SEMA Pedagogy

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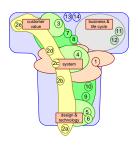
Abstract

The pedagogical path of the SEMA course. How the assignments during the course and during the homework build toward the final deliverable.

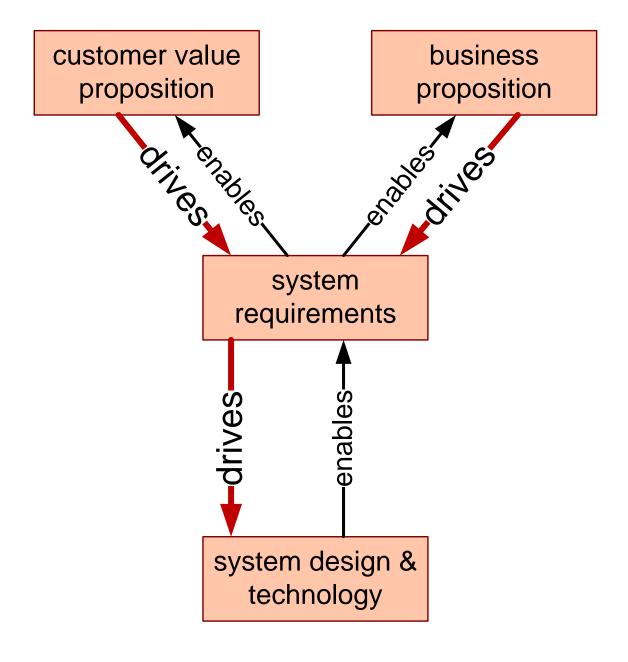
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August 21, 2020 status: draft version: 0



Systems Architecting Top View



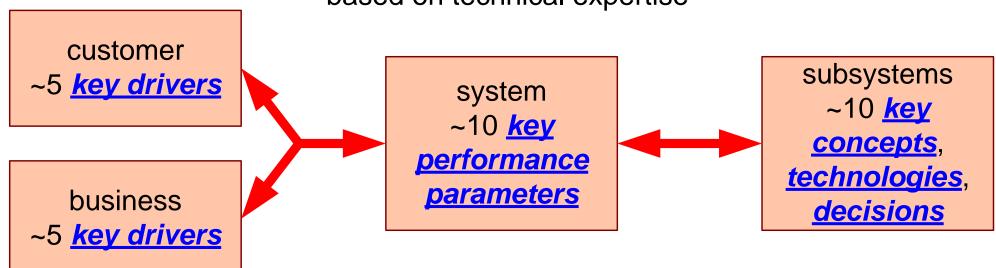


Main Responsibilities Systems Engineering

Systems Engineering: Fitness-For-Purpose

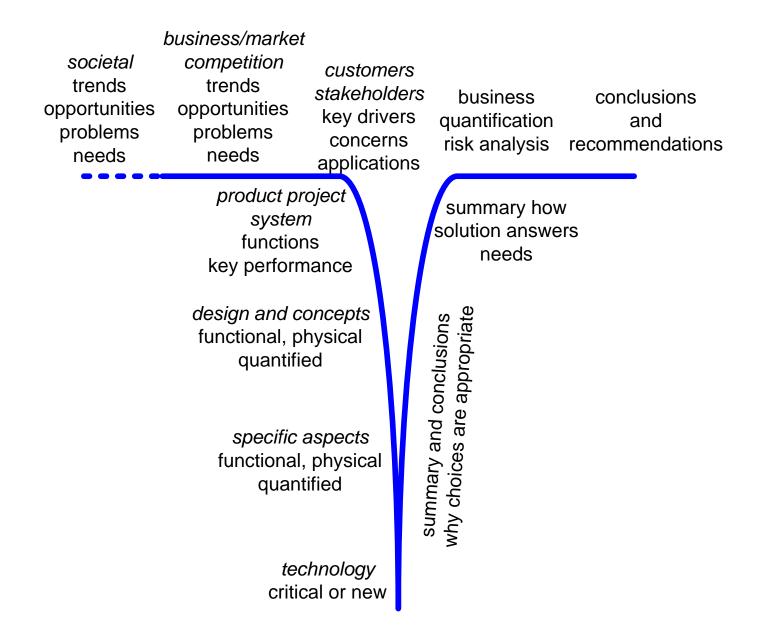
Achieving customer and business key drivers via key performance parameters of system

