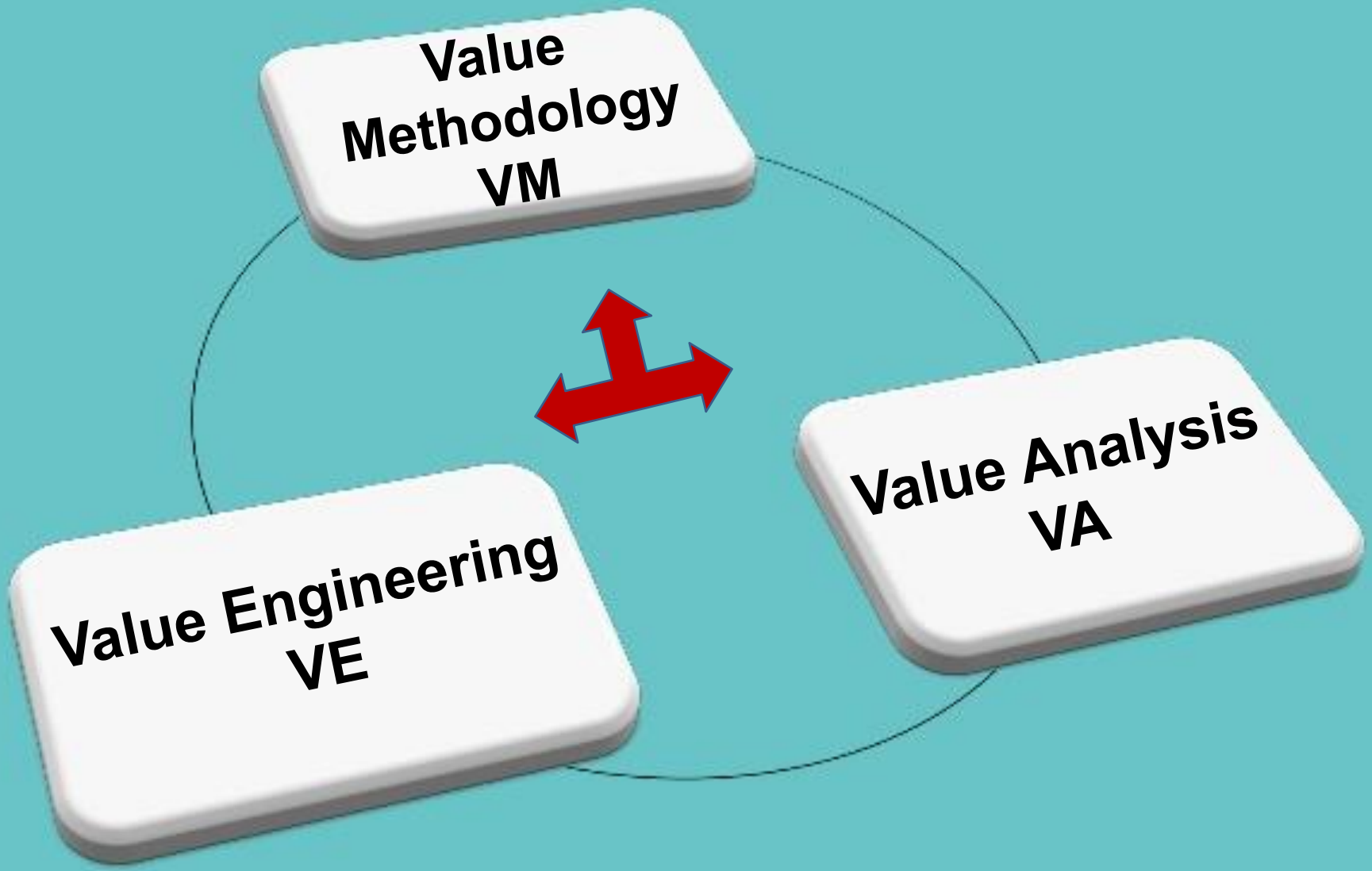
Welcome to the world of Value Methodology Fundamentals 1 (VMF1)

SAVE has changed the terminology



Come out of your shell

To understand VM globally

Just Relax

Value Methodology is a simple subject

But, while relaxing please remember

If you want to understand

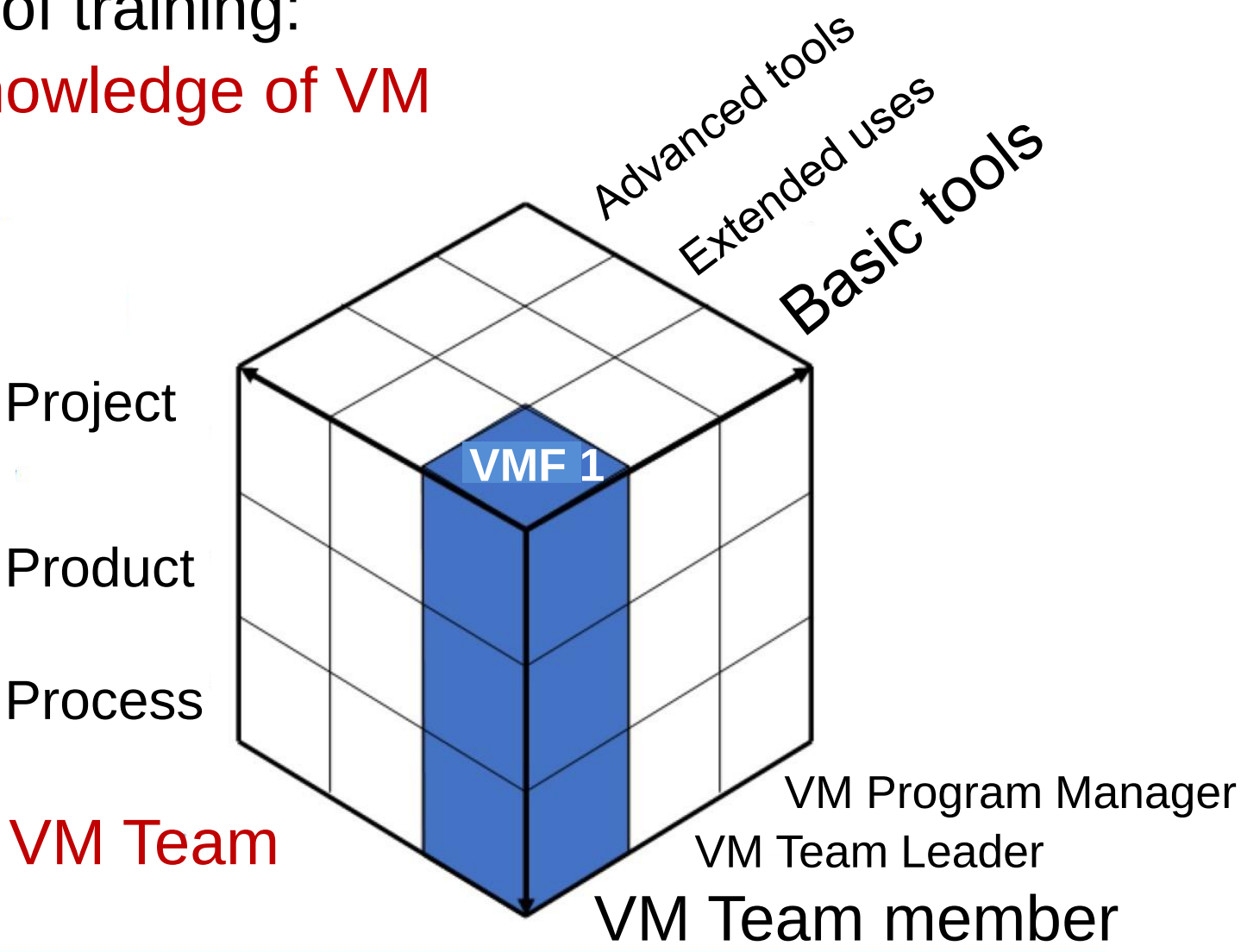
Because

Tell me	**I shall forget**
Show me	**I'll remember**
Involve me	**I'll understand**

Value Methodology Fundamentals 1

Purpose of training:

- Expand knowledge of VM



- Become a VM Team member

What is covered in VMF1

Core Competency	Education Objectives and Testing Parameters	VMA
1. Value Methodology		
1.1 Explain the Value Methodology		
	A. Explain Value Analysis, Value Engineering, or Value Management	●
	B. Define the Value Methodology	●
	C. Define Historical Milestones	●
	D. Know How Value Analysis Methods Spread Globally and Evolved	●
	E. Certification within SAVE International	●
	F. Understand What Constitutes a Value Study	●
1.2 Explain the Concept of Value		
	A. Define Value as a Basic Concept (Functions Divided By Resources)	●
	B. Who Determines Value	●
	C. Types of Value	●
	D. Define the Value Index (Function Cost Divided By Function Worth)	●
	E. Establish, Understand Sources, and Determine Worth	●
	F. Possible Reasons for Poor Value	●
1.3 Explain the Code of Conduct		

What is covered in VMF1

2. Transform Information		
2.1 Express Information		VMA
	A. Define Key Data Required (Cost, Process, Risk)	●
	B. Collect Relevant Data	
	C. Identify Potential Value Improvement Opportunities Based on Available Information	●
2.2 Apply Value Modeling in a Value Study		
	A. Transform Data (Pareto Diagram, Etc.)	●
	B. Organize/Diagram Key Resources (Space, Time, Energy, Labor or Staffing, Cost, Materials, Etc.)	●
	C. Identify Potential Value Improvement Opportunities Based on Stakeholders' Expectations and Available Information	
3. Team Facilitation		
3.1 Demonstrate the Skills for Workshop Leadership		
	A. Manage Team Dynamics	
	B. Motivate Team	
	C. Express Communication Skills	
	D. Demonstrate Time Management Skills	
	E. Elicit Information	
	F. Recall the Core Practices of Facilitation	

What is covered in VMF1

Core Competency	Education Objectives and Testing Parameters	VMA
4. Function Analysis		
4.1 Explain Function Analysis		
	A. Define Function Analysis	●
	B. Explain Purpose of Using Function Analysis	●
4.2 Differentiate Functions		
	A. Define What Is a Function	●
	B. Contrast Activities From Functions	●
	C. Classify Functions	●
4.3 Organize Functions		
	A. Explain What Is a Random List of Functions	●
	B. Construct a Random Function Identification Worksheet	●
	C. Explain What Is a Fast Diagram	●
	D. Construct a Fast Diagram	
	E. Allocate Resources to Accomplish Functions (Space, Time, Energy, Labor or Staffing, Cost, Materials, Etc.)	
	F. Prioritize Functions for Potential Value Improvements	

What is covered in VMF1

Core Competency	Education Objectives and Testing Parameters	VMA
5. Cost Analysis		
5.1 Recognize Costs		
	A. Recognize the Current State Cost Estimate (Correct Point in Time)	
5.2 Compute Financial Assessment		
	A. Know the Common Terms in The Use of a Financial Analysis (Net Present Value, Present Worth, ROI, Simple Payback)	●
	B. Calculate A Simple Payback, Breakeven, Or Return On Investment	
5.3 Apply Life Cycle Costing		
	A. Know the Common Terms on Life Cycle Costing	●
	B. Calculate Life Cycle Costs of a Simple Project, Process, or Product (Initial, Cyclical or Reoccurring, Salvage, and Annual)	●
	C. Interpret the Time Value of Money	●
	D. Express the Economic Principles and Terminology of Capturing Total Life Cycle Costs and Apply Them in a Value Study	

What is covered in VMF1

Core Competency	Education Objectives and Testing Parameters	VMA
6. Pre-Workshop Stage		
6.1 Elicit Stakeholder Goals and Objectives for the Workshop		
	A. Appraise the Targeted Goals, Expectations, and Objectives the Client Wants Addressed	
	B. Establish the Study Parameters Needed to Address Client Objectives: Scope of Study, Constraints, Duration, Appropriate SMEs, Stakeholder Involvement, Logistics	
	C. Verify How Value Improvement Will Be Measured, e.g., Changes to Time, Cost, and Performance; ROI; Quality; Etc.	
6.2 Assemble Appropriate Team Members		
	A. Identify the Correct Team Size Needed	
	B. Identify Subject Matter Experts (SMEs) Needed	
	C. Know When to Use More Than One Facilitator Based on Team Size	
	D. Request Appropriate Stakeholder Participation (Right Stakeholder at the Right Time In the Study)	
6.3 Develop an Agenda		
	A. Identify Activities and Milestones That Address the Six-Phase VM Job Plan	
	B. Scale the Agenda to Address the Scope and Objectives	

What is covered in VMF1

Core Competency	Education Objectives and Testing Parameters	VMA
6. Pre-Workshop Stage		
6.4 Acquire Information		
	A. Identify Information Needed	
	B. Manage Information	
	C. Distribute Information	
6.5 Arrange Workshop Logistics		
	A. Identify and Coordinate the Workshop Venue Requirements: Room Location, Size, Safety and Security, Need for Breakout Rooms for Sub-Teams, Lodging, Transportation, Etc.	
	B. Identify Equipment and Material Needs, e.g., Projectors, Flip Charts, Copy Equipment, Computer and Internet Interfaces, Etc.	
	C. Identify and Coordinate Any Food and Beverage Requirements	
	D. Arrange a Pre-Meeting With the Project Team and the Study Sponsor	

What is covered in VMF1

Core Competency	Education Objectives and Testing Parameters	VMA
7. Workshop Stage (Six-Phase VM Job Plan		
7.1 Manage the Six Phases of the VM Job Plan		
	A. Express the Purpose and Procedures of Each Phase of the VM Job Plan	●
	B. Apply the Proper Technique to Achieve the Expected Outcome of Each Phase	
	C. Express How Each Phase Builds on Its Previous Phases	●
	D. Express Potential Advantages and Disadvantages of Using Different Tools	
	E. Tailor the Phases to Match the Needs of the Project Goals and Objectives	
7.2 Complete Information Phase		
	A. Express Different Information Gathering Techniques	●
	B. Express Potential Advantages and Disadvantages of Using Different Techniques	
	C. Apply the Appropriate Technique to Achieve the Expected Outcome	
7.3 Complete Function Analysis Phase		
	A. Express Different Function Analysis Techniques	●
	B. Express Potential Advantages and Disadvantages of Using Different Techniques	
	C. Apply the Appropriate Technique to Achieve the Expected Outcome	
7.4 Complete Creative Phase		
	A. Express Different Creative Techniques	●
	B. Express Potential Advantages and Disadvantages of Using Different Tools	
	C. Apply the Appropriate Technique to Achieve The Expected Outcome	
	D. Foster a Creative Environment to Generate Ideas From the Team	

What is covered in VMF1

Core Competency	Education Objectives and Testing Parameters	VMA
7. Workshop Stage (Six-Phase VM Job Plan)		
7.5 Complete Evaluation Phase		
	A. Express Different Evaluation Techniques	●
	B. Express Potential Advantages and Disadvantages of Using Different Techniques	
	C. Apply the Appropriate Technique to Achieve the Expected Outcome	
7.6 Complete Development Phase		
	A. Express Different Development Techniques	●
	B. Express Potential Advantages and Disadvantages of Using Different Techniques	
	C. Apply the Appropriate Technique to Achieve the Expected Outcome	
	D. Develop Recommendations	●
	E. Identify Key Features to Sell Value Opportunities	●
	F. Suggest Path Forward for Implementation	●
7.7 Complete Presentation Phase		
	A. Manage the Audience	
	B. Illustrate Key Value Recommendations	●
	C. Organize Information for Effective Delivery	●
	D. Leverage Visual Aids and Technologies to Deliver a Presentation	●
	E. Anticipate and Respond to Questions	●
	F. Express Key Features to Sell Value Opportunities	●
	G. Illustrate Path Forward for Implementation	●

What is covered in VMF1

Core Competency	Education Objectives and Testing Parameters	VMA
8. Post-Workshop Stage		
8.1 Document Results		
	A. Document Value Study Results	
	B. Elicit Comments	
	C. Support Implementation	
	D. Capture Status of Recommendations (If Possible)	
9. Value Program		
9.1 Discuss a Value Program		
	A. Identify the value champion	
	B. Restate key elements of a successful Value Program (OMB Circular)	
	C. Identify how to select a project	
	D. Recognize the need to train managers, team members and decision makers in VM	

This presentation is divided into Five distinct parts

- What is Value?
- What is Value Methodology?
- History of Value Methodology
- Scope of Value Methodology?
- How is Value Methodology done?
- Gains through VM?

