



Value Improvement Practices: Going the Extra Step

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11th PMI-AGC International Conference, 13-15 Feb 2007, Bahrain



What are the Benefits of VIPs?

Value Driven Engineering

Value Improvement Practices go the extra step to improve the likelihood of a project's success.

These formal procedures improve:

- *Cost*
- *Capital Efficiency*
- *Scheduling*
- *Team Alignment*
- *Operational Efficiency & Reliability*

*They are "**Out of the Ordinary**" project activities*



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What are the Benefits of VIPs?

Value Driven Engineering

Value Improvement Practices implemented in the early project planning stages:



- ***Enhance project definition and value***
- ***Help ensure top project results***
- ***Assist in benchmarking audits***



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What are the VIPs?

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There are twelve VIPs currently identified by industry organizations:



Traditional Value Engineering



Process Simplification



Design to Capacity



Constructability Review



Waste Minimization



Technology Selection



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What are the VIPs?

Value Driven Engineering

There are twelve VIPs currently identified by industry organizations:



Classes of Plant Quality



Energy Optimization



Process Reliability Modeling



Predictive Maintenance



Minimization of Standards & Specifications

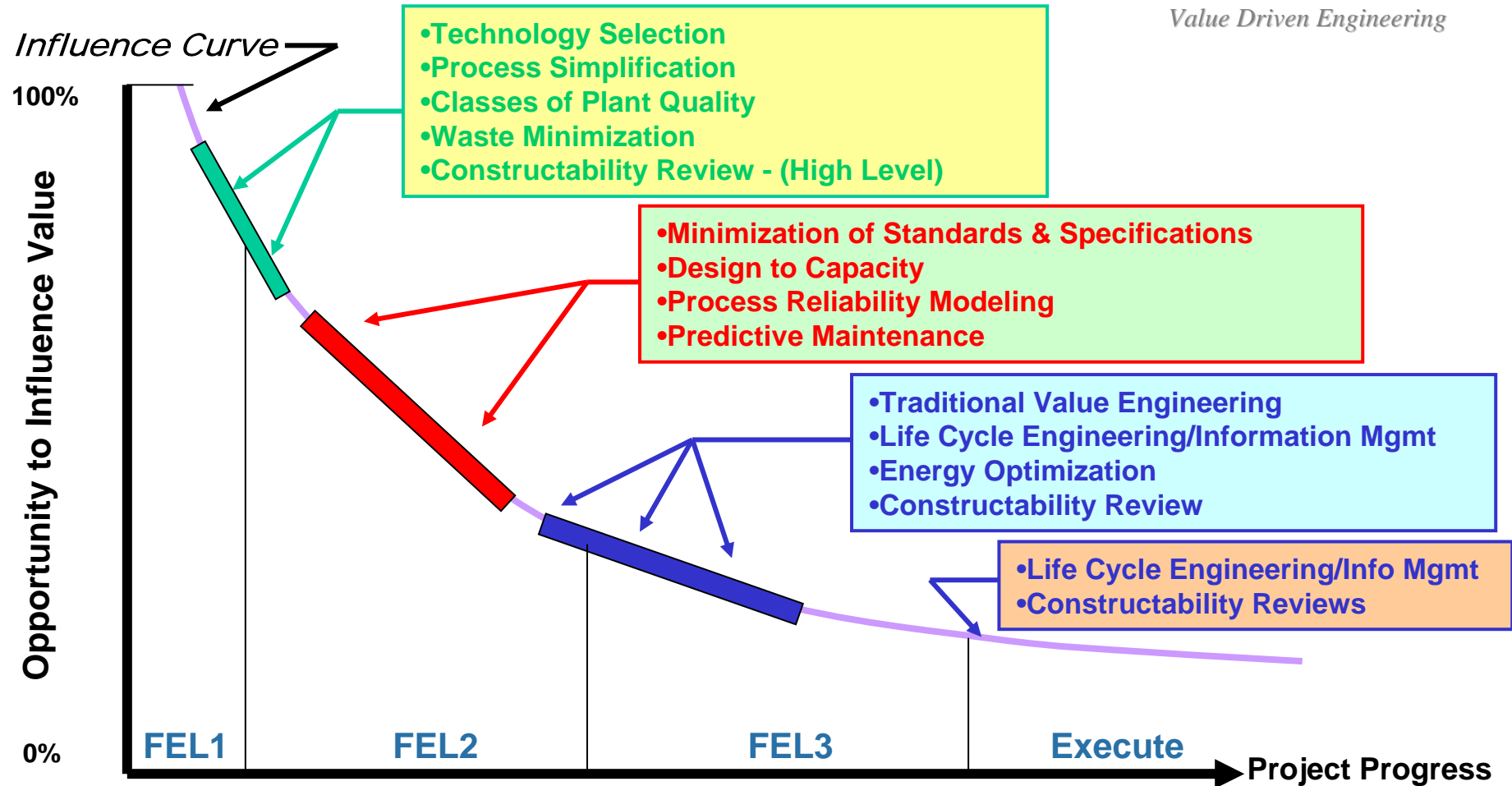


Life Cycle Engineering / Information Management (3D CAD)



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When are VIPs Implemented?



Implementation should be early, but late enough to have sufficient information to be successful



Typical Thoughts/Questions on VIPs

Value Driven Engineering

How many VIPs need to be done and what is normal?

IPA suggests utilization of 5 or 6 VIPs as optimum, since there is some overlap and you do reach a point of diminishing returns for your efforts.

We say you need to consider the type of project, maturity of technology, level of risk and potential for benefits. Then select the VIPs best suited to your project. This may be 1 or 2 or 5 or 6, whatever seems most beneficial.



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Typical Thoughts/Questions on VIPs

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How long does it take to implement one or more VIPs?

Plan for:

- A few hours to prepare (gathering information, etc.)*
- If a workshop is needed, 1 to 1-1/2 days for the workshop*
- Some follow-up on actions, evaluations, etc.
(attendees mainly)*
- Preparation of reports / documentation*
- A total of 3 to 4 weeks average from start to finish -
maybe more on some*



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Typical Thoughts/Questions on VIPs

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Can we have a single workshop and do all of them in one day in order to get credit?

This is not normally recommended. It may be beneficial and efficient to do 2 or more VIPs in a single workshop.

Gathering the participants is half the battle, so you might as well capitalize on that.

Some of the VIPs are a "good fit" for a single workshop, since the same participants are required.

