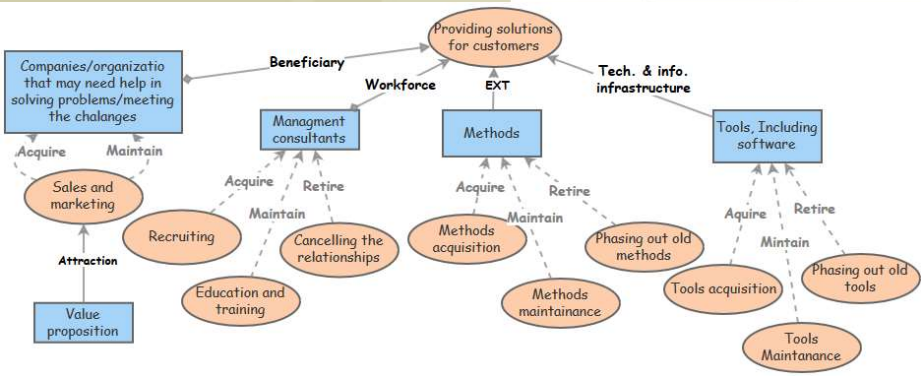


# Linking Autopoiesis to Homeostasis in Socio-Technical Systems



5th International Workshop on Socio-Technical Perspective in IS Development (STPIS'19), Stockholm, June 10, 2019



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# Objective

Introduce two system-theoretical concepts - *autopoiesis* and *homeostasis* - into the realm of socio-technical systems using Fractal Enterprise Model (FEM) for this end.

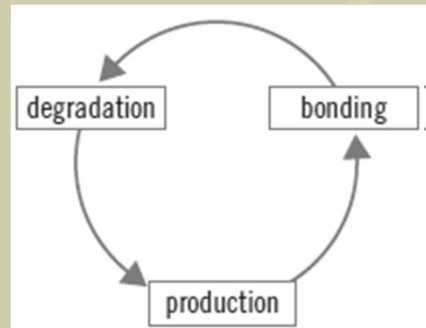
Both concepts comes from biology:

Maturana and Varela – Autopiesis

Canon - homeostasis

# Working definition (a)

Autopoiesis – a system constantly reproduces itself through a network of interconnected processes that reproduce its components



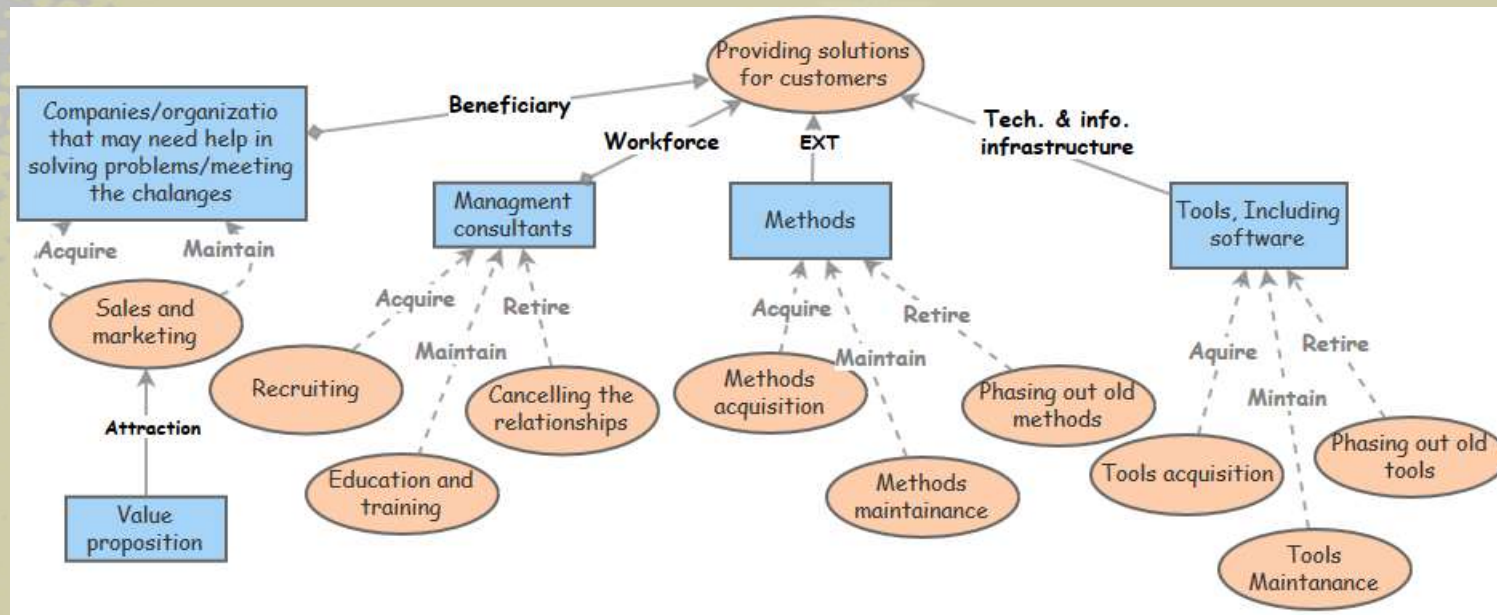
# Working definition (b)