Section I

What is Value

Seven classes of Value

(as per Aristotle)

1. ECONOMIC where money is transacted
2. POLITICAL
3. SOCIAL
4. AESTHETIC
5. ETHICAL / MORAL
6. RELIGIOUS
7. JUDICIAL

Value has a value if its value is valued

by

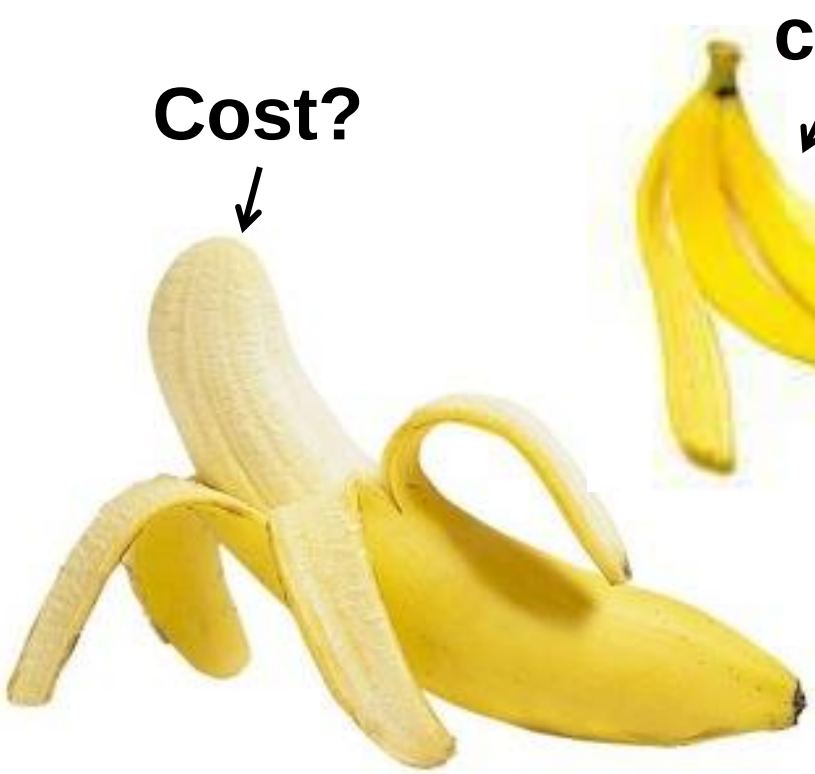
the Customer


THIS MAGIC SWORD BRINGS WEALTH!
I'LL PAY YOU A BAG OF GOLD FOR IT!
A-9

Value is not created by fooling others

It is in real term

What I get by what I give



What is the economic value?

What does

want from your product?

Performance is

Accomplishment against set standard

Which can be measured quantitively in units

Or

Satisfaction of desire

Which can be measured qualitatively in %

Customer wants

Performance

Functions of the object

- Quality (accuracy of standards)
- Ease of operation/handling
- Reliability (failure proof)
- Safety
- Environment friendly
- Attractiveness (look, taste, feel, smell)

At what cost?

$$\text{Value} = \frac{\text{What are my Benefits}}{\text{What is cost to me}}$$

Each Good & Service has to perform for the customer

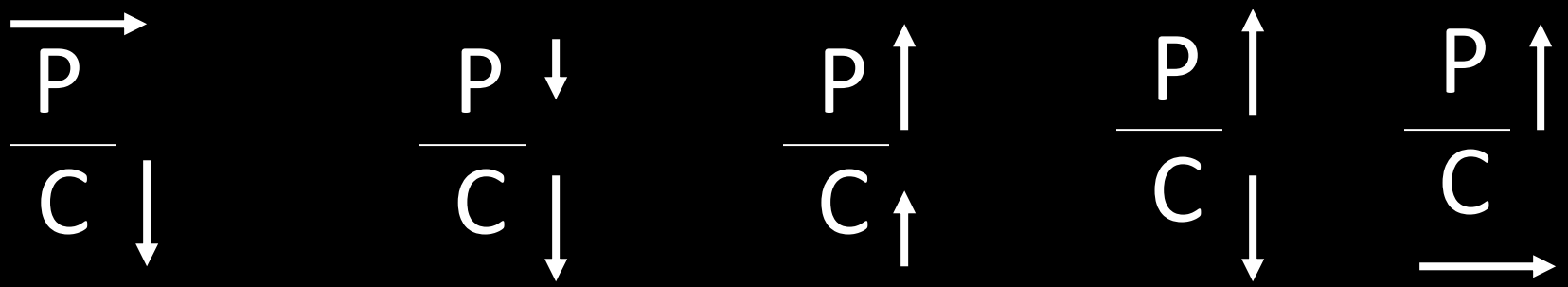
$$\text{Value} = \frac{\text{Performance (Function)}}{\text{Resource}}$$

{ material, process, time, human, money, space, safety & environment }

Defined as a fair return or the equivalent in goods, services, or money exchanged

How can I enhance Value?

$$\textbf{Value} = \frac{\text{Performance}}{\text{Cost}} = \frac{P}{C}$$



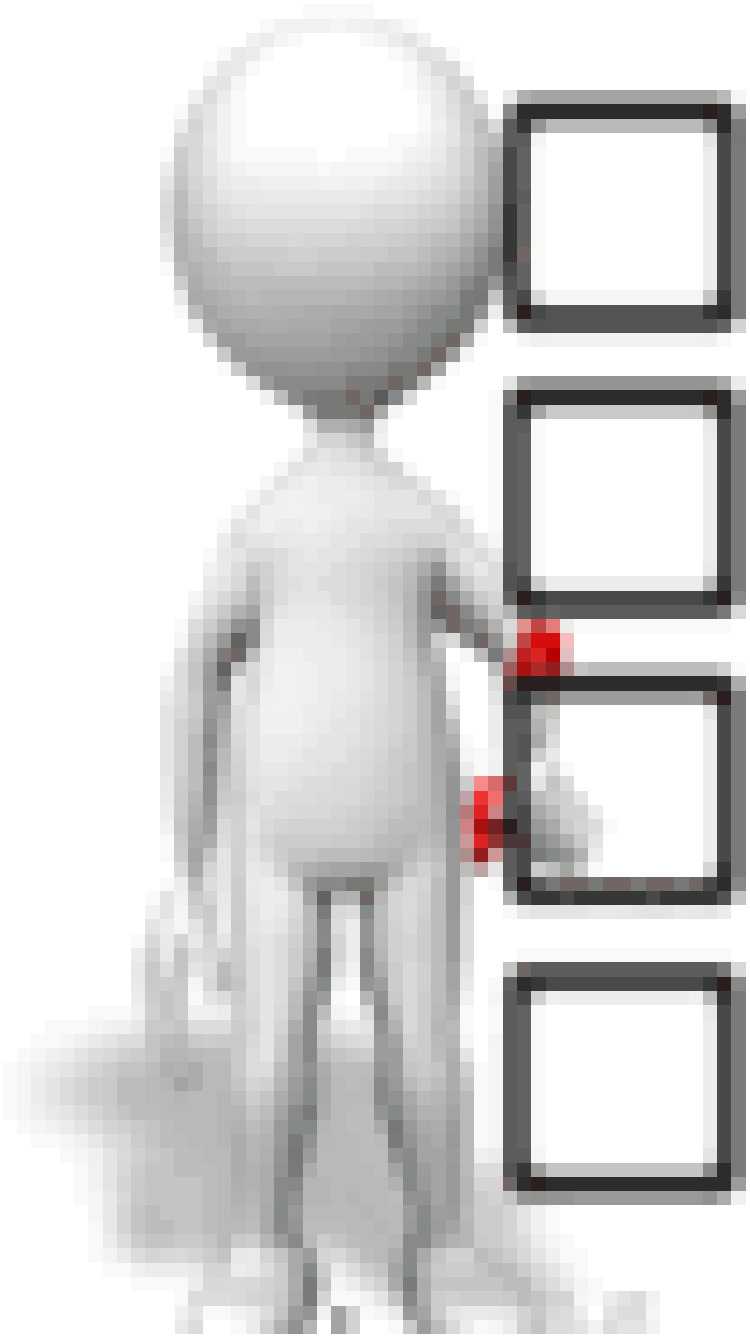
VM is for improvement of value

Not cost cutting

Cost may go up, down or may remain same

Types of

There are 4 types of value



Cost value

Exchange value

Use value

Esteem value

In VM, both of these values are not considered

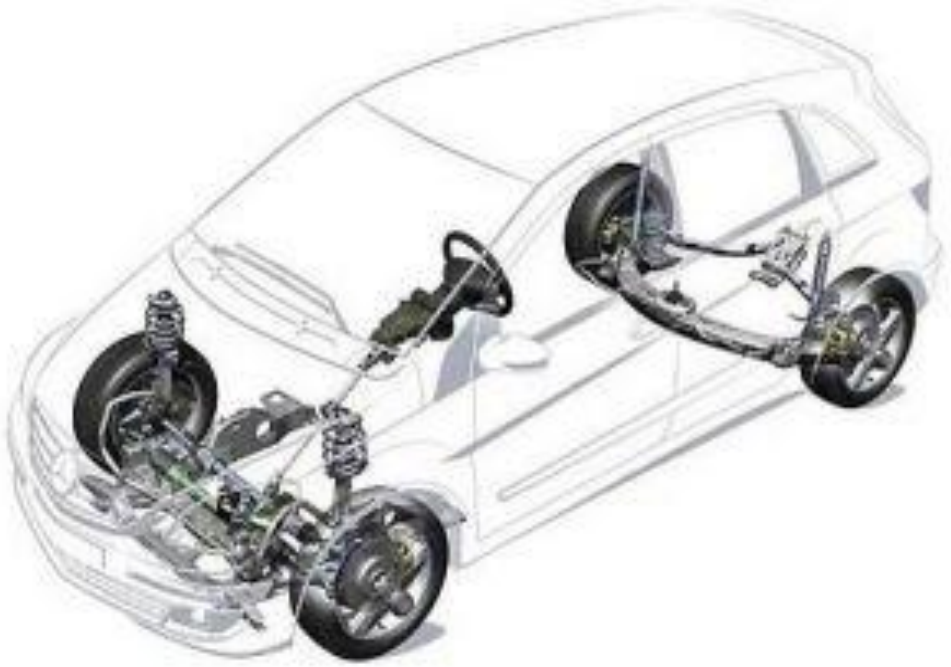
Use Value

Properties that accomplish Use, Work or Service

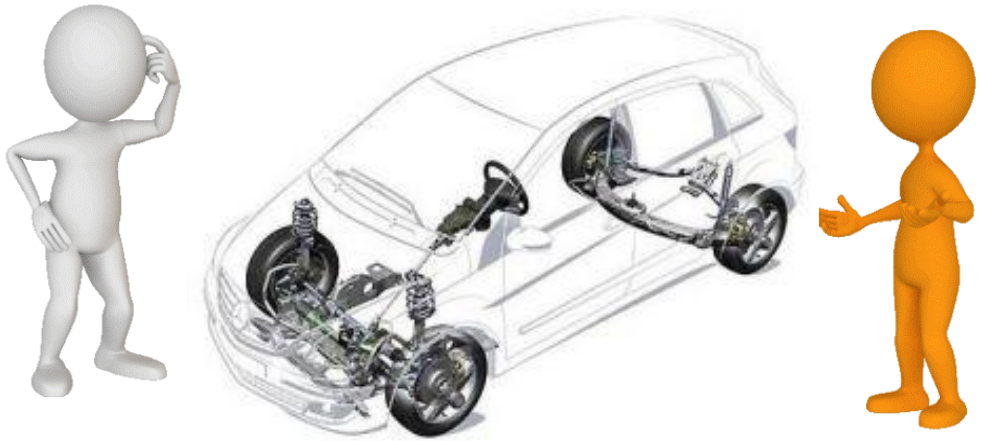
- ‘’Needs’’ of the customer

What are the basic needs of the customer? Must haves

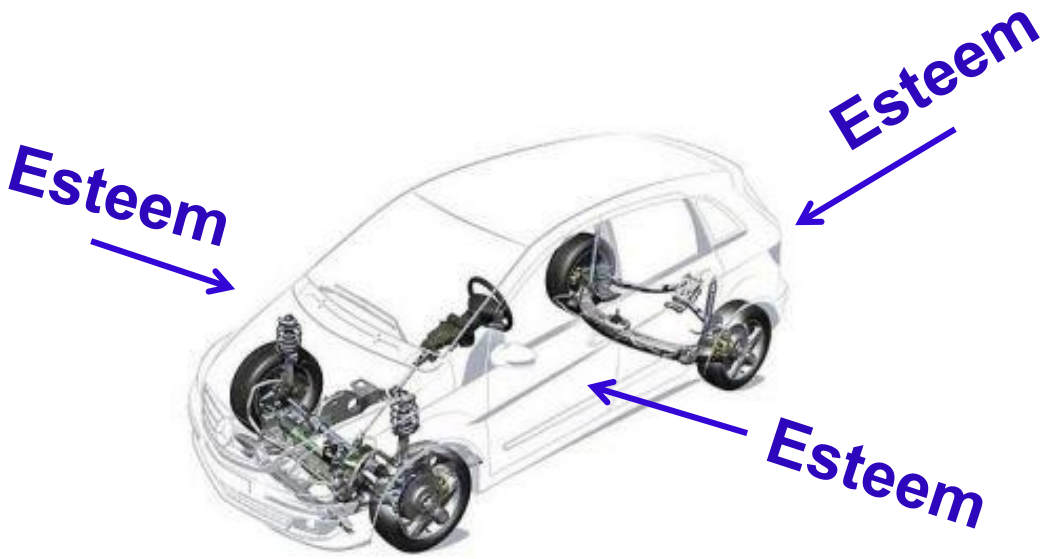
- Good driving system
  - ❖ Mechanical
  - ❖ Electrical
  - ❖ Hydraulics
  - ❖ Pneumatic
- Good body



Will you purchase the car?



