

Continuous Improvement (CIP)

Module 3 – Process

Quality Planning

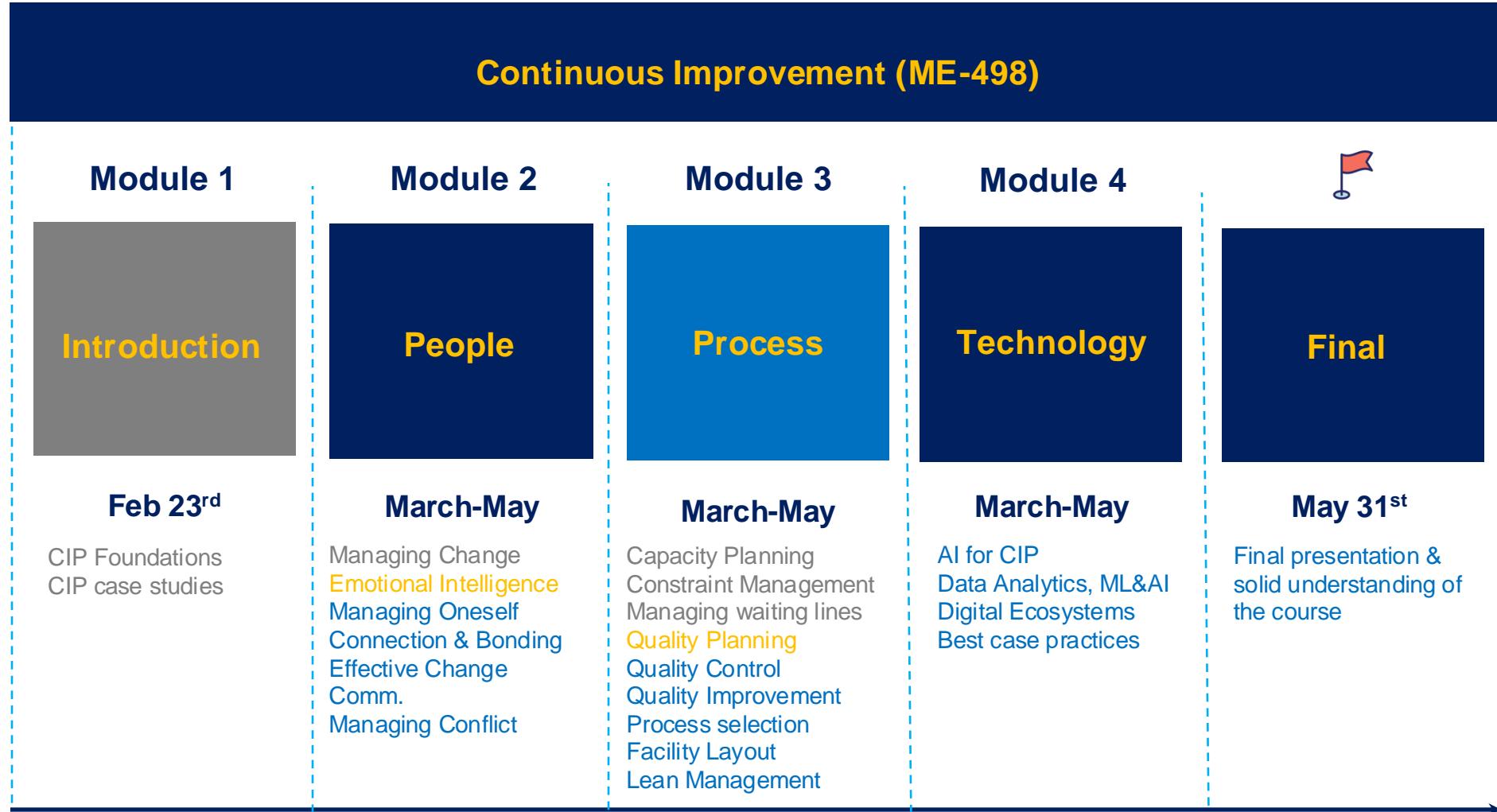
Amin Kaboli

Week 5, Session 1, Mar 21st, 2025

Course Framework



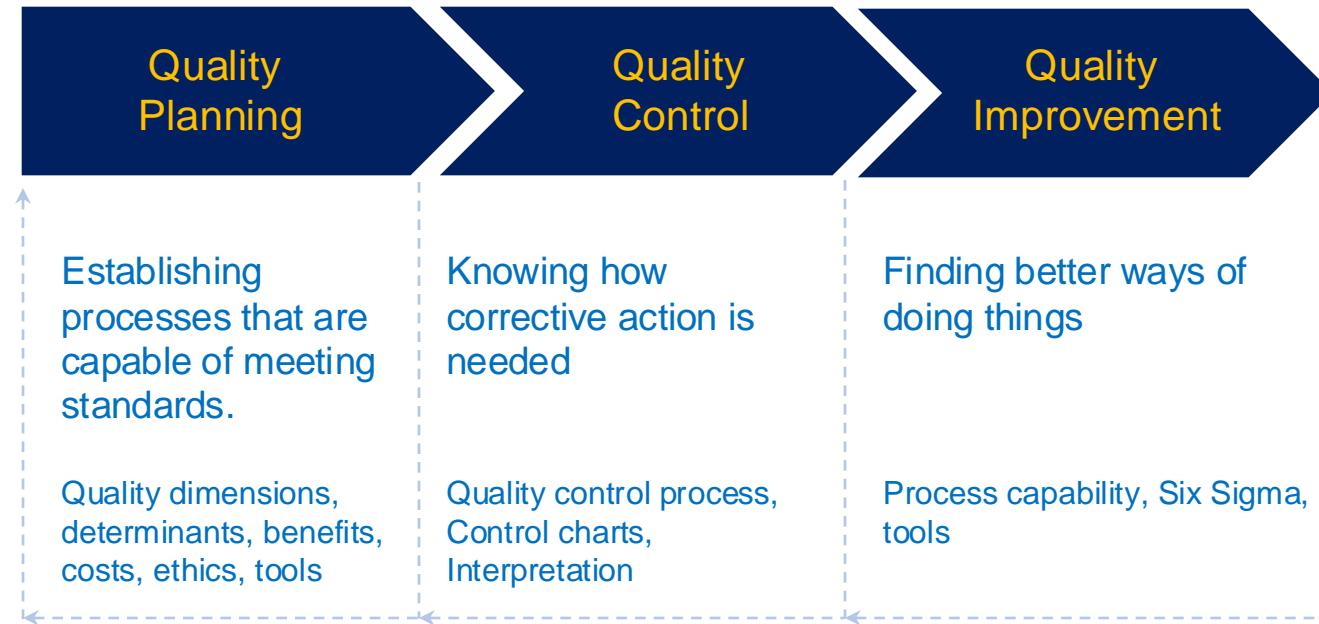
Change Plan
Strategic plan



Agenda of the day

- **13:15 – 14:00** **Module 3 – Process:** Quality Planning
- **14:15 – 15:00** **Module 2 – People:** Emotional Intelligence
- **15:15 – 16:00** Time to work on your project and Assignment 5
- **16:15 – 17:00** **Presentation of Assignment 3**

Quality Management – Trilogy



Quality Management – Trilogy



Quality Planning – Questions



Q1. What is Quality?, why is it important?



Q2. What are the quality dimensions?



Q3. What are the costs of quality?



Q4. How to effectively solve quality issues?



Q5. What are the quality tools?

Question 1:

**What is Quality?
Why is it Important?**

Quality – Definition & Necessity



Definition: The ability of a product/service performance to consistently meet or exceed customer expectations.

Why? Price and quality are two key elements of every purchasing decision.

Quality – Performance vs Customer Expectations



Performance does NOT
meet customer expectations



Performance meets
customer expectations

Performance exceeds
customer expectations

We Need Your Feedback



Agreement #7 – Giving and Receive Effective Feedback



Feedback is a gift



Feedback/comments are
always welcome

Please log in to IS Academia and share
your constructive feedback with us



Question 2:

What are the Quality Dimensions*?

* Dimensions: Customer Expectations

Quality Dimensions – Product/Service



Source:

1. David Garvin, "Competing on the Eight Dimensions of Quality," Harvard Business Review 65, no. 6 (1987).

Sources:

1. Valerie A. Zeithaml, A. Parasuraman, and Leonard L. Berry, Delivering Quality Service and Balancing Customer Expectations (New York: The Free Press, 1990).
2. J. R. Evans and W. M. Lindsey, The Management and Control of Quality, 3rd ed. (St. Paul, MN: West Publishing, 1996).

Quality Dimensions – Product

Dimension	Examples
