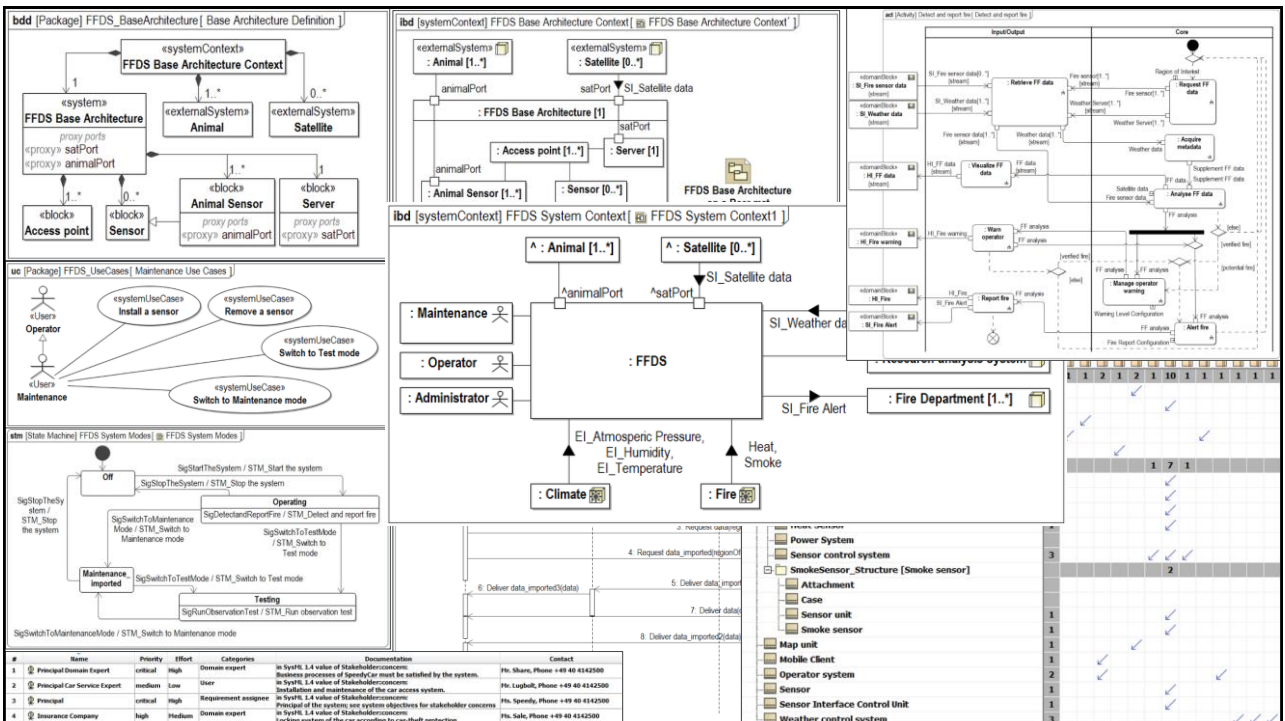
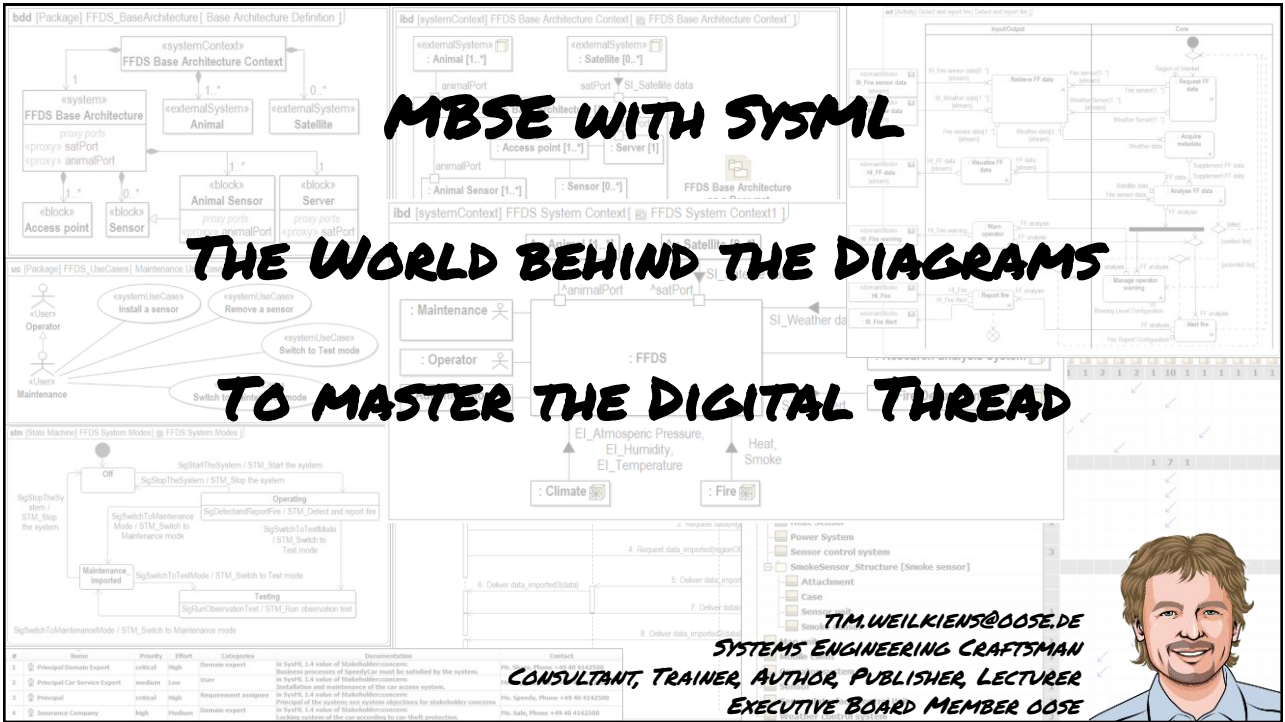