With “Use” value fulfilled



Esteem Value

Properties that make ownership of an object desirable

- Wants of the customer

What are the **wants** of the Customers? Should haves

- Look
- Colour
- Seat

- Comfort
- Brand
- Ego

$$\textbf{Value} = \frac{\text{Performance (Use + Esteem)}}{\text{Cost}}$$

Use value and Esteem value differs in end products

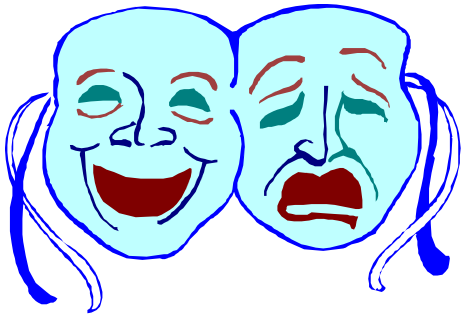
Use	70%	50%	90%
Esteem	30%	50%	05%

Which has more Value?

1 Kg Diamond or 1 liter Water

Value of the same product changes

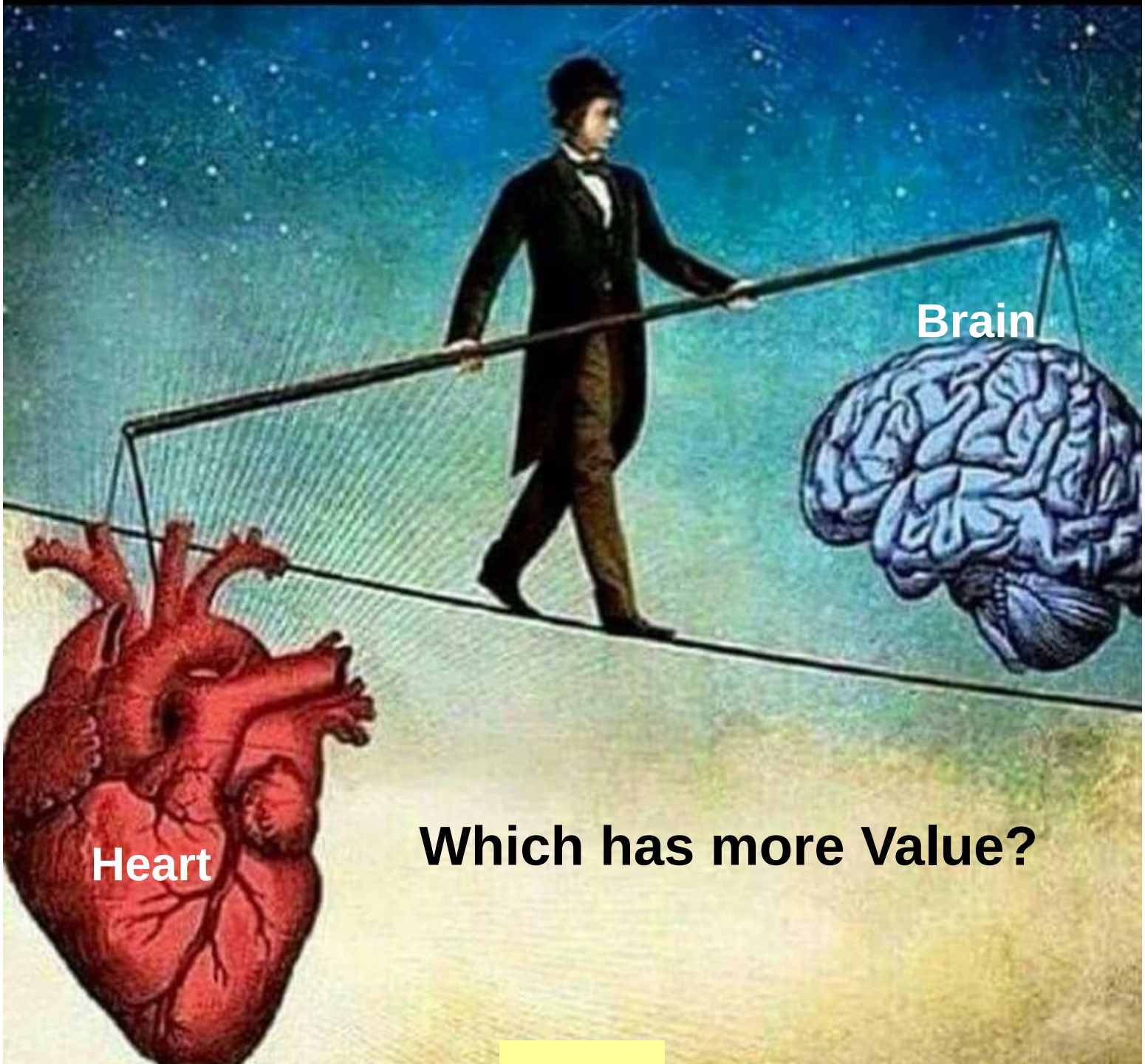
Customer to customer



Place to place

Time to time

Value of a product is not constant


Brain
Heart
Which has more Value?

Reasons for poor value

- Lack of information
  - Project Goals and Objectives are not clear
  - What must it do, what would it be good to do, why, where, when, how
- Maintain status quo (fear of change)
- Honest wrong believes
- Rigid application of standards (that is how we do it)
- Negative attitude (failure to recognize creativity)
- Fear of failure (solution worked before, leave it alone)
- Indecision (fear of making wrong decision, so postpone)
- Lack of ideas
- Others?

SECTION II

What is Value Methodology

Value Analysis (VA)
&
Value Engineering (VE)

Developed first

Developed later

Difference between

Value Analysis

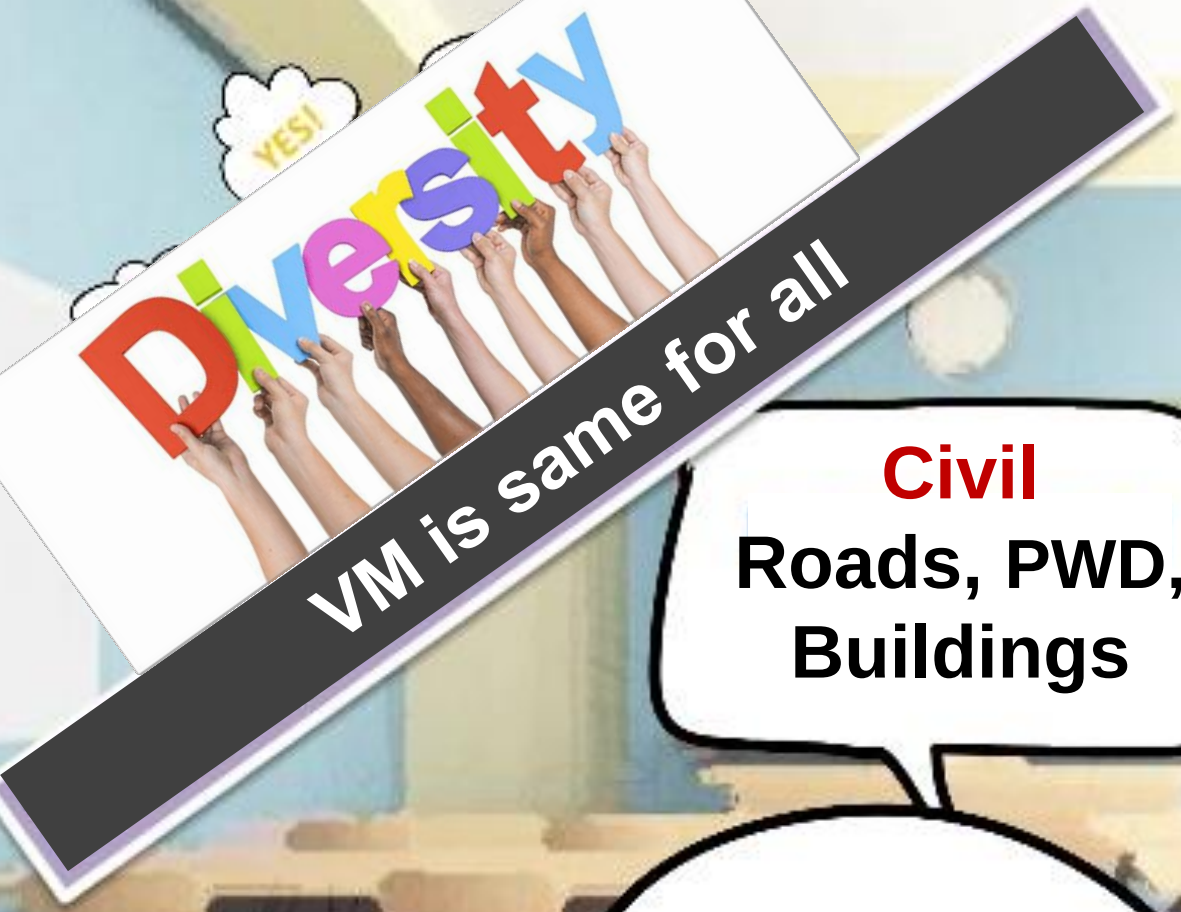
After the fact

It is in manufacturing, implementation or operation stage

Value Engineering

Before the fact

It is in conceptual, design or development stage



VM is same for all

Process
Oil , Gas,
Metal, Power

Civil
Roads, PWD,
Buildings

Manufacturing
Automobiles,
Ships, Rails,
Aircrafts

Service
Medical, IT,
Education,
Hospitality

Raw material
Mining

Support
Purchase, M&S
Finance, HR,
Engg.

How do you express the picture below ?

Half full or Half empty of water

Optimist

-The glass is half full.

Pessimist:

-The glass is half empty.

Value Engineer:

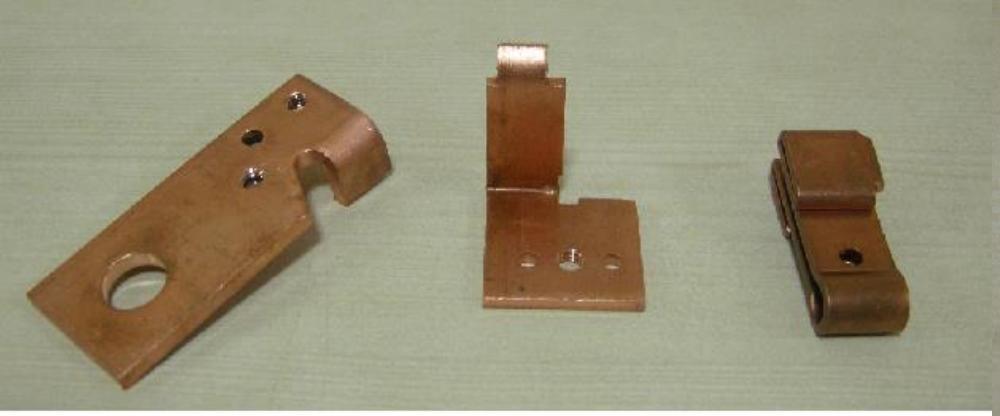
- The glass is twice big as it needs to be, now.

Believe It or Not!

