

Reuse so Far: Phasing in a Revolution

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- What does a revolution look like?
 - factor of 10 in productivity
 - lifecycle scenarios to achieve it
- Can we get there from here?
 - US DoD DSSA should provide factor of 10 in productivity
 - low LOA domain specific parts
 - powerful in their domain, inflexible outside their domain
- Let's buy some parts
 - version and configuration space problems
 - Microsoft VBX example
- Flexibility **and** productivity goals
 - interconnected knowledge base with refinement mechanism
 - transformational implementation

Lifecycle Scenarios to Achieve a Factor of 10 Productivity

	req	ana	des	imp	tst
now	100%	100%	100%	100%	100%
A	100%	100%	80%	20%	60%
B	100%	100%	40%	10%	35%
C	65%	85%	20%	5%	15%
D	50%	60%	10%	0%	10%
E	50%	50%	5%	0%	5%

Lifecycle scenario vs. pct. effort from current lifecycle

	req	ana	des	imp	tst	ttl MM
now	24	32	121	141	98	416
A	24	32	97	28	59	240
B	24	32	48	14	34	152
C	16	27	24	7	15	89
D	12	19	12	0	10	53
E	12	16	6	0	5	39

Lifecycle scenario vs. man-months required in each phase of lifecycle