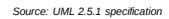
(SYSML-)MODELING IS NOT DRAWING

„A PICTURE IS WORTH A THOUSAND WORDS...”

...AND A MODEL IS WORTH A THOUSAND PICTURES.”

(Andreas Willert)





WITHOUT A CONTEXT THIS IS JUST A NUMBER

CONTEXT FOR HUMANS

42

Subsystem	Part	CBE Mass (kg)
SYS1	P1	42,00
SYS1	P2	1,20
SYS1	P3	7,30
Total SYS1		50,50

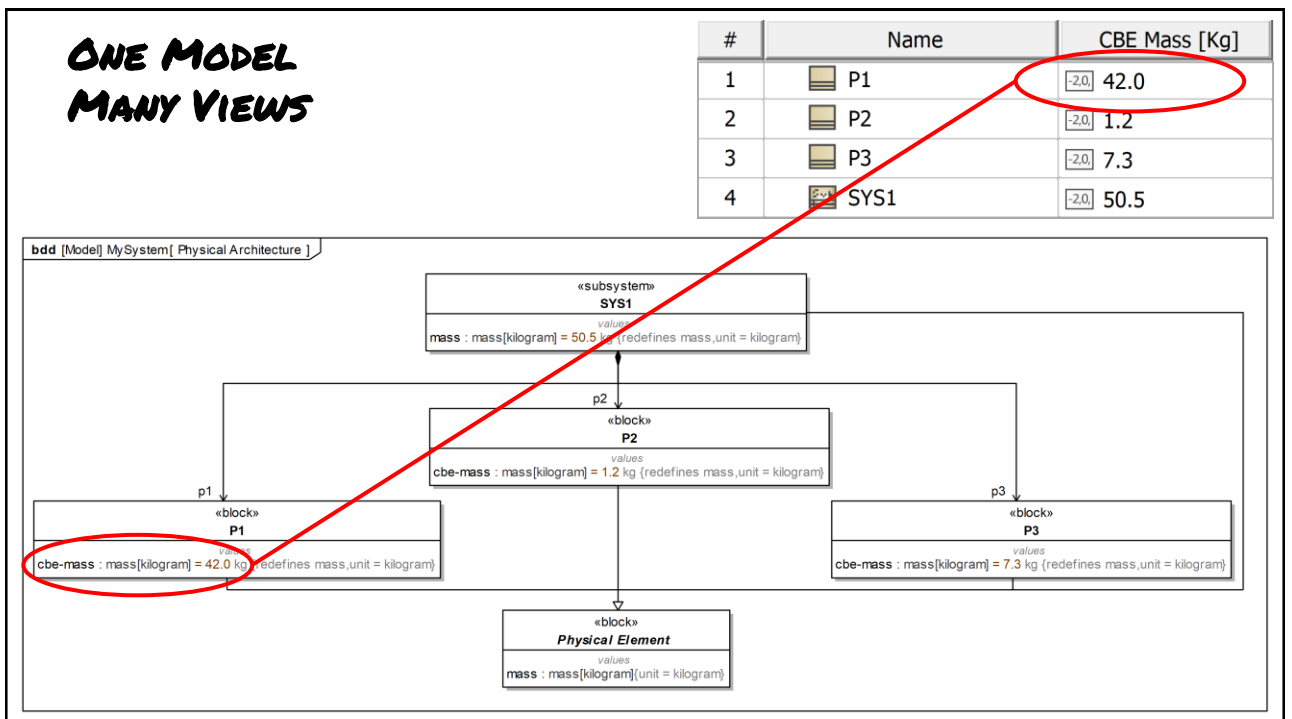
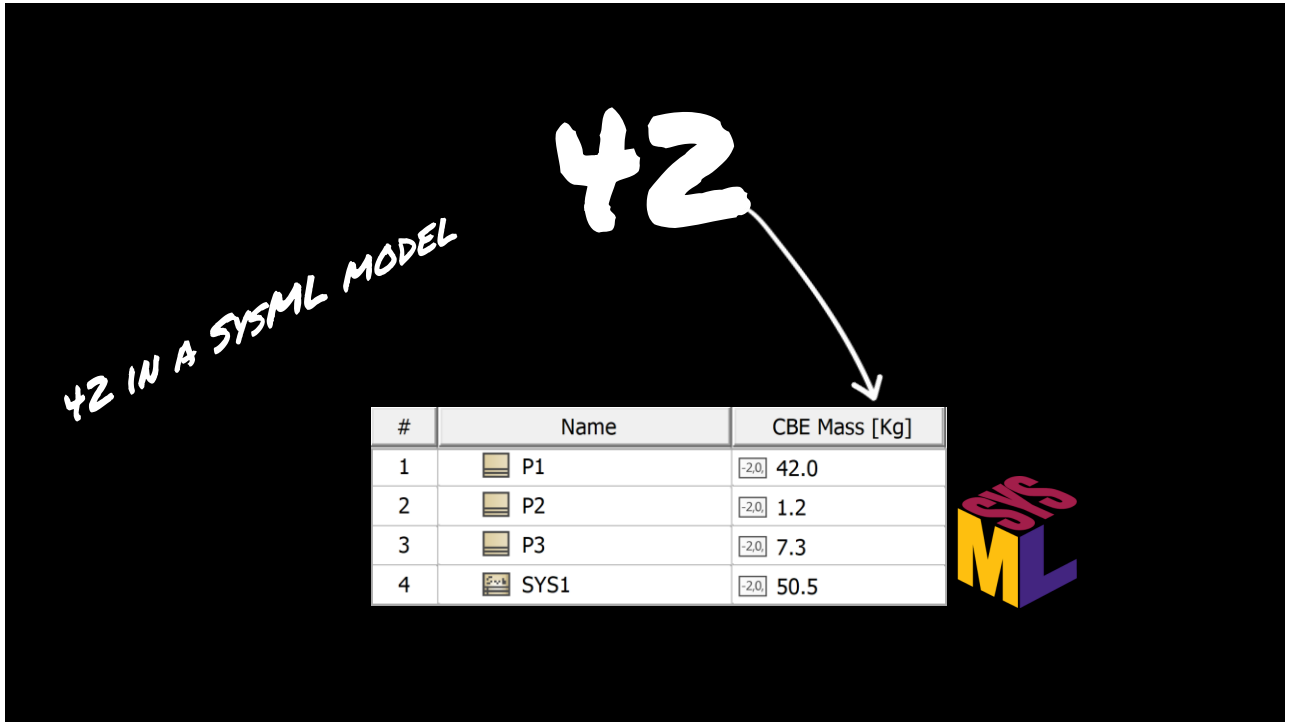