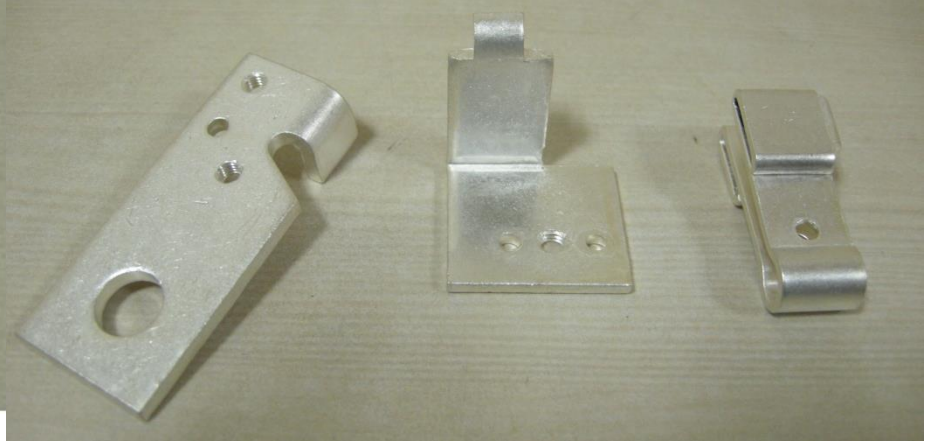
Most of the objects are overdesigned

Some are, of course,

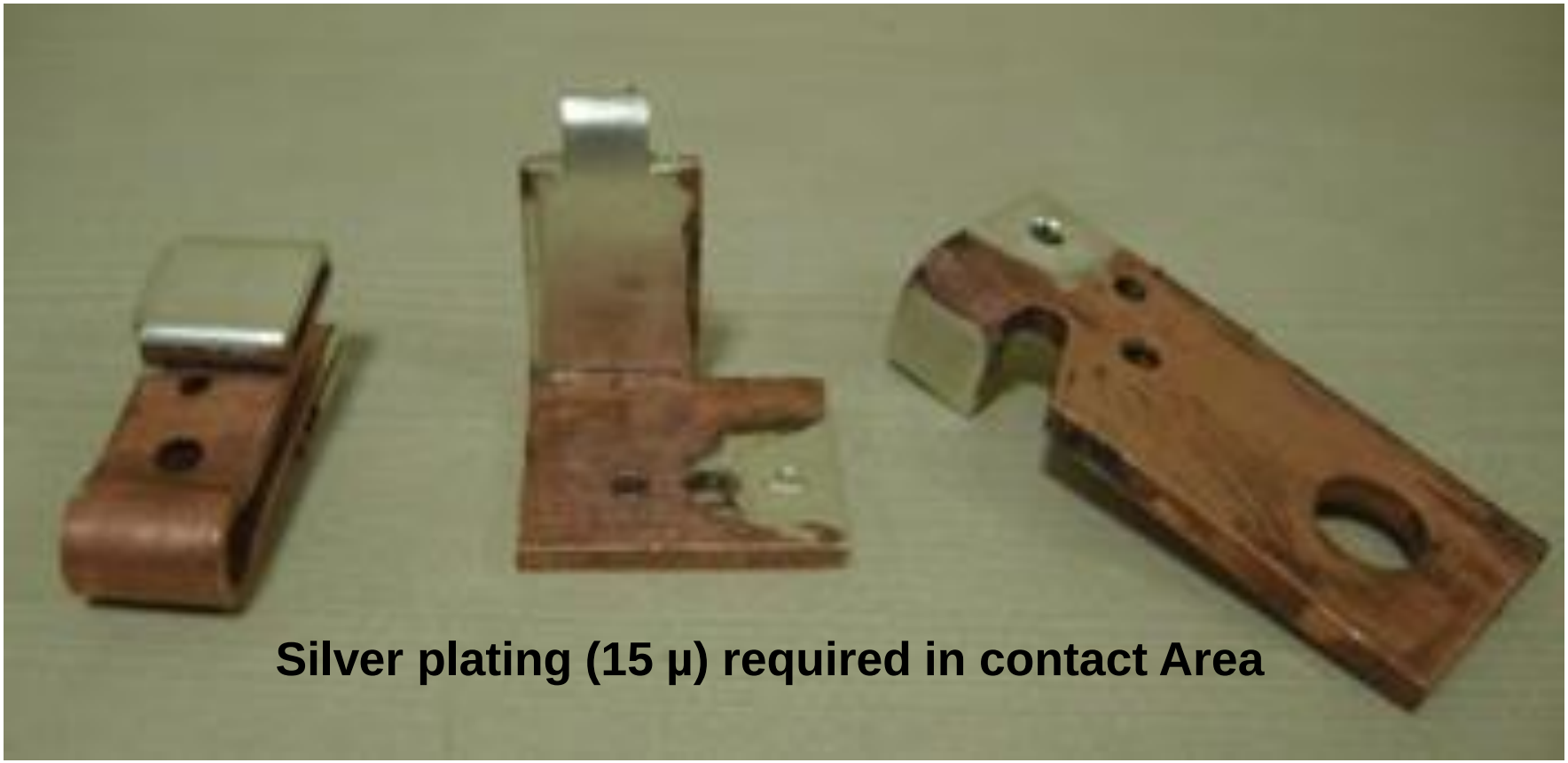
underdesigned



Copper current carrying plates

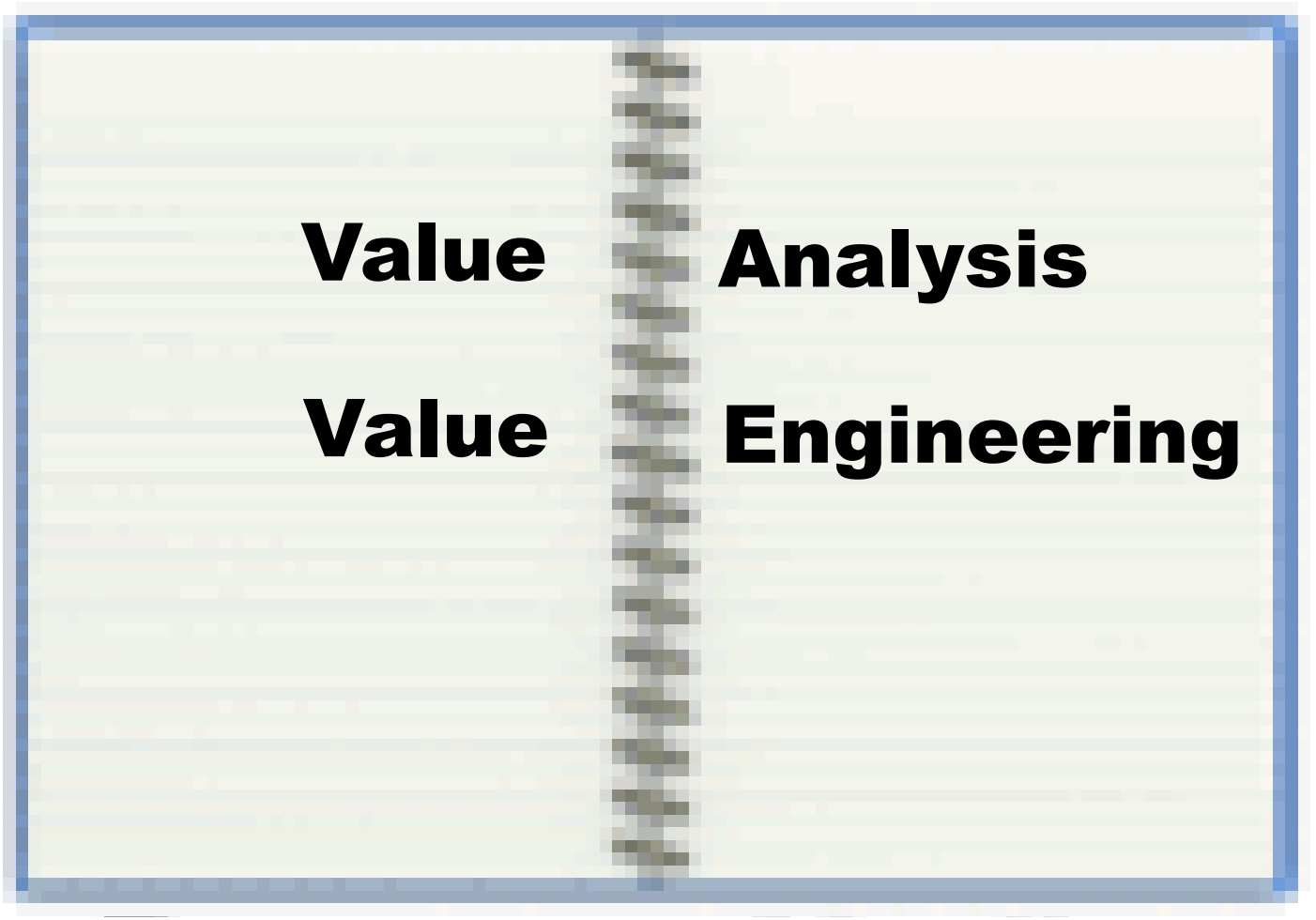


Silver plating (15 µ)



Section III

History of VM



Value Analysis was developed by

(April 21, 1904 – August 1, 1985)

Lawrance Delos Miles
in 1947, in General Electric Company, USA

He worked in the Purchase dept., GEC (USA) from 1931 to 1964, till retirement

The event that triggered the development of VA was the "Asbestos Affair"

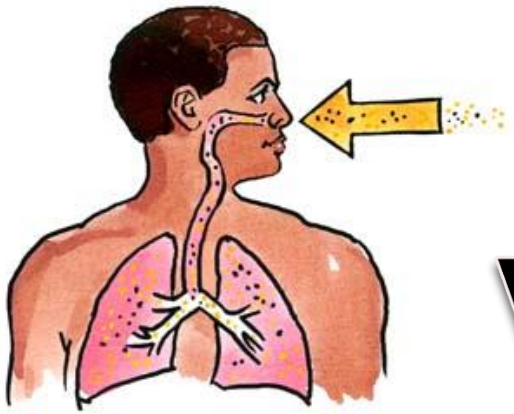
which was required as a flooring material for godowns

What are the Functions of Asbestos tiles?

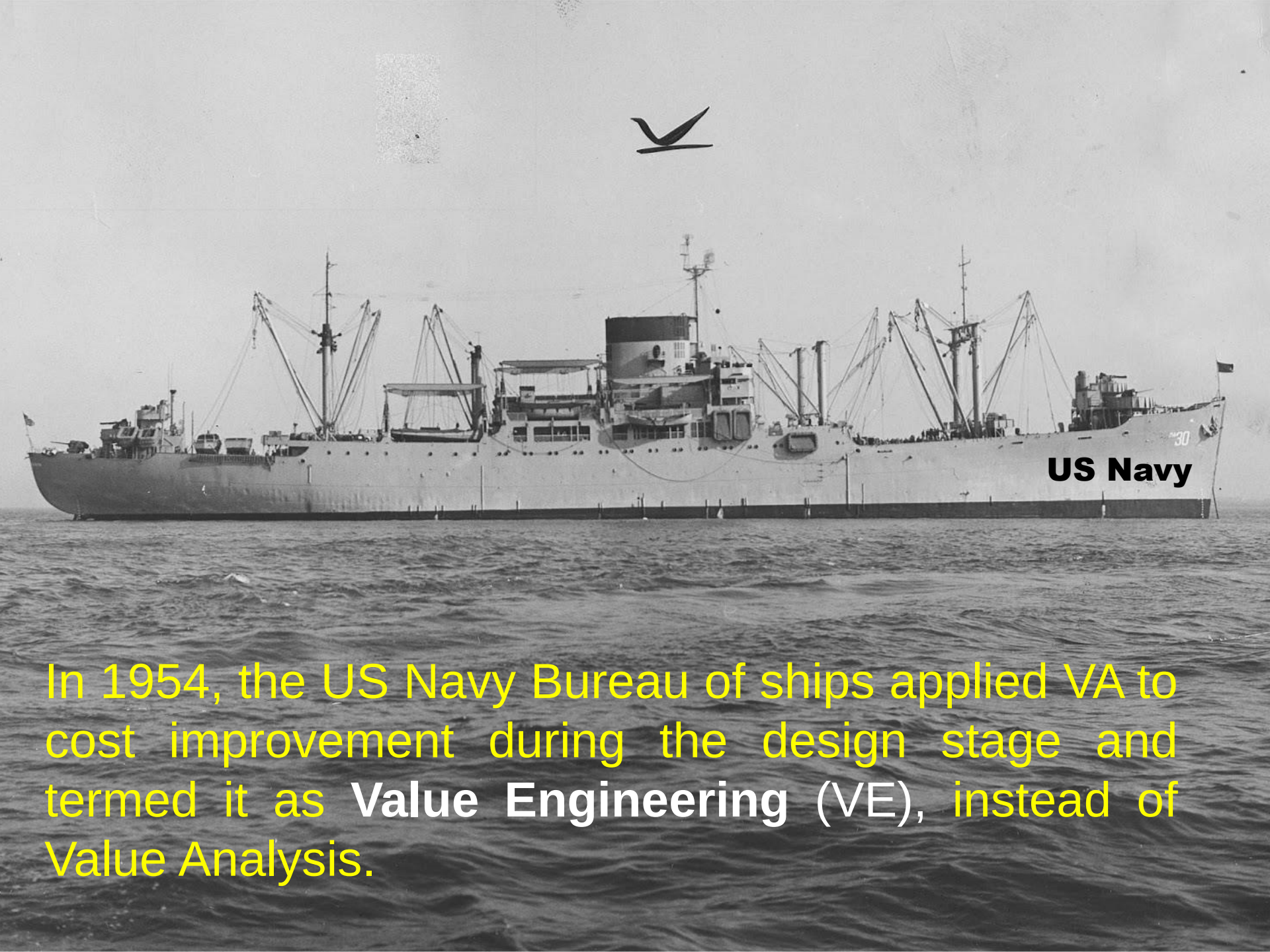
Asbestos tile

What are the Functions?

- Fire proof
- Sound proof
- Acid resistant
- Alkaline resistant
- Doesn't conduct electricity
- Good mechanical strength
- High wear resistant
- Low cost
- Release fibres



Value Analysis



In 1954, the US Navy Bureau of ships applied VA to cost improvement during the design stage and termed it as **Value Engineering** (VE), instead of Value Analysis.

In 1954

VA was extended to VE

It was the 1st Gov. application in the world

In 1958, L.D. Miles was awarded the US Navy's highest civilian honor for his contribution to the Bureau of Value Engineering.

Society of American Value Engineers (SAVE) was formed in March 18, 1959, in Washington DC, USA

The U.S. National Aeronautics and Space Administrative (NASA) began conducting VE studies and training from 1969.

The US Congress endorsed VE by recommending its use in Federal and Highway projects in 1970.

The General Service Administration (GSA) of US began its building contractor VE program in the same year (1970).

The US Department of Health, Education and Welfare adopted the use of VE on selected construction projects in 1971.

The SAVE Certification Board was formed in **1972**

SAVE was changed to SAVE International in **1996**

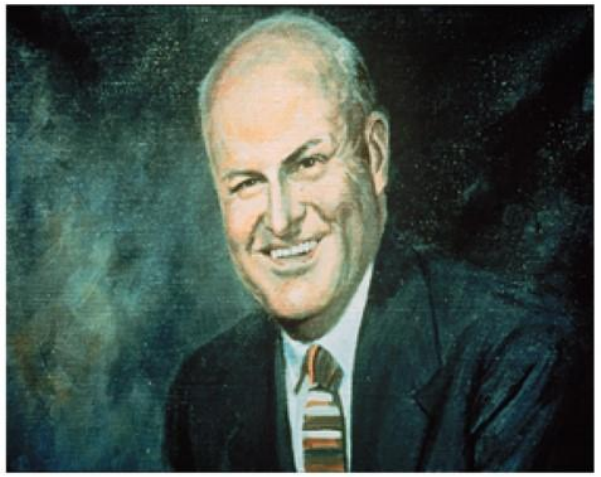
SAVE International

The Value Society

LAWRENCE D. MILES FOUNDATION

Nonprofit organization that strives to:

- Develop, apply, and promote the use of VM worldwide
- Mission – Educate, Innovate, and Advocate
- Website = http://valuefoundation.org/



Encourage research and development through scholarship /grants programs.

SAVE International®'s Certification Program is the industry standard for recognizing competence in the practice of the Value Methodology (VM).

SAVE offers two levels of certification:

The highest level is the **Certified Value Specialist (CVS)**, which is recognition of the individual who has met all certification requirements, both technical and experience, and whose principal career is value engineering.

The **Value Methodology Associate (VMA)** recognizes those individuals who decided to become professional value engineers, but who have not yet acquired all the experience or technical skills expected of a CVS.

The SAVE Certification Board also maintains a cooperative certification program with the following international organizations, whereby they meet all SAVE requirements as a minimum but also adapt the overall requirements for their own culture:

Indian Value Engineering Society (INVEST)

Society of Hungarian Value Analysts (SHVA)

Society of Japanese Value Engineering (SJVE)

Society of Korean Value Methodology (SKVM)

Value Engineering Society of China (VESC)

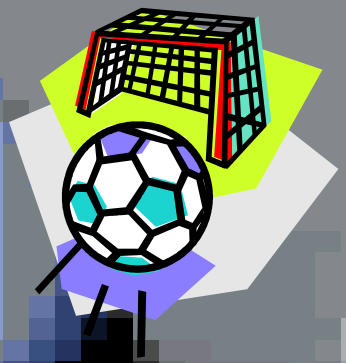
Value Management Institute of Taiwan (VMIT)

SECTION IV

Scope of Value Methodology (VM)

Improvement of Quality brings down cost

What is the goal of an organisation?



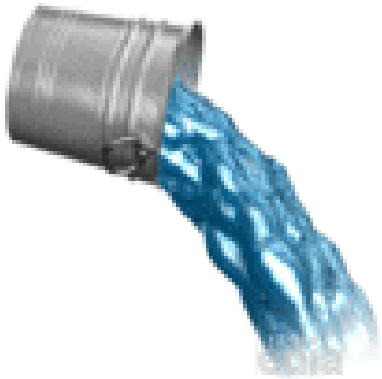
To make money by selling its products & services, morally.....

now as well as in future!!

How does an organisation

achieve this?

By doing some activities to deliver



Products & Services

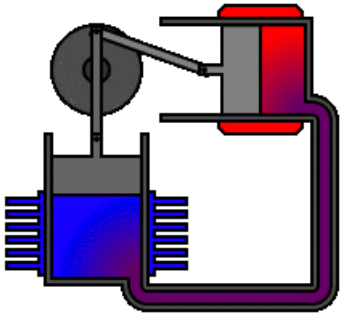
by using resources

What are the resources we use?

we use the following resources

People

Material



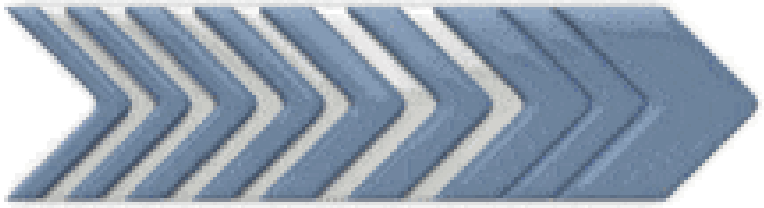
Process

Space

Time

Money

All the resources are worked through processes



to deliver output

Do we use the right amount of resources or right processes?

