

An Engineering Approach to Work and Enterprises

or

In the Footsteps of Monty Python

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**Some
Interesting
Results**

Oil company: filling orders

cycle time reduced by 75%, cost reduced 45%, customer satisfaction increased 100%

Trucking firm: sales

RFP cycle time reduced 95%, win rate increased 70%

Consumer packaged goods: product deployment

lead time reduced 50%, inventory reduced 25%, backorders decreased 50%

Auto insurer: claims handling

cycle time reduced 90%

Computer firm: product development

time to market reduced 75%, development costs reduced 40%, customer satisfaction increased 25%

Electric utility: new connections

cycle time reduced 90%, personnel required reduced 70%

The Underlying Theme: Process

Concept: end-to-end work

as opposed to piecemeal work

Definition: an organized group of related tasks that work together to create a result of value

transformation of inputs into outputs
structured purposeful work

Some common processes

order fulfillment
procurement
product development

order acquisition
demand creation
plan to produce

Themes

cross-functional
outcome-focused
context for activities
work, not structure
tasks, not people
small in number

The reality

processes are present but unrecognized in every enterprise
reversing a 200 year legacy

The Old Way



CSR



Line tester



Dispatcher



Field service technician

Customer Service as a Process

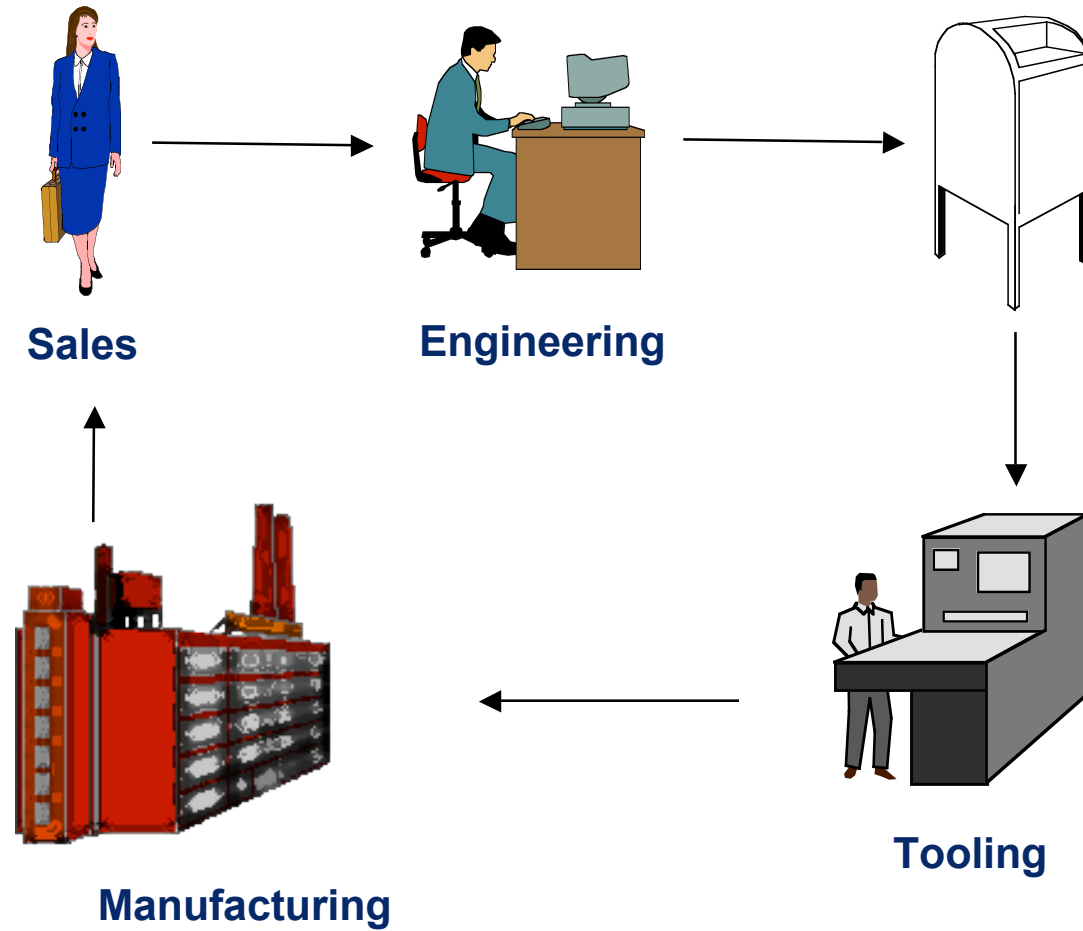


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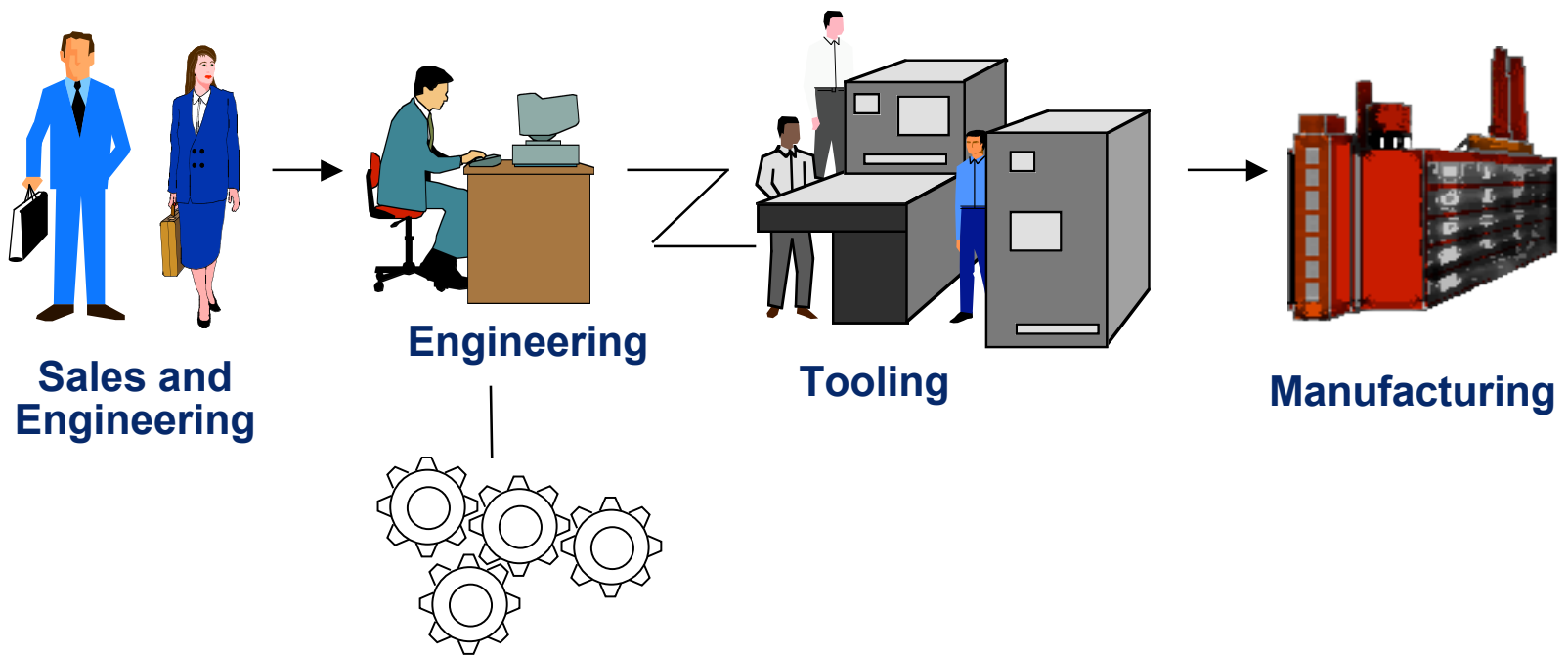


Zone technician

The Old Way



Sample Development as a Process



The Process Approach to Performance Improvement

Identify the enterprise's processes

a business model in process terms, driven by strategic goals

Measure process performance

and set design goals

Create high-performance process designs

specifying precisely how tasks fit together
replacing inherited default designs

Implement new process designs

after suitable testing
including supporting training, infrastructure, and technology

Improve process performance

on an ongoing basis

Improved performance through improved design

The Power of Process Design

The key determinant of process performance is process design

specification of who does what, when, where, whether, and how much

Process design provides an envelope for process performance

the end of heroics as strategy

you can't (consistently) do better than the design allows

Any process design is better than no design

moving beyond tribal knowledge

A good design is better than a bad design

leveraged way to improve

Any process design needs to be improved

to keep up with change

Redesigning a process means reorganizing how the pieces fit together into a whole