Homeostasis – a system adapts to the changes in its environment while maintaining its identity (whatever it is).

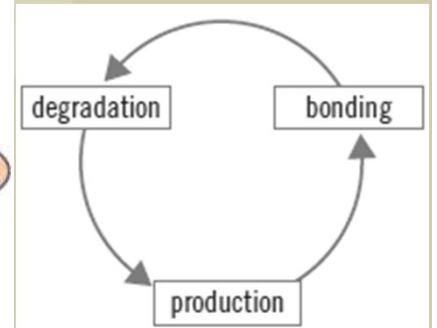
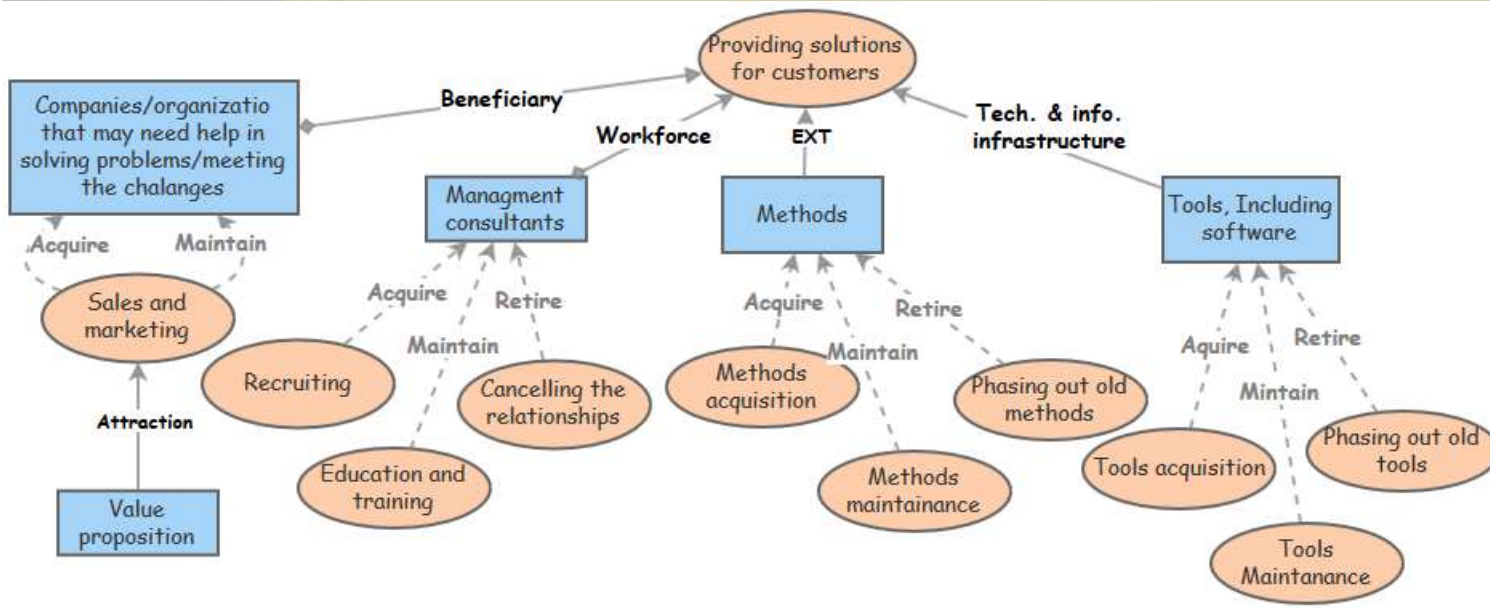
# Questions