There is almost always excess use of resources & complicated processes

Which reduces the Value of the product

VM improves the consumption of resources

$$\text{Value}_{\text{(maximum)}} = \frac{\textbf{Performance}\ \text{(desired)}}{\textbf{Cost}\ \text{(lowest)}}$$

VM is for all out improvement in all areas of resource consumption

There are many ways of

Types of Improvements

- **Method improvement** - doing differently
- **Work study** - time & motion study
- **ISO 9000** - adopting a standard system
- **TQM** - all out quality improvement
- **TPM** - zero failure & defects
- **Daily Management** - health of equipment

Types of Improvements

- **Operations Research** - resource optimization
- **Six Sigma** - reduction of process variability
- **Benchmarking** - adoption of best practices
- **Reengineering** - radical change
- **Lean manufacturing** - reduction of wasteful activities
- **Value Methodology** - improvement of functions

This is where VM is different from others

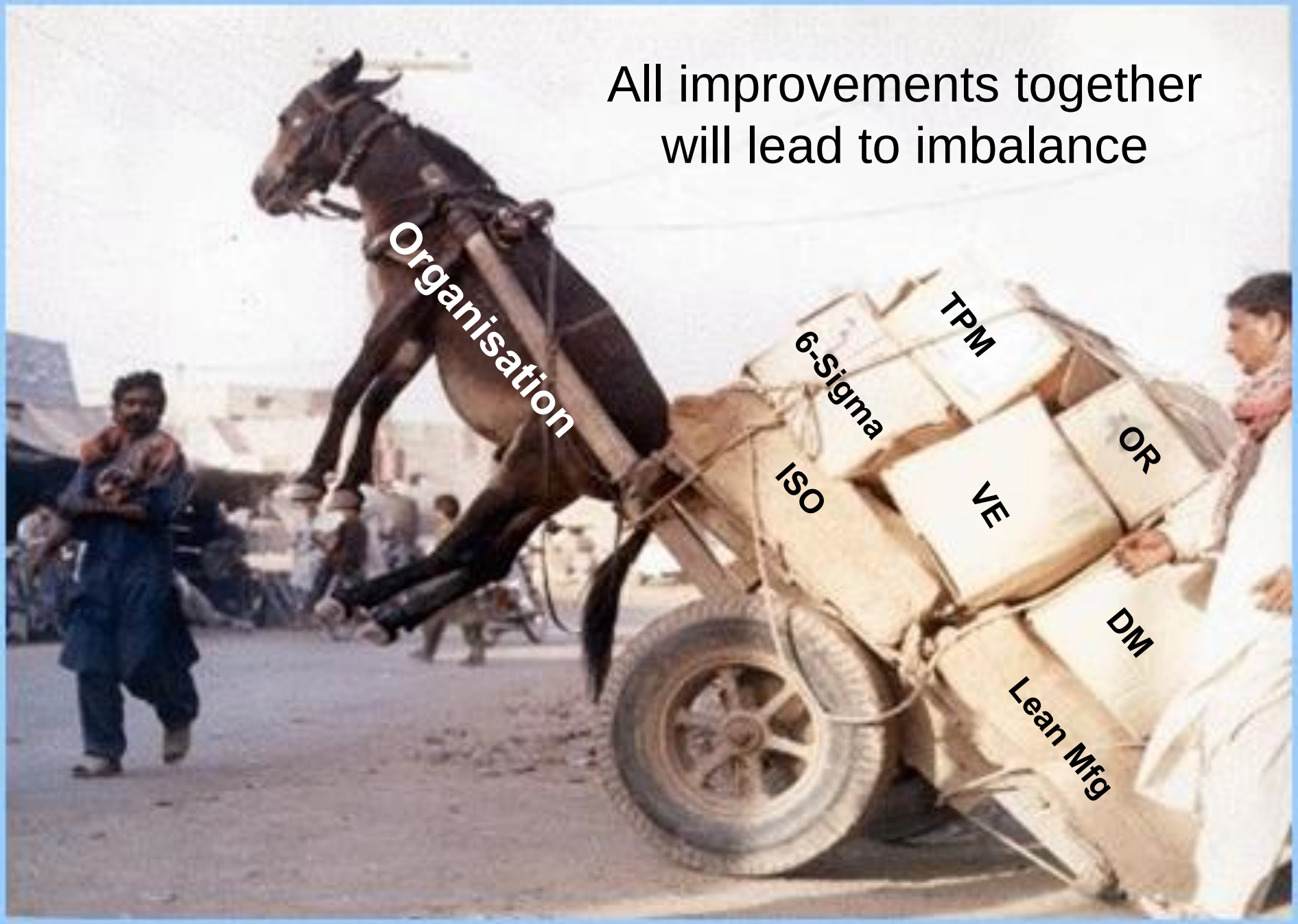
There is no competition amongst each other

All are complementary to other

Don't

USE ALL THE TOOLS

Stick to one or two


All improvements together will lead to imbalance
Organisation
TPM
6-Sigma
ISO
VE
OR
DM
Lean Mfg

Most of these improvement initiatives have vanished because of its limitations and inherent difficulties

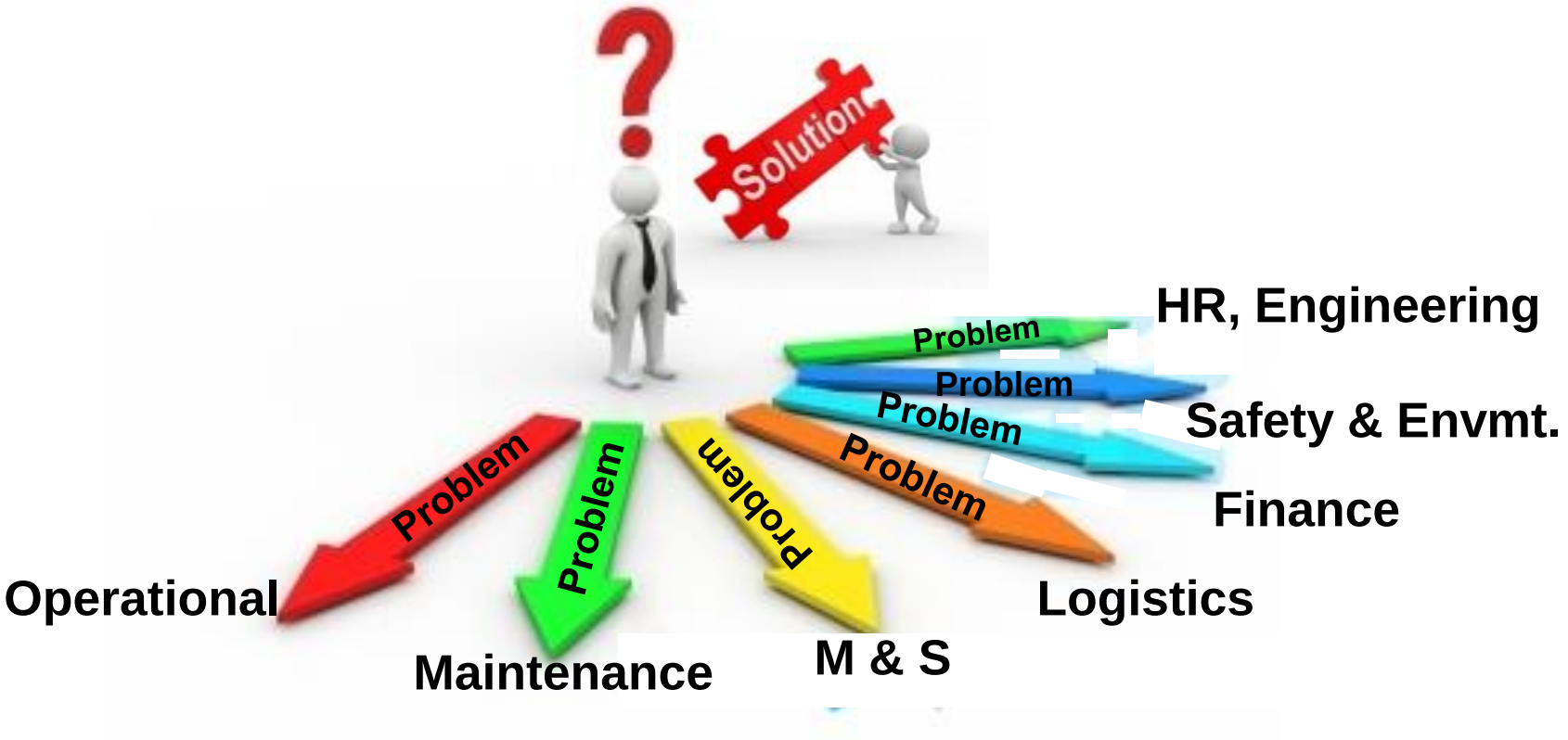
But Value Methodology is still practiced, after 70 years, because of its versatility and adaptability

VM – one method for all problems

Most of these cost initiatives have vanished because of its limitations and inherent difficulties

But VM is still practiced, after 70 years, because of its versatility and adaptability

VM is one solution for all problems



Where should you apply VAVE?

- Practically, all areas of a business operations
- Any aspect of safety, sustainability & environment
- Any place, where efficiency is to be replaced by effectiveness and output is replaced by outcome

ship.ppt

Efficiency & effectiveness.ppt

Which one you prefer ?

Quality

Doing things right

or

Doing right things

VM

Which one you want to identify?

Wrong thing in right place

or

Right thing in wrong place


Right thing in wrong place
Wrong thing in right place

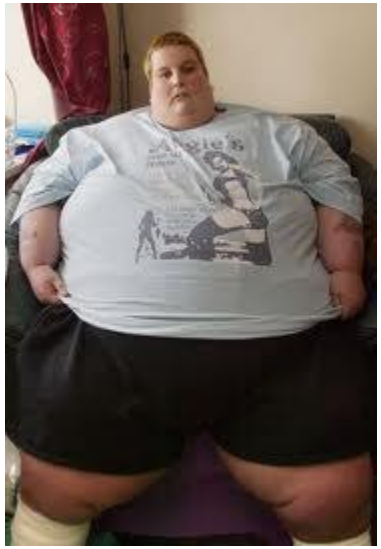
Life- 10 years

SKF bearings
Life-20 years

Wrong thing in right place

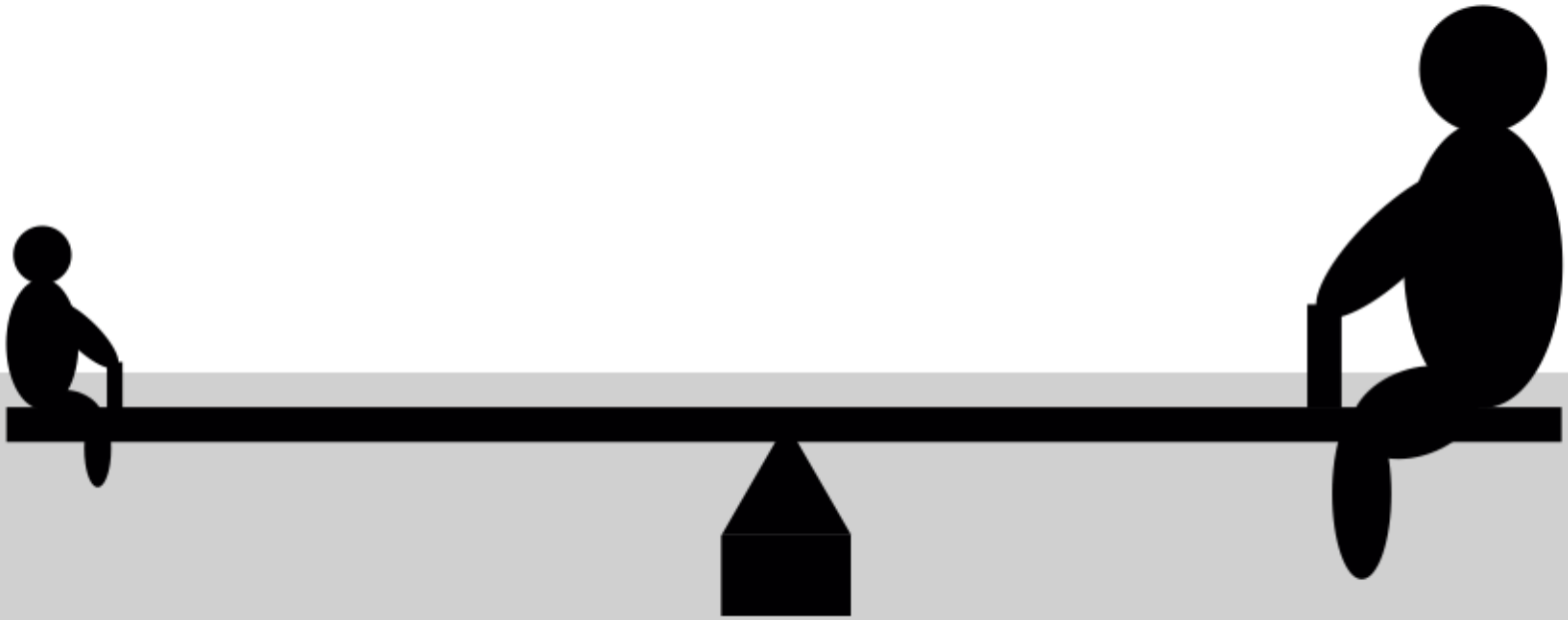
Value is lost for

Overdesign



Underdesign

Very difficult to find a balanced design



Either it is **Over designed** or **Under designed**

SECTION V

How is Value Methodology done?

Usual procedure for improvement

You have a problem

You are intelligent you use your brain

You improve it

Improvement through VM

You have a problem

Identify element(s) leading to problem

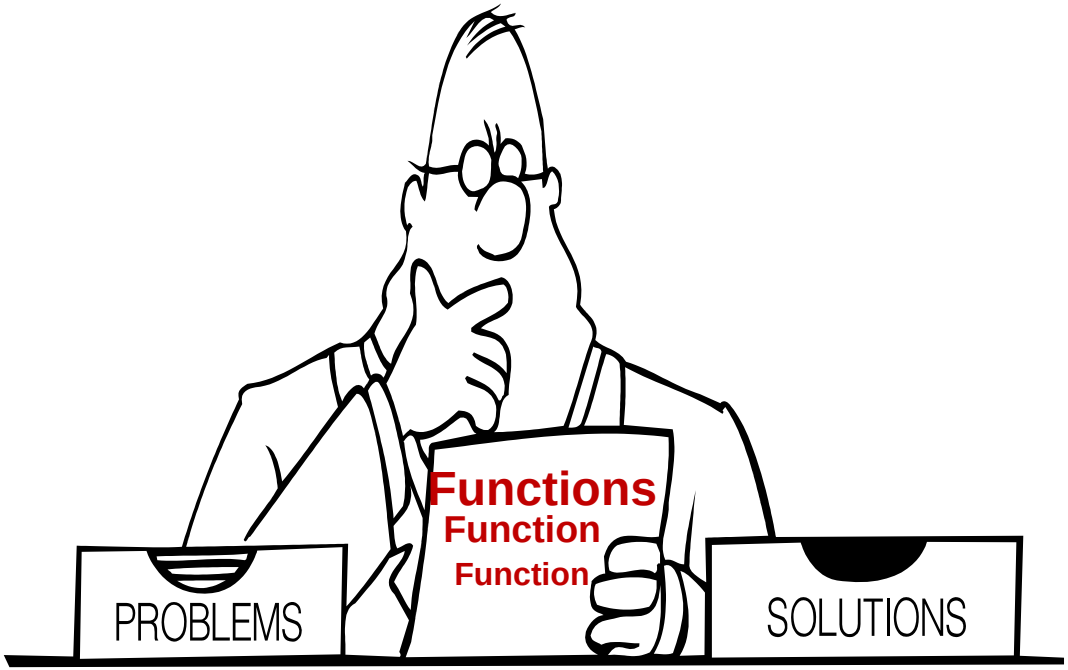
Ask, what are the Functions of the element(s)?