the Tinker Toy approach to eliminating need for NVA

**What's the
Matter with Your
Old Process
Designs?**

They were poorly designed in the first place

They have become burdened with accretions

The world has changed

Requirements have evolved

Assumptions have become false

Technology has advanced

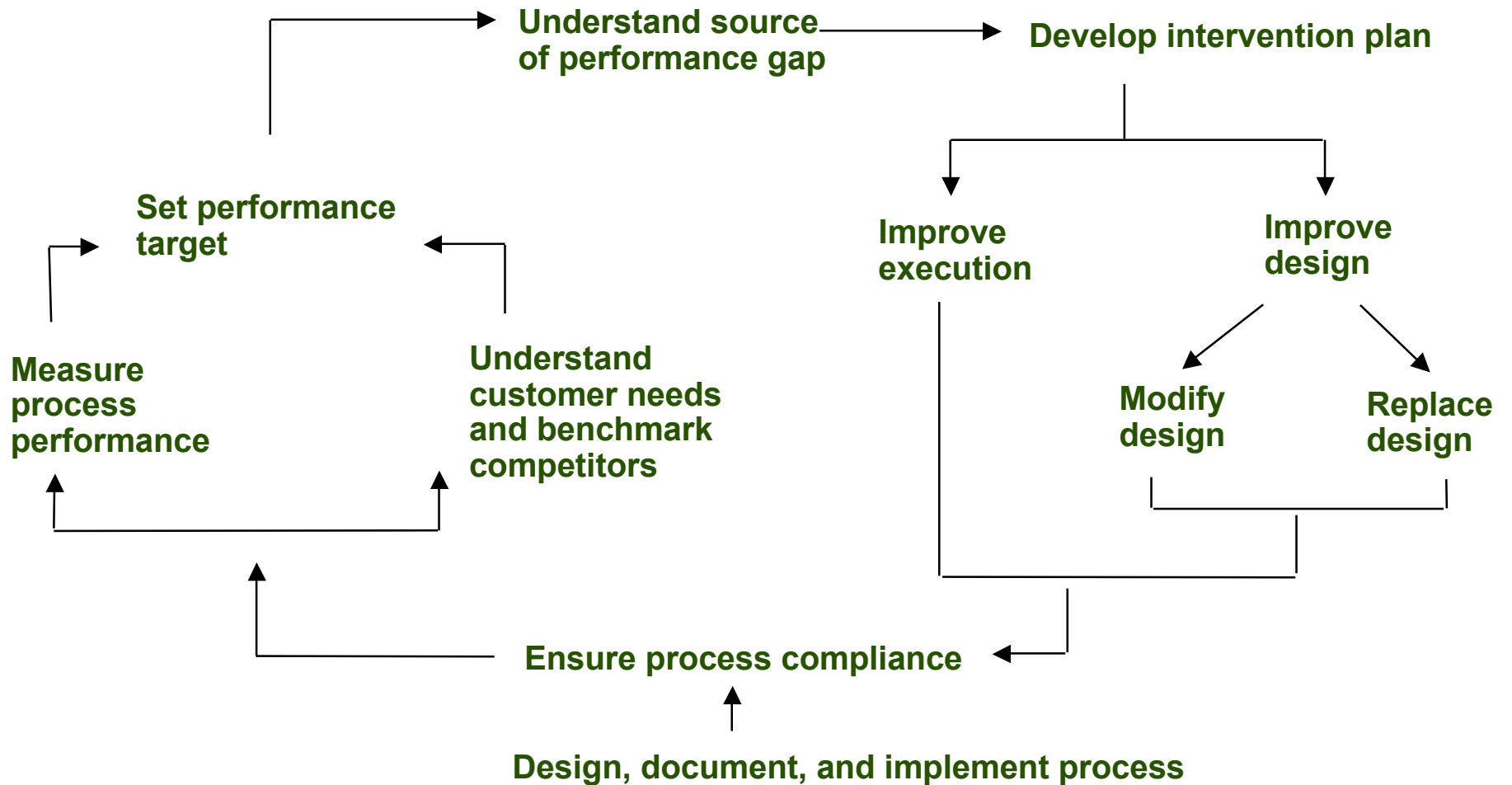
They are obsolete

They don't fit together

Nobody knows them

What old process designs?

The Process Lifecycle



**The Key
Dimensions of
Process Design
“The 7 W’s”**

Who

When (relative or absolute)

**Redesign rearranges
the value-adding tasks**

Where (physically or organizationally)

Whether

What precision

What interconnections

What information

Principles of High Performance Process Design

Work should be done by whoever is in the best position to do it

irrespective of history or organizational boundaries

A process should be performed by as few people as possible

to minimize handoffs

Do work at the best time for it to be done

don't be constrained by history

Don't wait for one task to finish before beginning the next one

avoid artificial linearity

Location is a variable, not a given

to be explicitly factored in

Strive for simplicity

non-value-adding work breeds complexity

Consider the context when performing work

the virtues of uniformity have been greatly oversold

Control must be subjected to cost-benefit analysis, just like everything else

neither perfect nor free

**By Way of
Contrast:
Traditional
Design Templates**

Sequentiality and linearity (assembly line)

Specialization

Segregation of duties

Transaction-level control

Hierarchical decision-making

Striving for complete precision

Uniformity

Process Illities

Repeatability

formal design

Improvability

context and process

Adaptability

a handle for change

Accountability

ownership

Manageability

measures and comprehensibility

Flexibility

separation of work and resources

Representations of an Enterprise

Organization chart

who we are

P and L statement

how much we make

Balance sheet

what we own

Product catalog

what we sell

Customer list

whom we serve

Mission statement

what we aspire to

Cisco Process Model



Resource management

- Financial mgmt
- Fixed assets mgmt
- Hire to develop/develop to retire
- Vendor/Partner mgmt
- Other

Business management

- Strategy and planning / Acquisitions
- Brand / Identity mgmt
- Knowledge mgmt/Intellectual Capital
- Customer feedback
- Metrics Review
- Other

Aligning with Processes

Metrics

processed-based performance measures

Information systems

integrated systems to support process work

Facilities

work spaces to reinforce team work and process flow

Human resource systems

job descriptions, career models, and compensation systems designed for process performers

Management systems

budgeting, planning, and financial systems focused on processes

Culture

attitudes and values of teamwork, customer concern, and personal responsibility

Integration

mechanisms for ensuring that processes work together as well as individually

The Tradeoff

System simplicity vs. component complexity