FOR A MACHINE
42 IS IN CELL C2

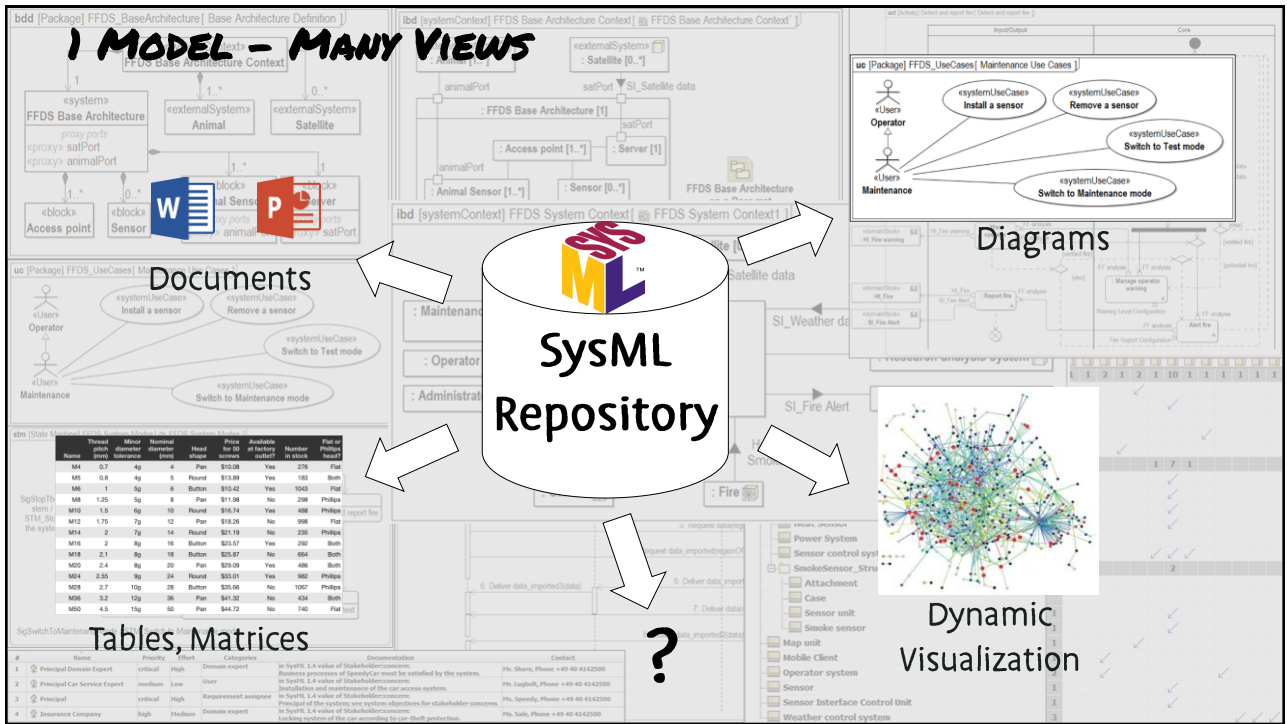
42

Subsystem	Part	CBE Mass (kg)
SYS1	P1	42,00
SYS1	P2	1,20
SYS1	P3	7,30
Total SYS1		50,50





MBSE with SysML – The World behind the Diagrams to the master the Digital Thread



MACHINE READABLE SEMANTICS

42

«block»	
P1	
values	
cbe-mass	mass[kilogram] = 42.0 kg (redefines mass, unit = kilogram)

- VALUE PROPERTY CBE-MASS
- OWNER BLOCK P1
- VALUE TYPE MASS[KILOGRAM]
- UNIT KILOGRAM
- QUANTITY KIND MASS
- ...



SysML MAKES COMMON SYSTEMS ENGINEERING CONCEPTS ACCESSIBLE FOR MACHINES.

THE MODEL MAKES THE DIFFERENCE



Subsystem	Part	CBE Mass (kg)
SYS1	P1	42,00
SYS1	P2	1,20
SYS1	P3	7,30
Total SYS1		50,50



#	Name	CBE Mass [Kg]
1	P1	-2.0 42.0
2	P2	-2.0 1.2
3	P3	-2.0 7.3
4	SYS1	-2.0 50.5

„SYXCEL – APPROACH“

THE MODEL MAKES THE DIFFERENCE



Subsystem	Part	CBE Mass (kg)
SYS1	P1	42,00
SYS1	P2	1,20
SYS1	P3	7,30
Total SYS1		50,50