How can I improve/eliminate/replace/combine these **Functions?**

Fish new.pptx

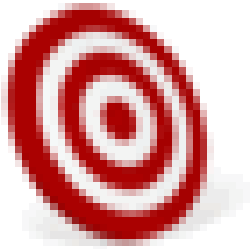
VM is different than all other cost improvement methods

It studies the **Functions** of the elements and not the elements itself



Value Methodology

is a step by step approach



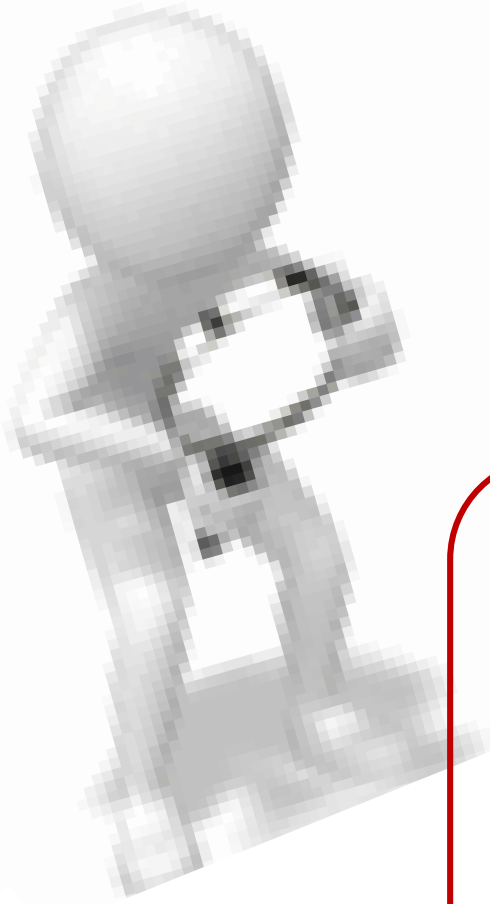
aimed at achieving desired Functions

Of product

At minimum cost

Giving maximum performance

Without sacrificing



1. QUALITY
2. RELIABILITY
3. SAFETY
4. ENVIRONMENT

How do we start?

VM is done in three stages

Three stages of Value Methodology

Pre workshop

In workshop

Post workshop

A

Pre workshop

- VM awareness

- Project selection

- Team selection

Value Methodology pre-workshop activities

VALUE METHODOLOGY BASICS

Value Methodology pre-workshop activities:

- Identify Goals and Objectives
  - Study subject
  - VE Workshop
- Determine scope
- Collect useful data
- Identify user / customer attitudes
- Prepare value or data models
- Determine team composition

VALUE METHODOLOGY BASICS

Value Leadership pre-workshop activities:

- Establish Study Parameters Needed to Address Client Objectives:
  - Scope of Study
  - Constraints
  - Duration
  - Appropriate SME's
  - Stakeholder Involvement
  - Logistics

VALUE METHODOLOGY BASICS

Value Methodology pre-workshop activities:

- Verify How Value Improvement will be Measured
  - Changes to Time
  - Changes to Initial Cost
  - Changes to Life Cycle Cost
  - Changes to Performance / Quality
  - Changes to ROI

Select a multidisciplinary team

4 to 6 members

Also select a member who is unaware of the project

The team determines the Project objectives and defines the project scope

P P P

VALUE METHODOLOGY TEAM MEMBERS

Identify Appropriate Team Members for Workshop:

- Identify Correct Team Size Needed
- Identify Subject Matter Experts Needed
- Know When to use More than One Facilitator
- Know When to Request Appropriate Stakeholder Participation

VALUE METHODOLOGY TEAM MEMBERS

Identify Agenda and Logistics for Workshop:

- Develop Agenda for Key Six Phase VM Job Plan
- Know how to Modify When Requested or During the Workshop if Durations Change
- Arrange Workshop Logistics
  - Venue Requirements (Location, Room Size, Security, Breakout for Sub-Teams, Lodging, Transportation, Food, etc.)
  - Identify Equipment Needed (Chords, Internet, Projector, Screens, Audio System, Flip Charts / Easels, etc.)
  - Arrange Pre-Meeting with Project Team and Sponsor

B

In workshop

VM works under a

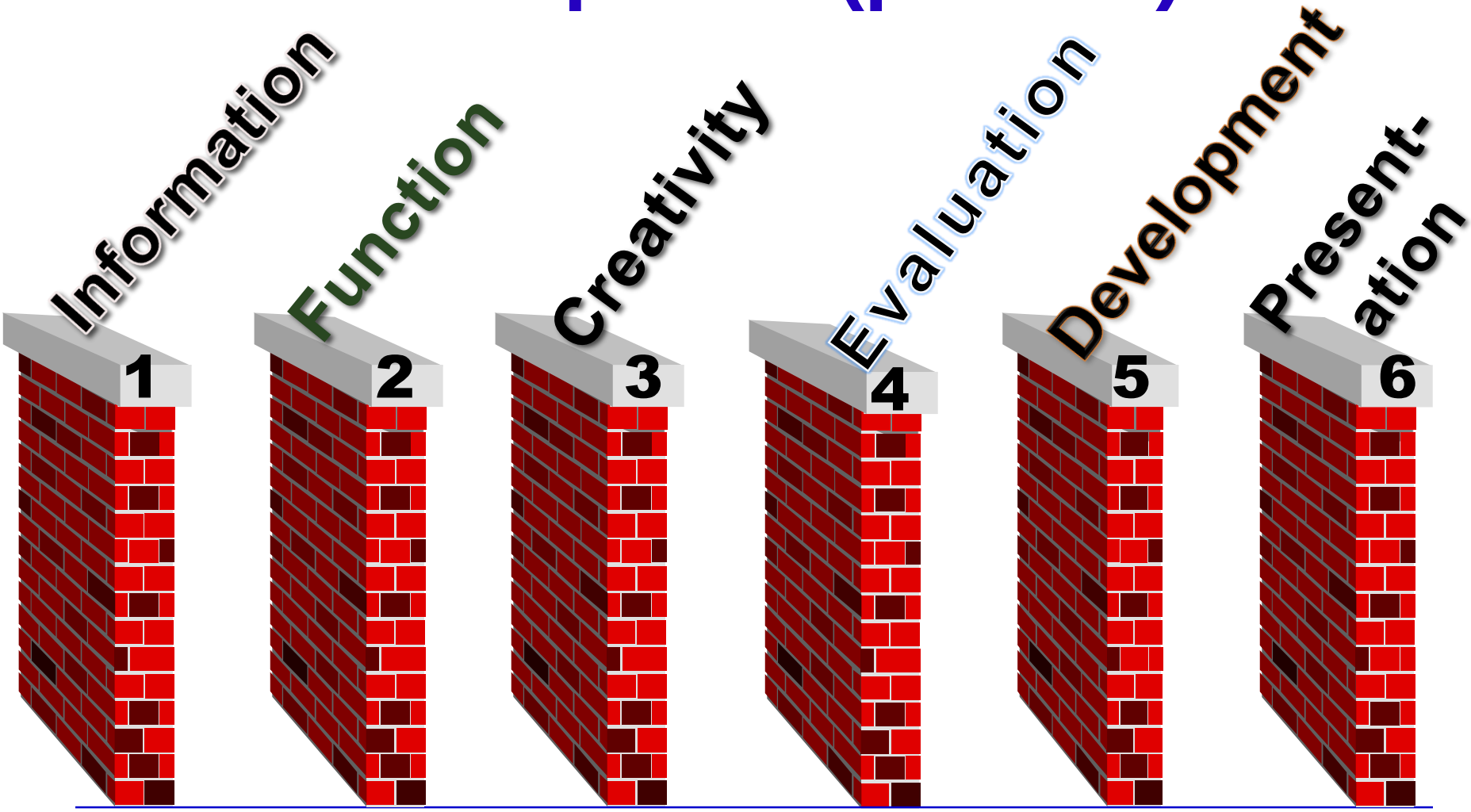
Job

Which has six Phases or pillars

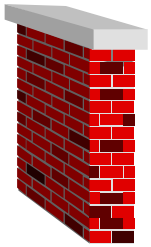
The 6-phase VM Job Plan

- Provides a systematic approach
- Divides the study into distinct work elements

Six pillars (phases)



You can not skip any phase



1st phase

Information phase

INFORMATION PHASE

Purpose:

- Obtain thorough understanding of the project, system, process or study item

Key Information from:

- Management:
  - Opens workshop
  - Welcomes team
  - Confirms goals of workshop
  - Stresses importance of workshop's outcome
  - Asks for presentation at end of workshop

INFORMATION PHASE

Key Information from:

- CVS Team Leader:
  - Value Models prepared during the pre-workshop activities
  - Tools needed to be used during the VE workshop
  - Confirms missing information with the VE team
  - Requests additional information with Study Subject / Design Team
  - Leverages different information gathering techniques to obtain the data needed

Acquire information for ‘Project study’

- Basis of Design
- Drawings
- Specifications
- Project budget
- Latest estimate
- System narratives
- Support documents (geotechnical, acoustics, design standards special needs, economic criteria)

Acquire information for ‘Product study’

- Customer requirement / statement of work
- Costed BoM, with material and process information
- Sample components
- Assembly and all component /product drawings
- Design Failure Mode Effect analysis for subject
- Competitive analysis and parts
- Packaging requirements
- Test and qualification requirements
- Others

Acquire information for the ‘Process study’

- Process operations or work instructions
- Process tool and labour routing
- Tooling and maintenance reports
- Process flow diagrams
- Design Failure Mode and affect analysis for subject
- Competitive and alternative process opportunities
- Value steam map
- Volumes- production, forecast, inventory, storage
- Distribution methods
- Others

INFORMATION PHASE

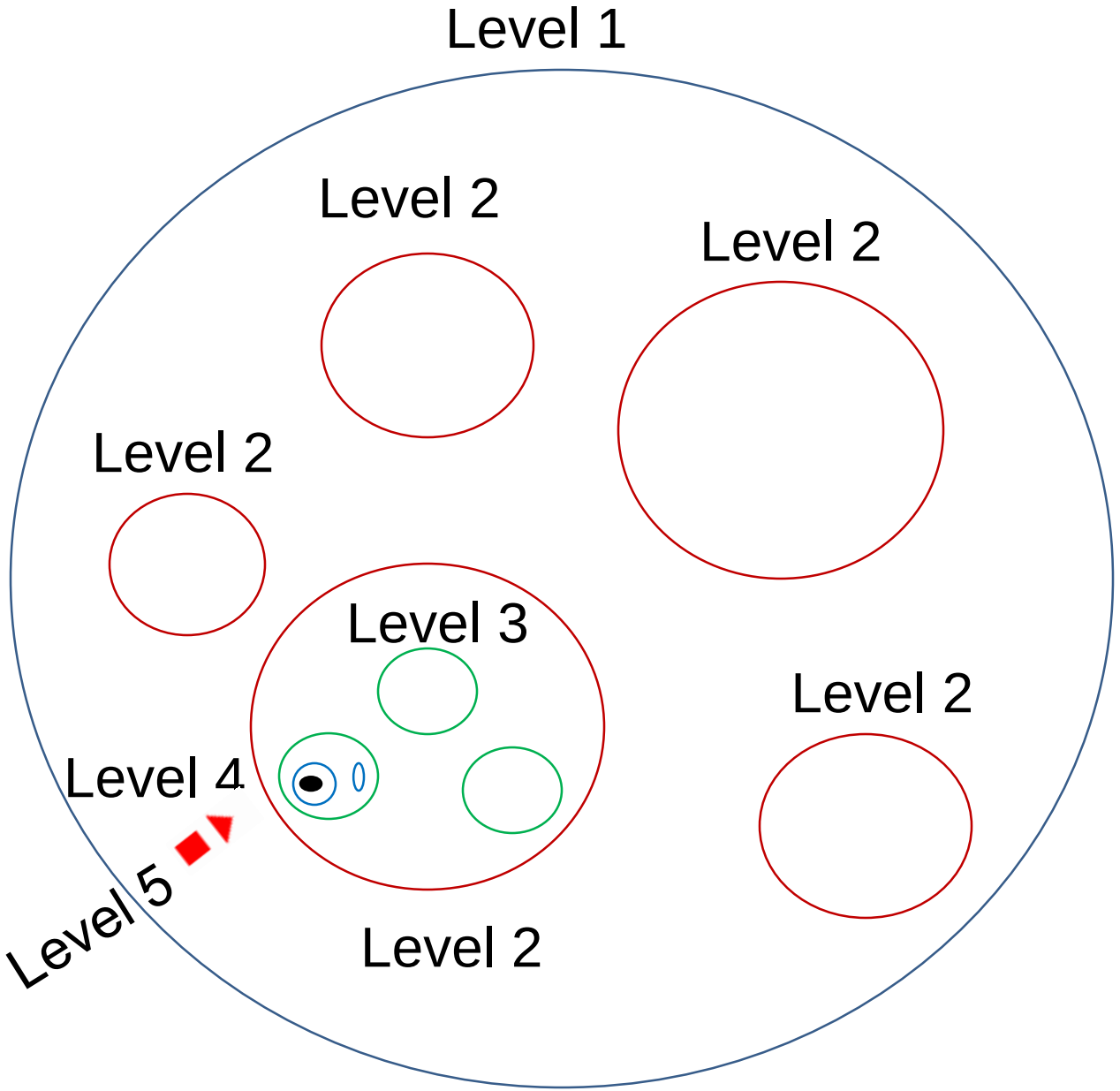
Key Techniques in Information Phase

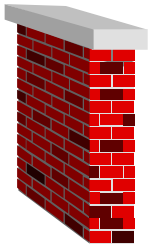
- Create Preworkshop Checklist to obtain data
- Meet with PM before workshop and obtain data
- Work with Key Stakeholders to obtain data

Information on the subject study

Find out the scope of study

Identify the Scope of study by breaking into levels





2nd phase

- Break the project into elements
- Find out the element causing trouble
- Find out Functions of this element

Ask, what does it do?

Technical answer please!

What is the Function of a hammer

Function of Hammer

Function is the result of an action

Action: Hammer is driven by hand

Function: What does it do?

Deliver Force

Reduce Effort

‘Function’ is an action that produces a measurable result

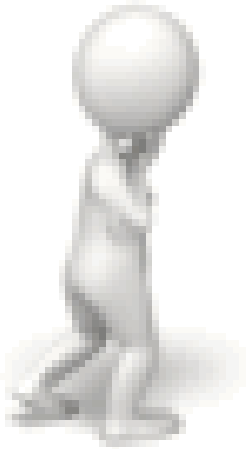
Customer wants result, which Function provides

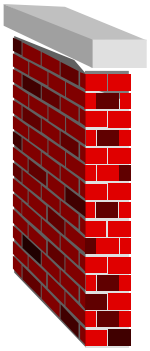
Supplier get paid for the Functions delivered
Customer pays for the results delivered

Ask

- **What is it ?**
- **What does it do ?** – Functions?
- **What does it cost ?**
- **Identify poor value Functions**

Space shuttle.ppt





3rd phase

CREATIVE PHASE

Find the alternatives of achieving the **''Functions''**

Not alternatives of the product

Think in un-conventional manner

Can you?