based on technical expertise



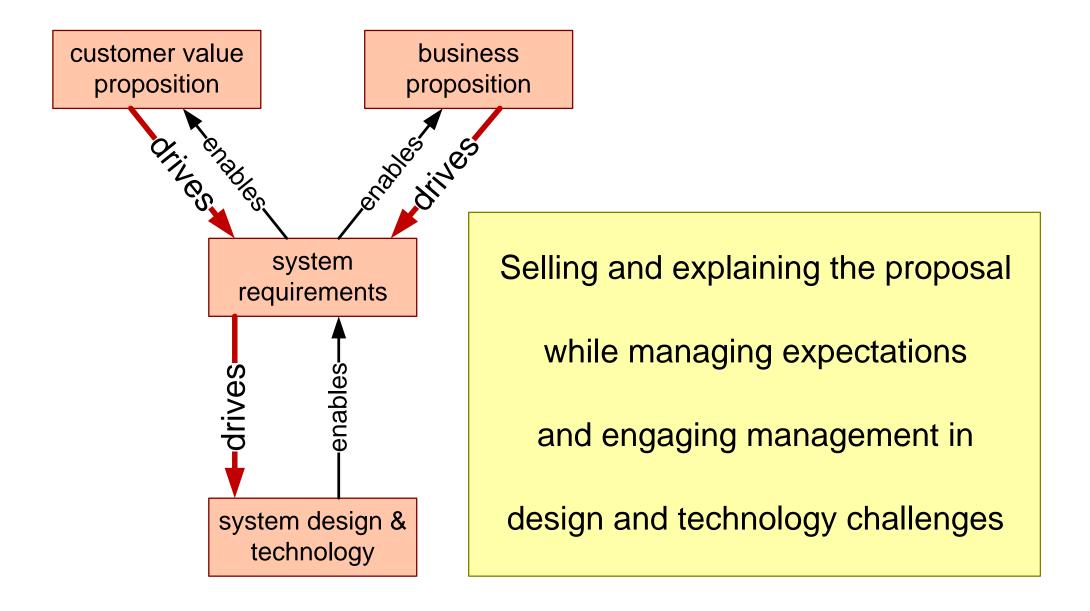


Final Homework Deliverable: T-shaped Presentation





Final Course Week Deliverable: Elevator Pitch



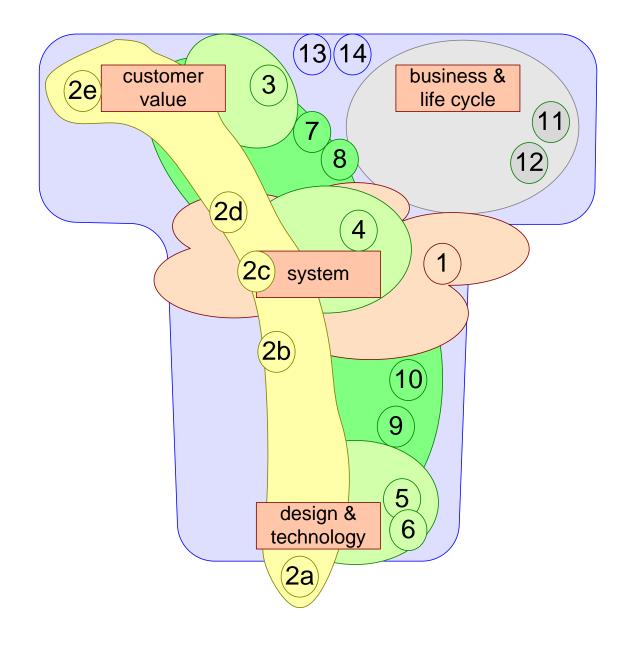


Assignments during the Course

1. elevator Customer Realization Functional Conceptual **A**pplication **+** Life cycle objectives 2. exploring the case 3. story telling 5. dynamic behavior 4. use case 6. block diagram 7. context and workflow 9. budget based design 8 customer key driver graph 11. business plan 10. concept selection 12. change analysis 13. line of reasoning 14. thread of reasoning 15. quantified chain of models 16. credibility and accuracy



Classroom Assignments





Panorama Photo of Classroom



SEMA classroom September 2017, photo: Yang Yang Zhao



Homework Assignments

1/3: Capture course results as electronic visualizations (PowerPoint/Visio)

2/3: Transform into draft T-shaped presentation

final: T-shaped presentation plus individual reflection