1. What is reproduced in a socio-technical system(body)?
2. How it is done (network of processes)?
3. How the autopoietic activities help to maintain homeostasis, i.e. adapting the system to the changes in its environment while maintaining identity.

# Fractal Enterprise Model (FEM)

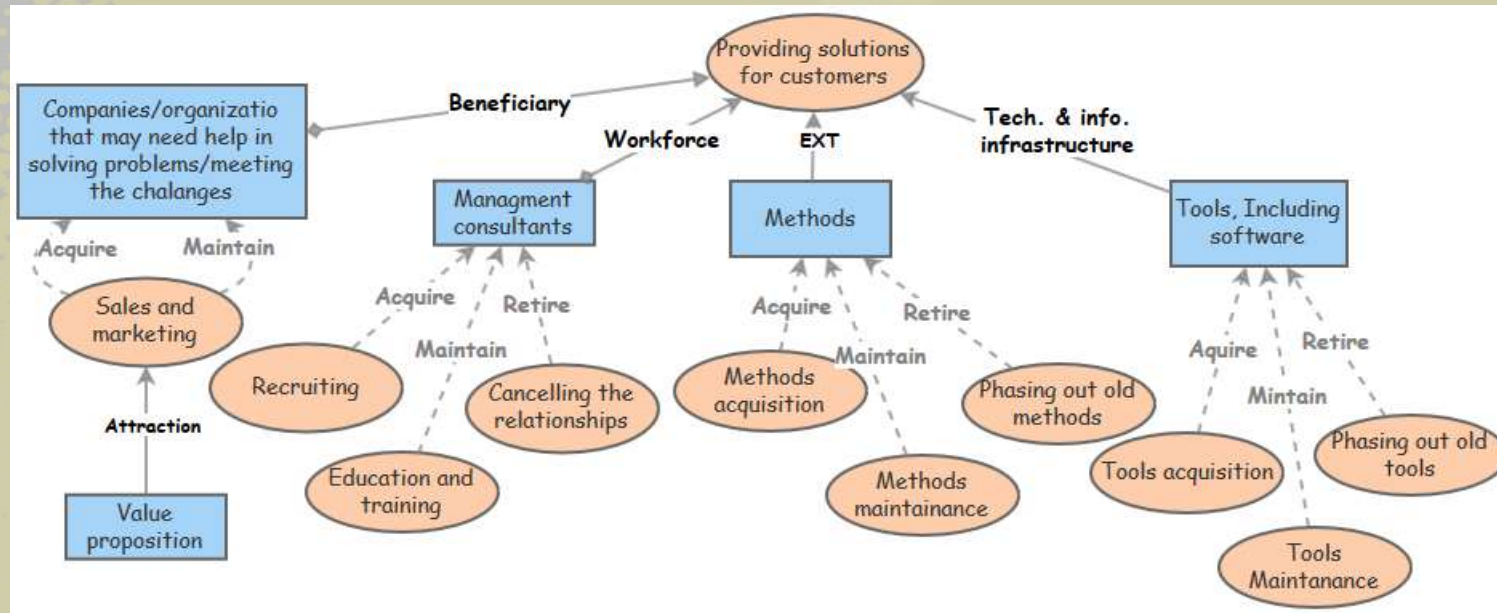


# What is reproduced and how





# Adaptation







# Conclusion

Introduce two system-theoretical concepts - *autopoiesis* and *homeostasis* - into the realm of socio-technical systems using Fractal Enterprise Model (FEM) for this end.

The work is in initial stage - ideas rather than something that could be used in practice

# Q & A

Thank you for your patience

Questions and comments

Please

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