Let us try

Prove that $\frac{2}{10} = 2$

Japanese student: It is wrong question

American student: It is not possible

What will you say? Possible, if you are un-conventional

$$\frac{2}{10} = \frac{\cancel{\text{Two}}}{\cancel{\text{Ten}}} = \frac{\text{wo}}{\text{en}}$$

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

$$\frac{23 + 15}{5 + 14} = \frac{38}{19} = 2$$

CREATIVITY PHASE

Ask the following 8 questions to improve Functions

- **WHAT CAN WE ADD TO IMPROVE IT ?**
- **WHAT CAN WE SUBTRACT TO IMPROVE IT ?**
- **CAN WE RE-ARRANGE FUNCTIONS TO IMPROVE IT ?**
- **CAN WE COMBINE SOME FUNCTIONS ?**
- **WHAT IS THE OPPOSITE OF THE OBJECT ?**
- **DOES THE FUNCTION HAVE OTHER USES ?**
- **CAN WE REDUCE THE SIZE OF THE FUNTION?**
- **WHAT ARE THE OTHER WAYS TO DO THE FUNCION?**

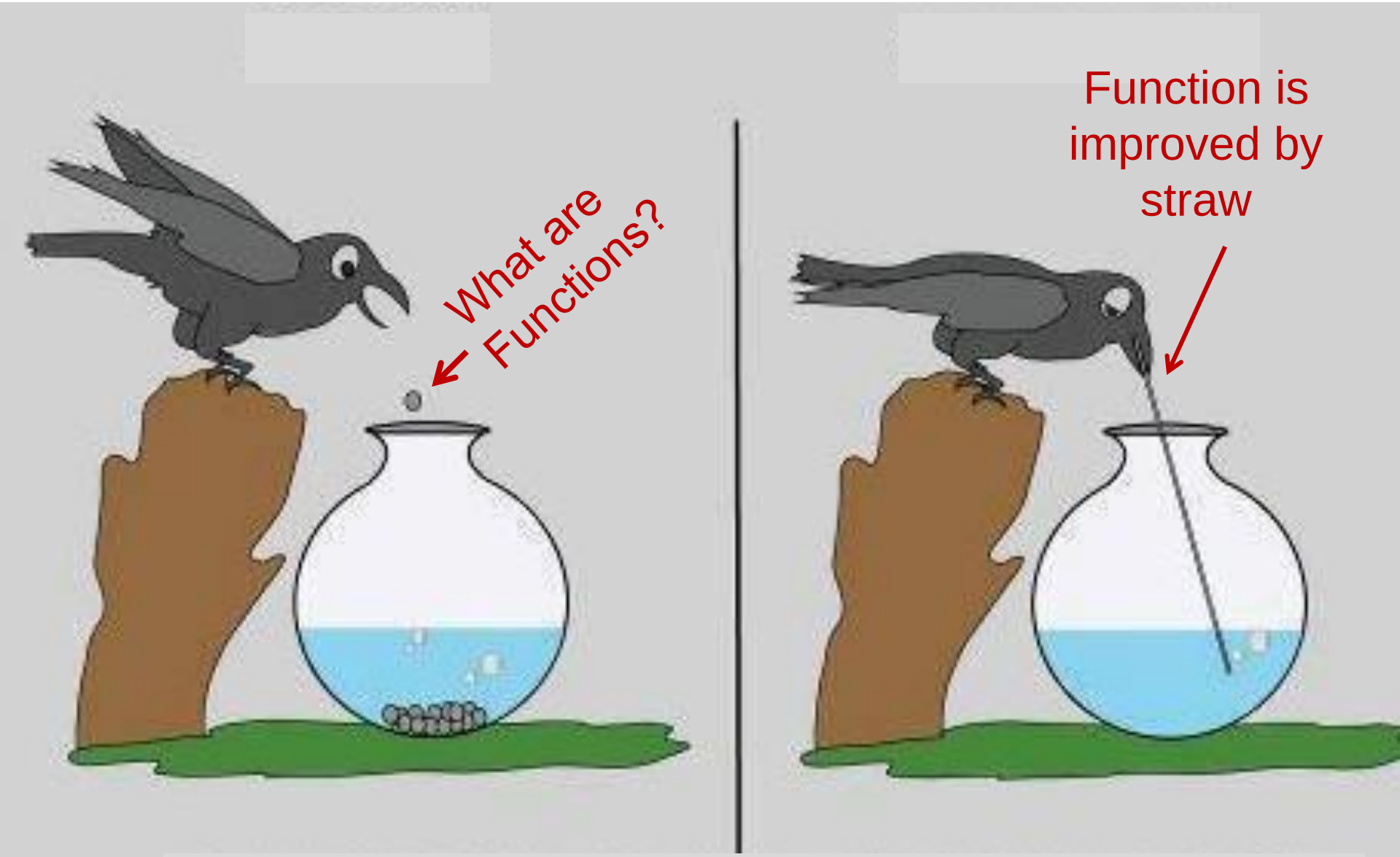
Which is preferred?

Improve what is

or

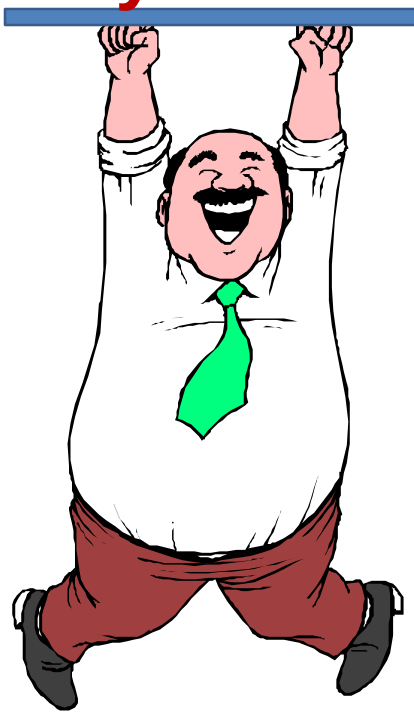
Create what is not

Improve what is



George Bernard Shaw

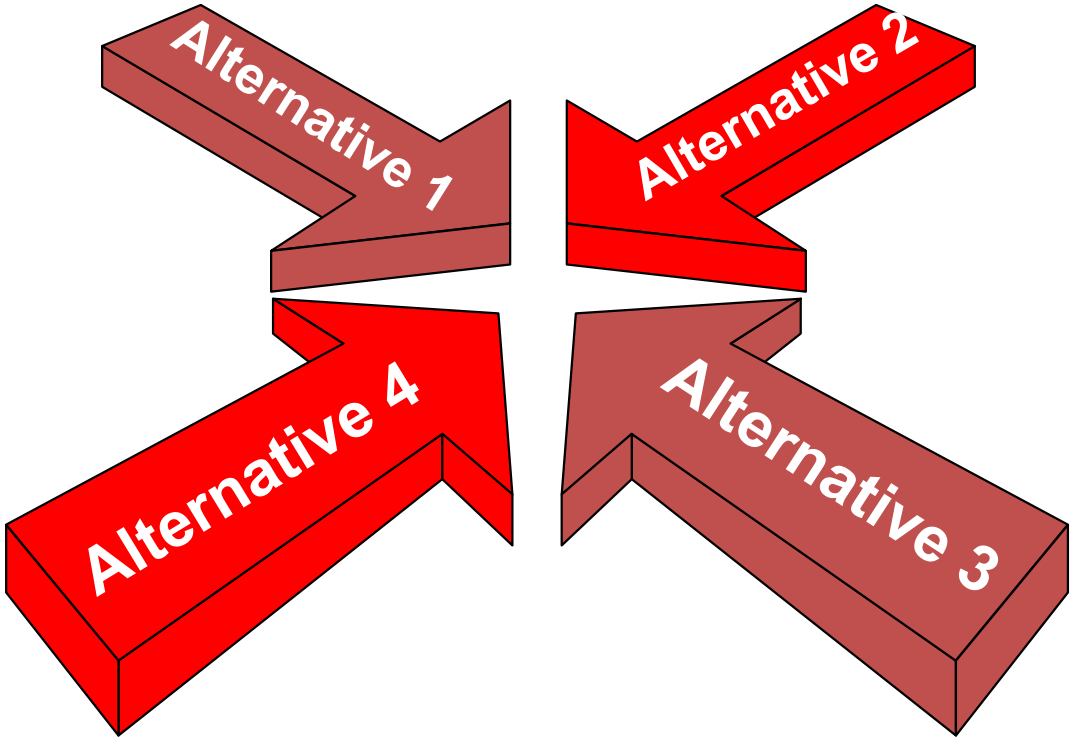
The people who get on this world are the people who get up and look for the circumstances they want, and, if they can't find them **they make it**



EVALUATION PHASE

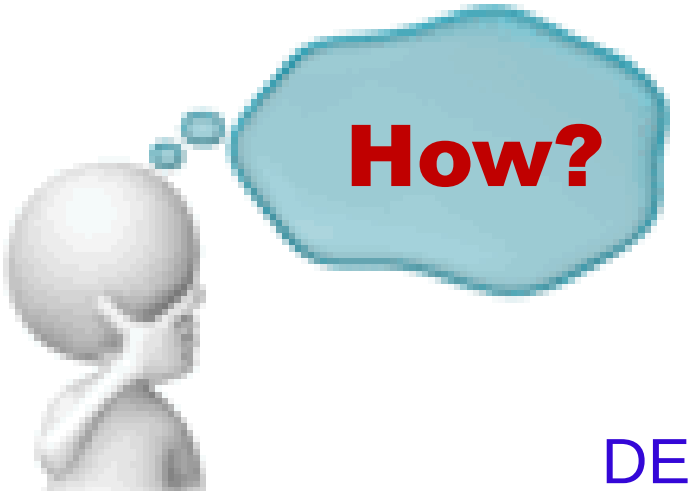
Select the best alternative out of many ideas

4th phase



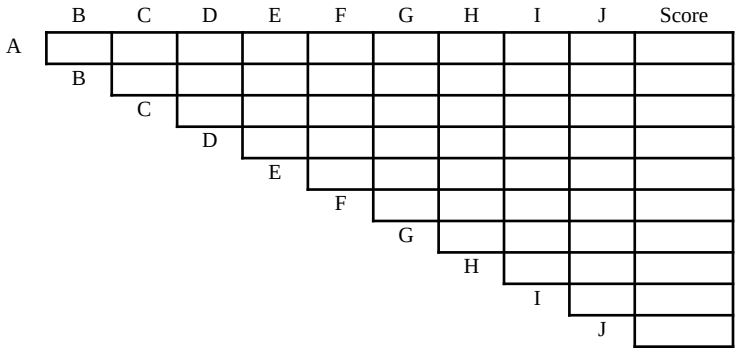
EVALUATION PHASE

Select the best alternative out of many ideas



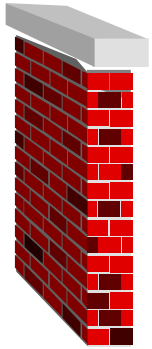
DECISION MATRIX

5 POINT SCALE EXCELLENT VERY GOOD GOOD FAIR POOR	5 4 3 2 1 CRIT ERIA											
PROPOSAL	WEIGHTAGE	A	B	C	D	E	F	G	H	I	J	TOTAL SCORE
1												
2												
3												
4												
5												



PAIRED COMPARISON MATRIX

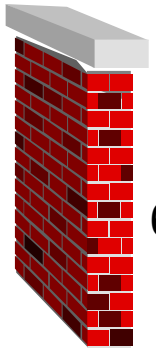
5th phase



Development phase

Development phase

- How can we make it acceptable to users ?
- What can we do to make it better ?
- What can be done to make it cost further less?
- What are the strength of the three best alternatives?
- What are the weaknesses of the 3 best alternatives?
- Calculate the Tangible and non-tangible benefits



6th phase

PRESENTATION PHASE

Make presentation to the Management for management or owner's approval

- Sell your VM change proposal (VMCP)
- Define required resources for implementation
- Show a plan for implementation

PRESENTATION PHASE

Tools for selling VAVE Change Proposals (VMCP)

- A matrix evaluation
- Independent proposal cost data
- Performance data from actual user