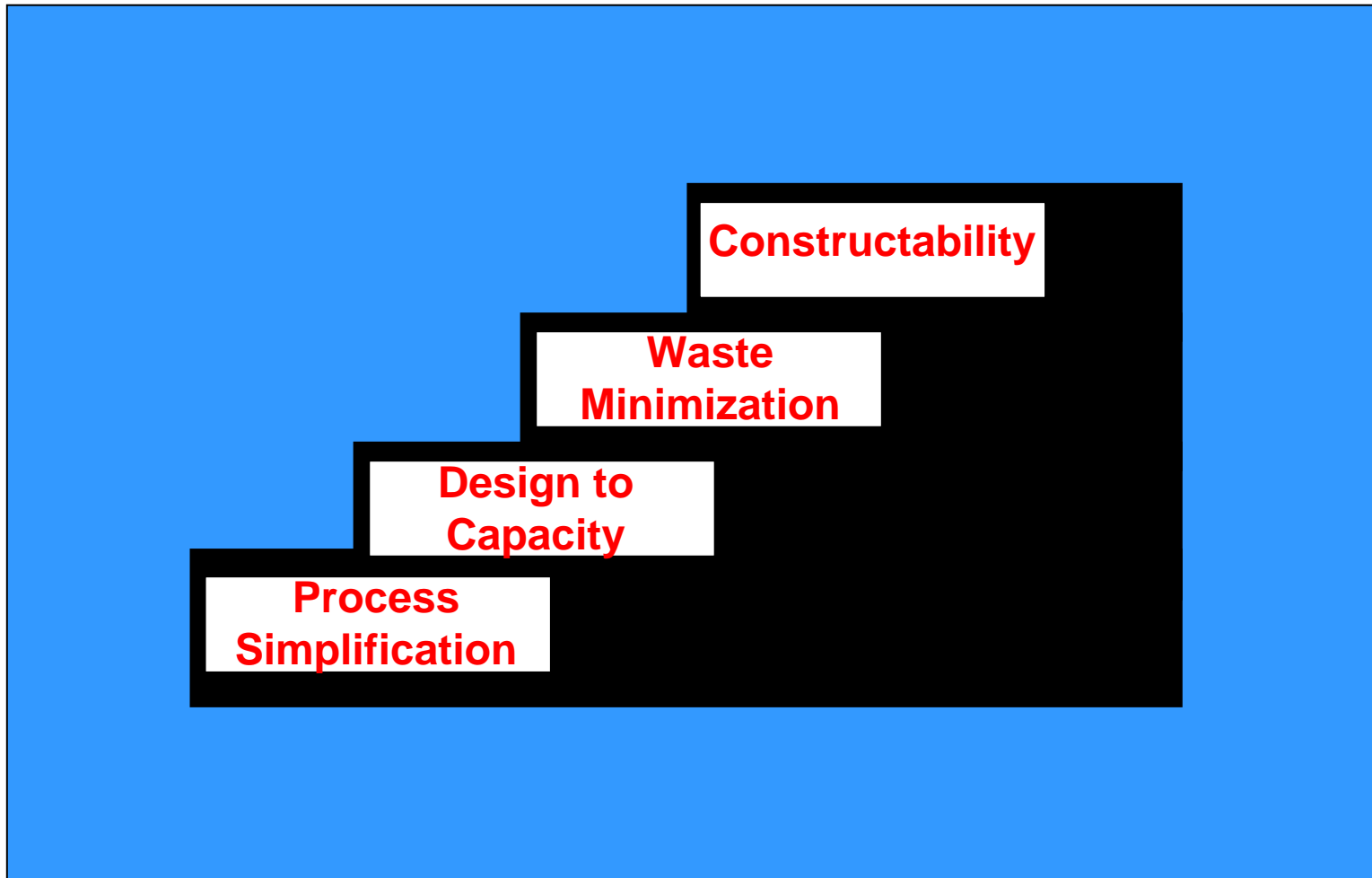


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Typical Thoughts/Questions on VIPs

Value Driven Engineering

Which VIPs can we do together?



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Typical Thoughts/Questions on VIPs

Value Driven Engineering

What is required to implement one or more VIPs?

Evaluate your needs and prepare a plan. This can be done in a single 45 minute (or so) meeting with the Project Manager and Project Engineer.

Most VIPs require some type of facilitation. It is recommended that this be done by someone independent from the project.



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Typical Thoughts/Questions on VIPs

Value Driven Engineering

How many project team members need to be involved in a workshop?

It can vary anywhere from 3 or 4 participants up to 12 or more.

Typically between 6 and 8 team members are recommended depending on the VIP being implemented with the Project Manager and Project Engineer having the most involvement.



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Typical Thoughts/Questions on VIPs

Value Driven Engineering

We do this anyway, can we just document what we have done?

No. What is done in the normal course of the project is not the same as doing the VIP. VIPs are structured, step by step processes that require planning, execution and reporting to be effective and accredited. Most involve some type of workshop.



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Typical Thoughts/Questions on VIPs

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Why do VIPs at all? Are they really worth anything?

Experience has shown that taken seriously, VIPs do work and do improve value. So yes, they are worthwhile.

This is especially true when used in a staged project management process as part of an overall Best Practices effort.



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IN SUMMARY

Value Driven Engineering

- *Usually do not take as much effort to do right as most people think*
- *VIPs can be useful and worthwhile - not just “check the box” activities to manipulate the project’s IPA score*
- *Plan early, as most VIPs are done in FEL2 and FEL3*



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