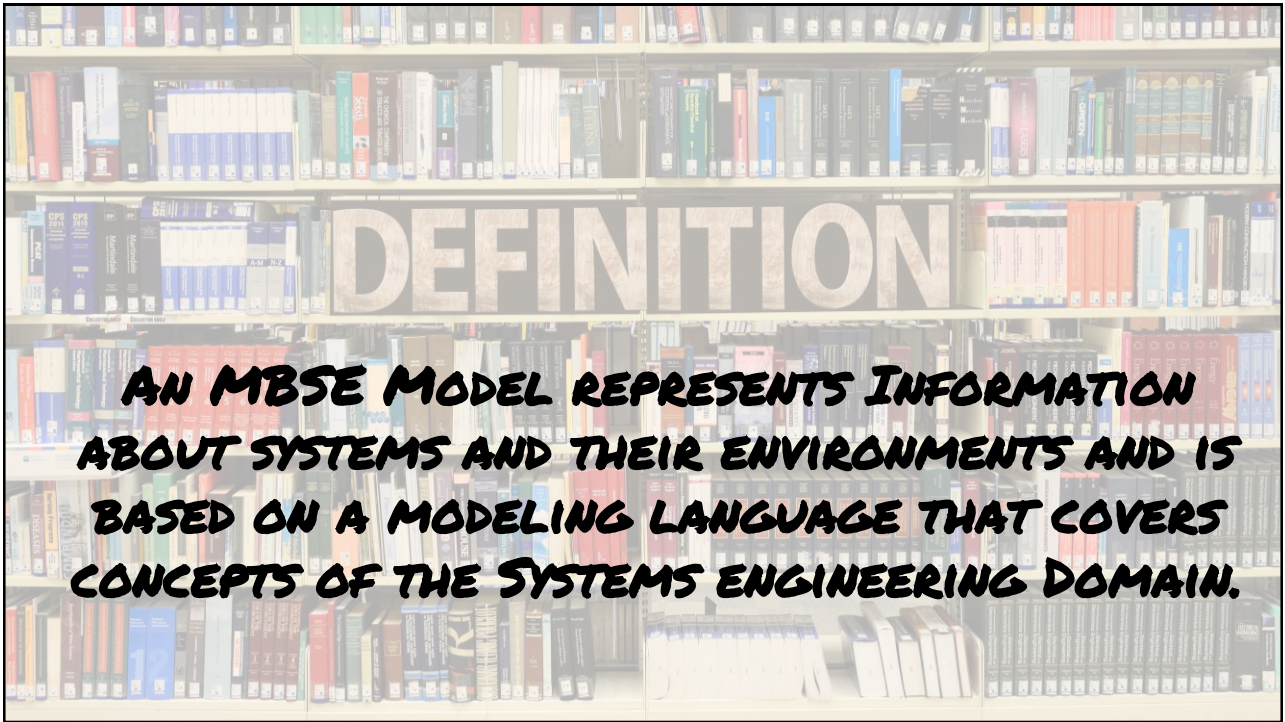
MODEL

NO MODEL?



#	Name	CBE Mass [Kg]
1	P1	-2.0 42.0
2	P2	-2.0 1.2
3	P3	-2.0 7.3
4	SYS1	-2.0 50.5

„SYXCEL – APPROACH“



THE KIND OF MODEL IS CRUCIAL

„WORKSHEET MODELING LANGUAGE“

MACHINES GET INFORMATION ABOUT CELLS, DATA FORMATS, FORMULARS, ETC.



Subsystem	Part	CBE Mass (kg)
SYS1	P1	42,00
SYS1	P2	1,20
SYS1	P3	7,30
Total SYS1		50,50