Post workshop

Implementation

Review

Audit

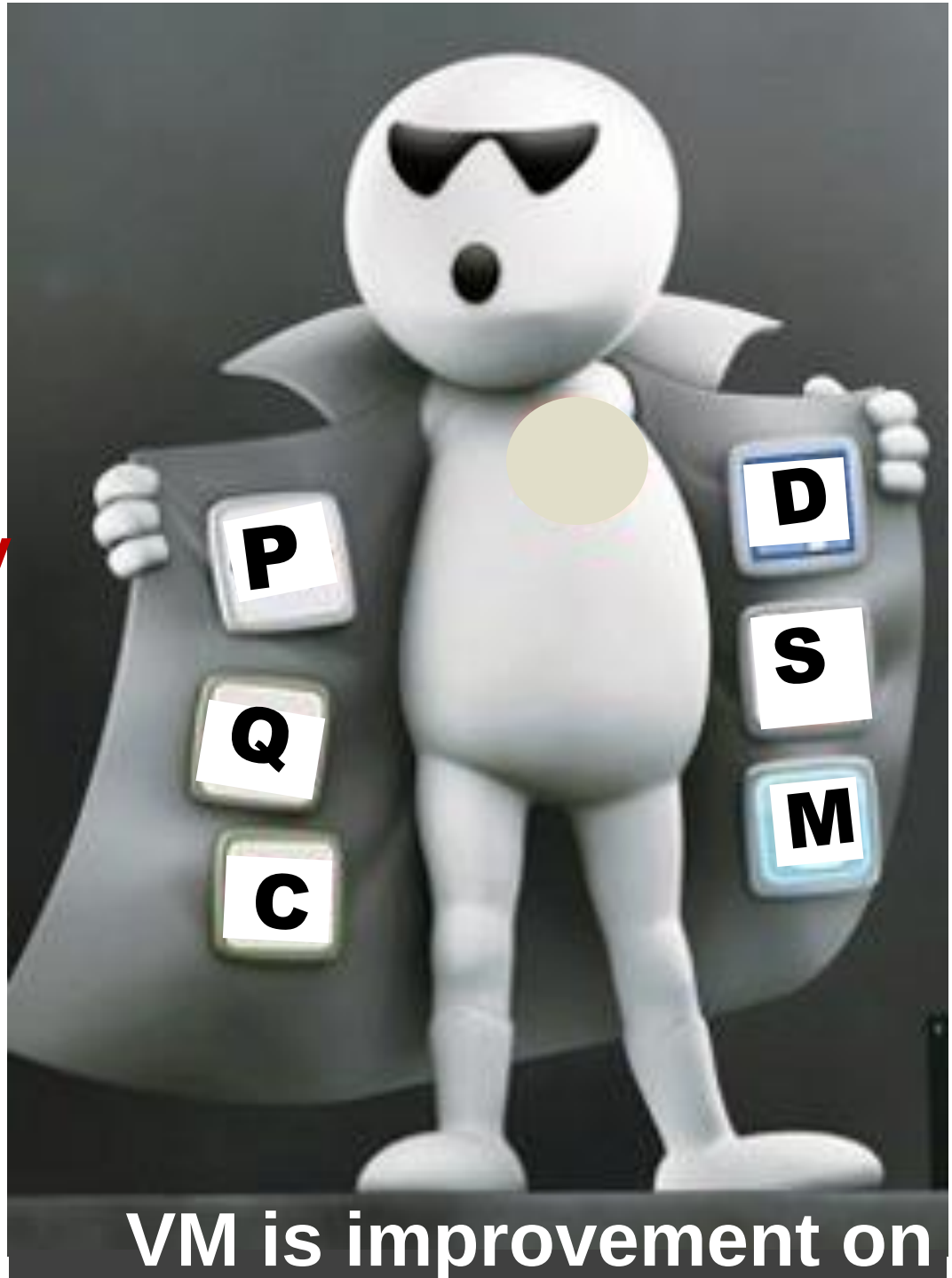
SECTION VI

Gains through Value Methodology

Productivity

Quality

Cost



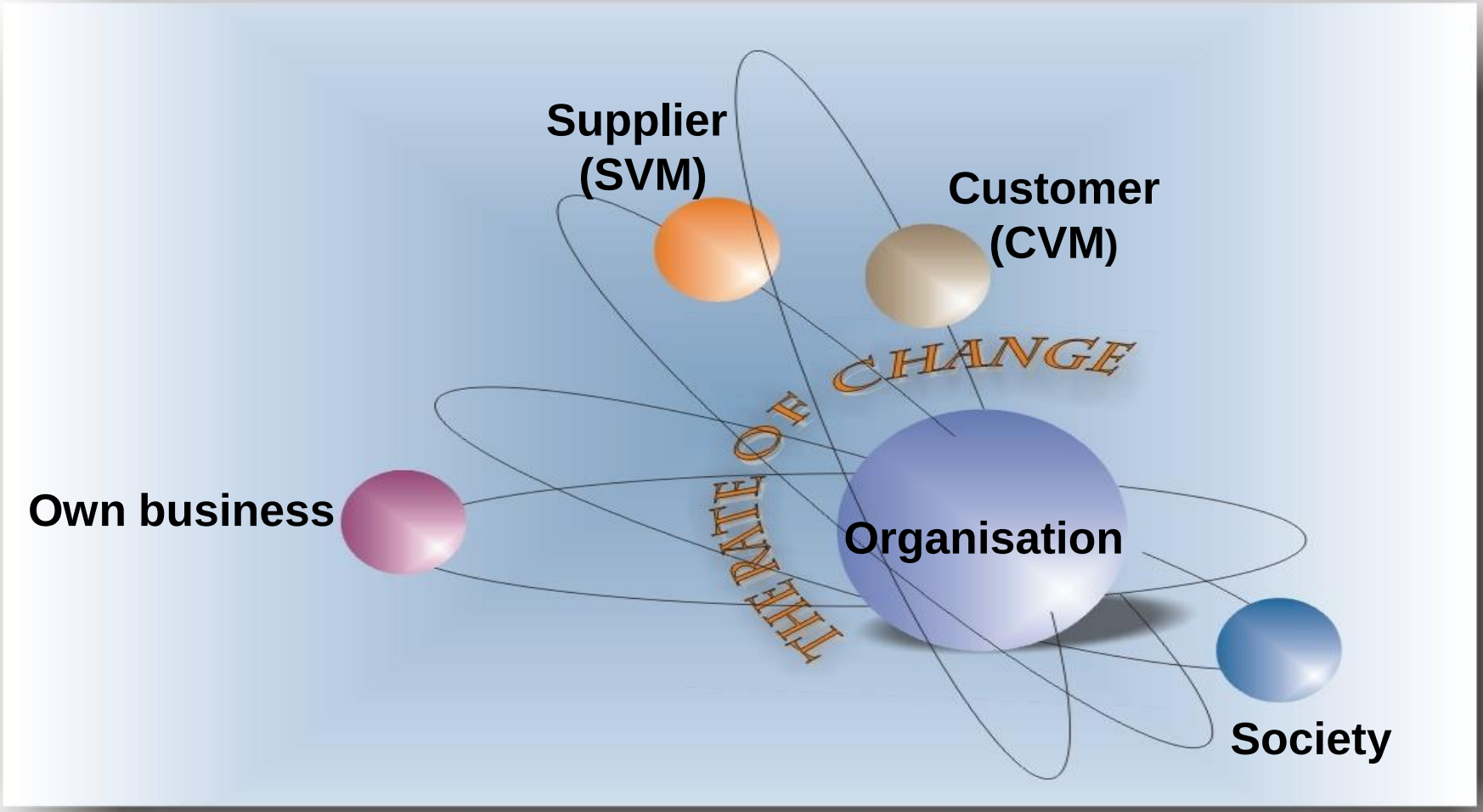
Delivery

Safety

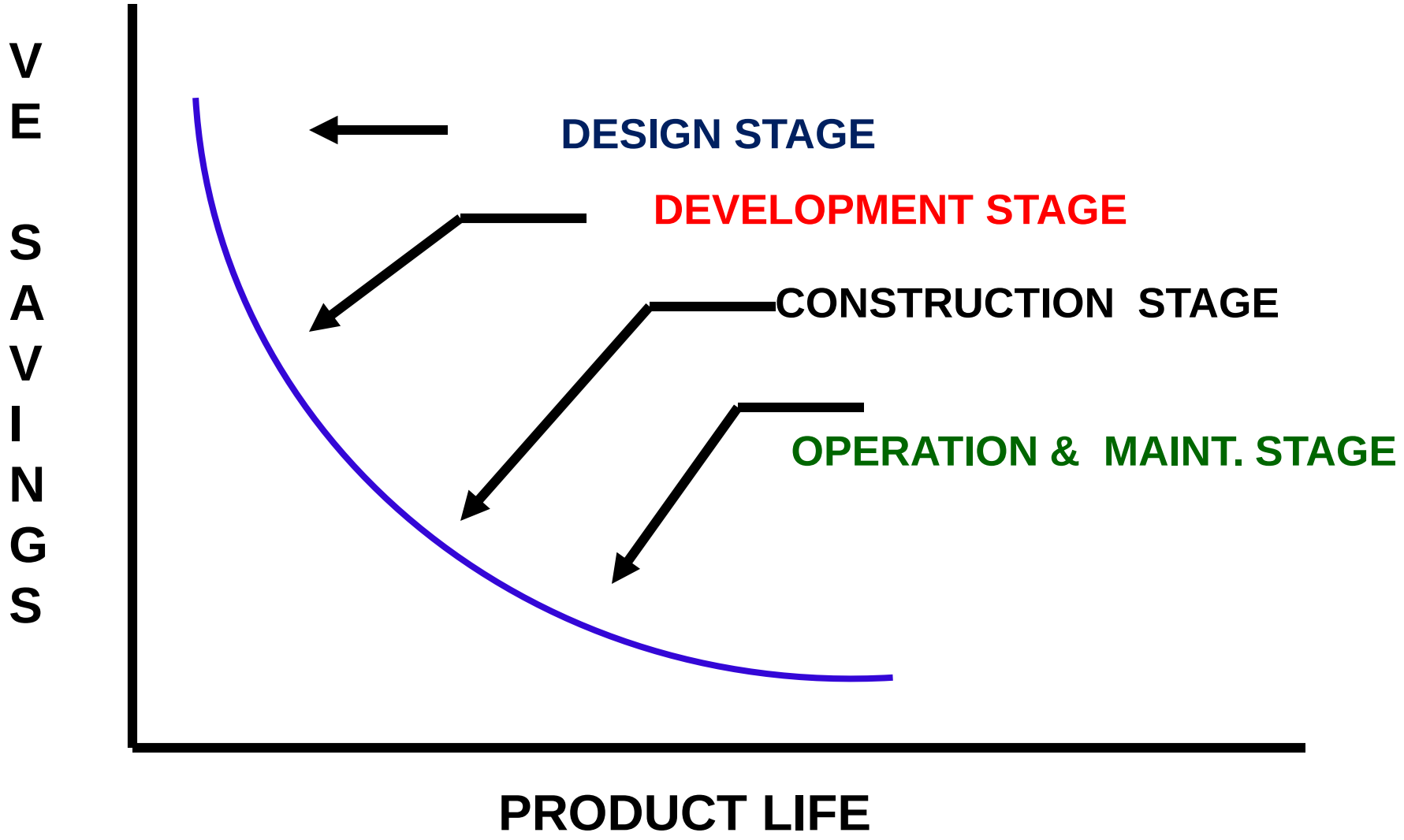
Morale

Production	• More availability/MTBF • More throughput
Quality	• Less defect/re-work • Less waste
Cost	• More yield • Less consumption
Delivery	• Reduction of time/MTTR
Safety	• Less incident/accident • Lower Carbon foot print • More sustainability
Morale	• Creating VM attitude

A holistic approach of change for improvement with all stakeholders

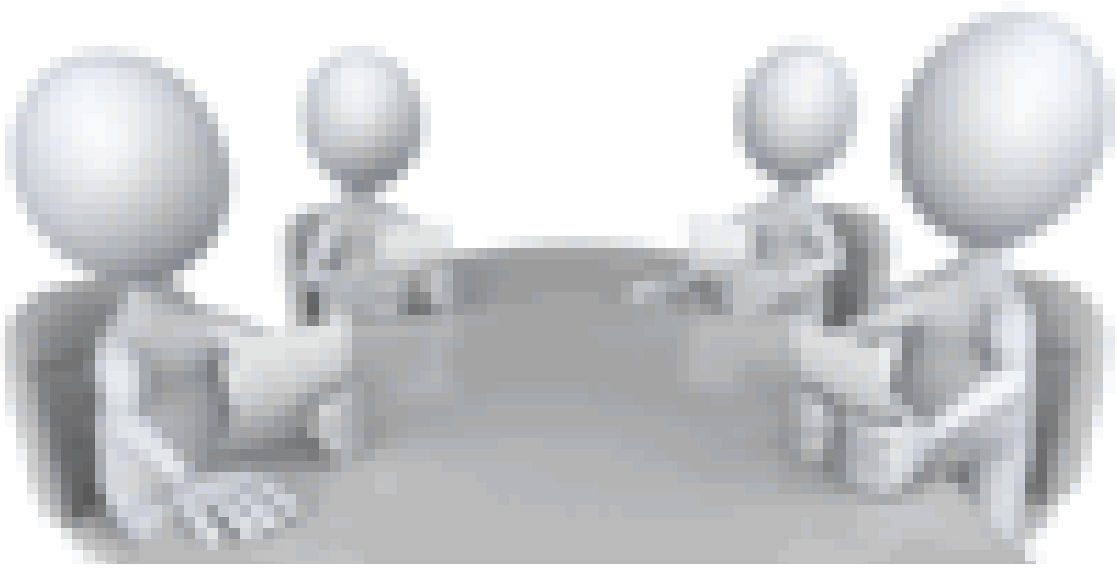


VM GAINS ARE MAXIMUM AT DESIGN STAGE



Management support

VM is a continuous effort



For success
Management control and support are essential

Management will identify **Pain** areas

and assign projects for VM

Management support

- VM program is top down approach.
- The top Executives assign the projects.
- They take important decisions.
- They help in project & team selection.
- They facilitate implementation, review and approval.
- They make VM Program budgeting.

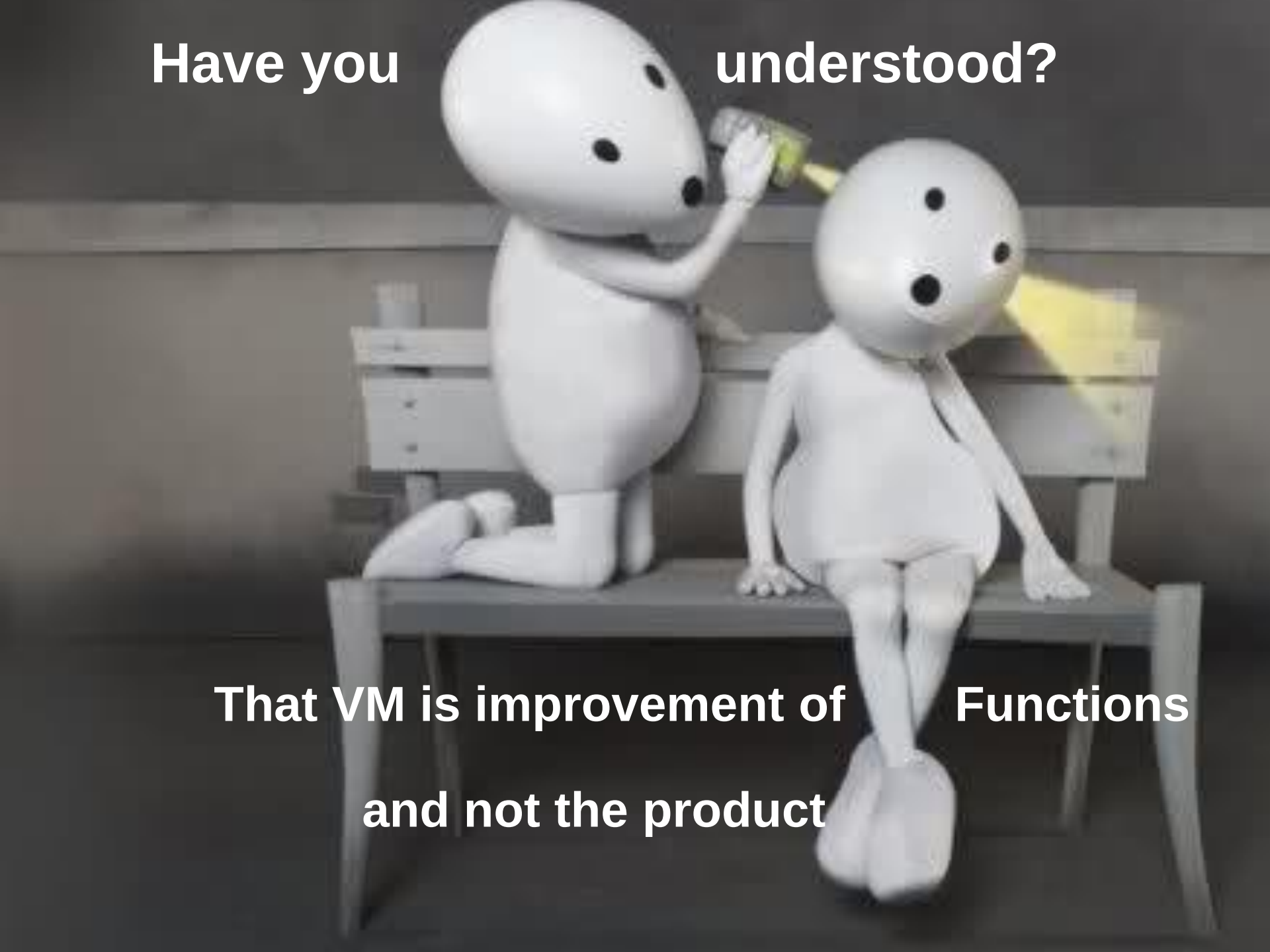
Therefore, a VM programme will not run without management’s active support

WHAT VM IS NOT

- A SACRIFICE OF QUALITY
- A CRASH COST REDUCTION METHOD
- A ONE TIME GIMMICK
- A MONOPOLY OF ONE GROUP
- A CRITICISM OF EXISTING DESIGN, PROCESS, METHOD OR SYSTEM
- ROUTINE ACTIVITIES

VM is not done when organisation is not doing well

It is done when the organisation is running well


Have you understood?
That VM is improvement of Functions
and not the product

Without management support VM will not move

In case you are still hungry


Google
UK
http://www.value-eng.org/
Google Search
I'm Feeling Lucky
http://www.invest-in.org/

alok@totalvesolutions.com

VM process can be summed up by asking

- What is it?
- What does it do?
- What does it cost?
- What must it do?
- How else can we do it?
- What will that way cost?
- What are my benefits?


Now
Later
WHAT'S YOUR
Question?

Thank you