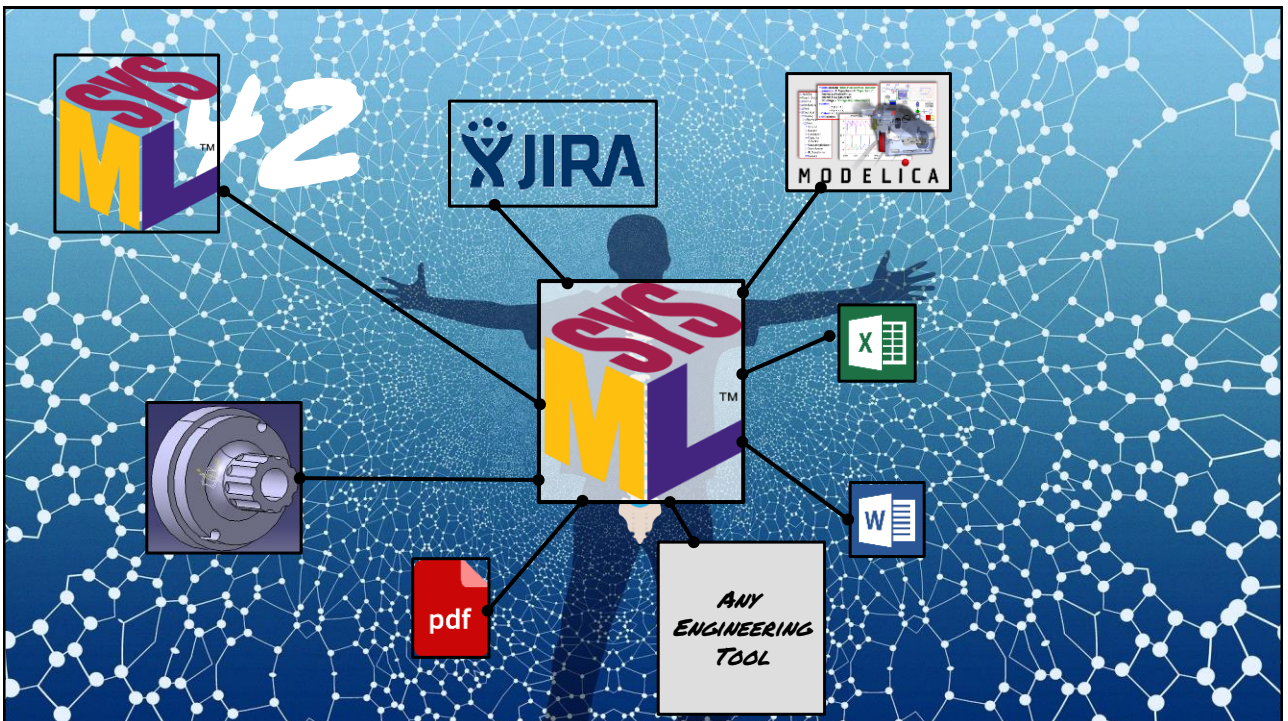
SYSTEMS MODELING LANGUAGE

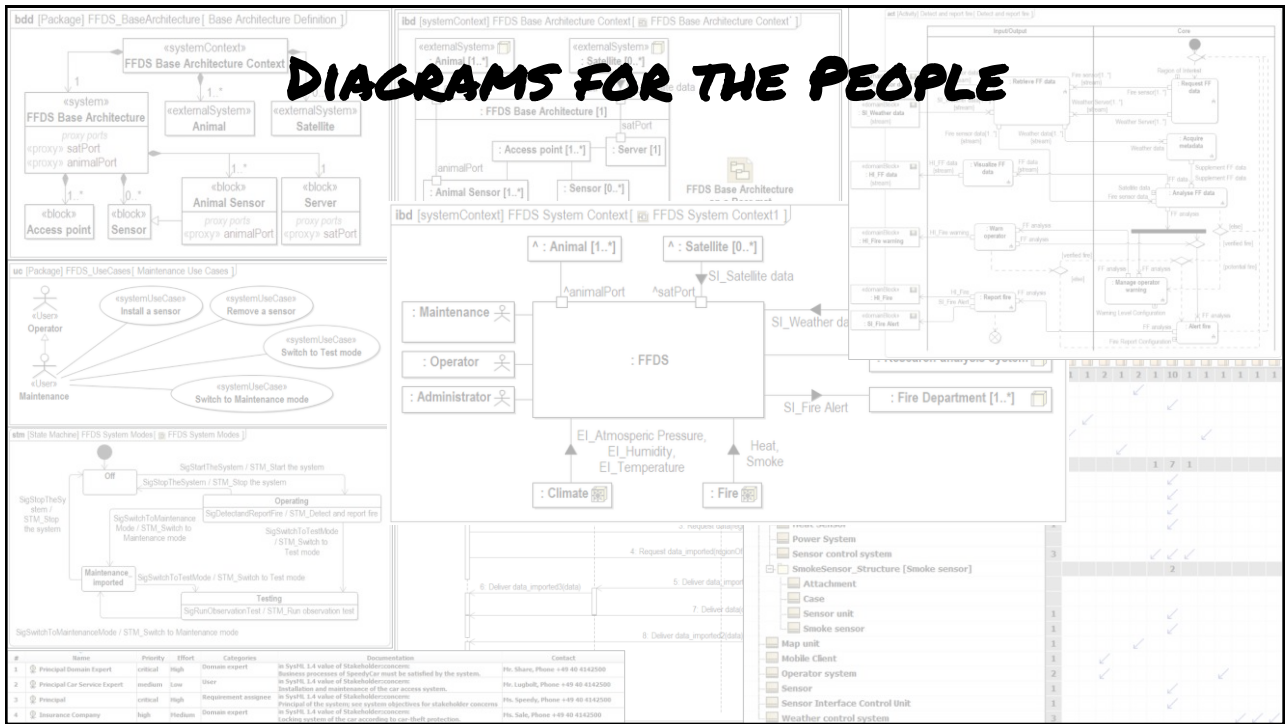
MACHINES GET INFORMATION ABOUT SYSTEMS ENGINEERING CONCEPTS



#	Name	CBE Mass [Kg]
1	P1	42.0
2	P2	1.2
3	P3	7.3
4	SYS1	50.5

„SYXCEL – APPROACH“



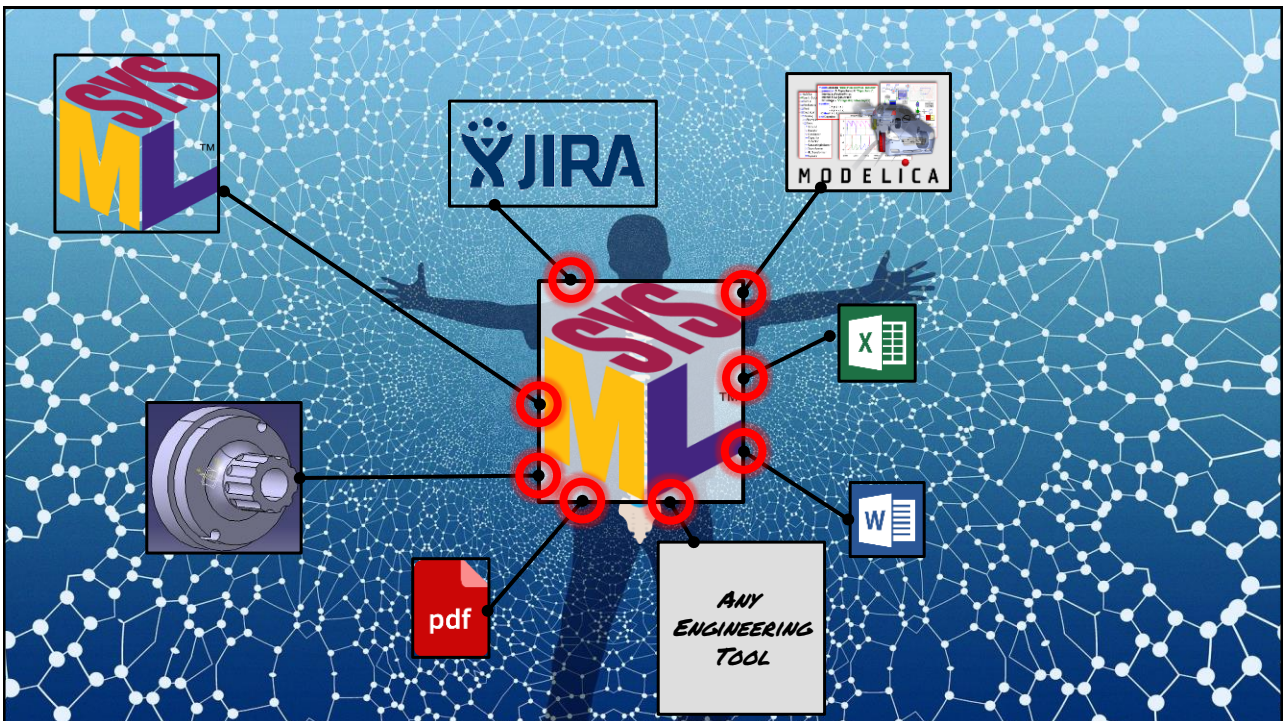


INTERNATIONAL STANDARDS FOR SUSTAINABLE ENGINEERING

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ONE MORE THING...





SysML v2 API AND SERVICES

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