1. Performance	Main characteristics of the product.
2. Aesthetics	Appearance, feel, smell, taste.
3. Features	Extra characteristics (High tech: GPS system, Safety: anti-skid, airbags)
4. Conformance	How well a product corresponds to design specifications
5. Reliability	Infrequent need for repairs
6. Durability	Ability to perform over time (resistance to rust)
7. Perceived quality	Reputation
8. Serviceability	Ease of repair
9. Consistency	Quality does not vary from product to product

Source: David Garvin, "Competing on the Eight Dimensions of Quality," Harvard Business Review 65, no. 6 (1987).

Quality Dimensions – Service

Dimension	Examples
1. Convenience	The ability and accessibility of the service.
2. Reliability	The ability to perform consistently and accurately.
3. Responsiveness	Customer support in unusual situations
4. Time	The speed of service delivery
5. Assurance	The knowledge of service providers, ability to build and maintain trust
6. Courtesy	The way customers are treated
7. Tangibles	The appearance of the service
8. Consistency	Quality does not vary from service to service
9. Perceived quality	Reputation

Sources:

Valerie A. Zeithaml, A. Parasuraman, and Leonard L. Berry, *Delivering Quality Service and Balancing Customer Expectations* (New York: The Free Press, 1990).
J. R. Evans and W. M. Lindsey, *The Management and Control of Quality*, 3rd ed. (St. Paul, MN: West Publishing, 1996).

Question 3:

What are the Costs of Quality?

Costs of Quality



Appraisal

Related to measuring, evaluating, and auditing materials, parts, products, and services to assess conformance with quality standards

Inspection equipment, testing, labs, inspectors, interruption of production



Prevention

Related to reducing the potential of quality problems

Quality improvement programs, training, monitoring, data collection and analysis, and design costs



Internal failure

Related to defective products or services before they are delivered to customers

Rework costs, problem solving, material and product losses, scrap and downtime

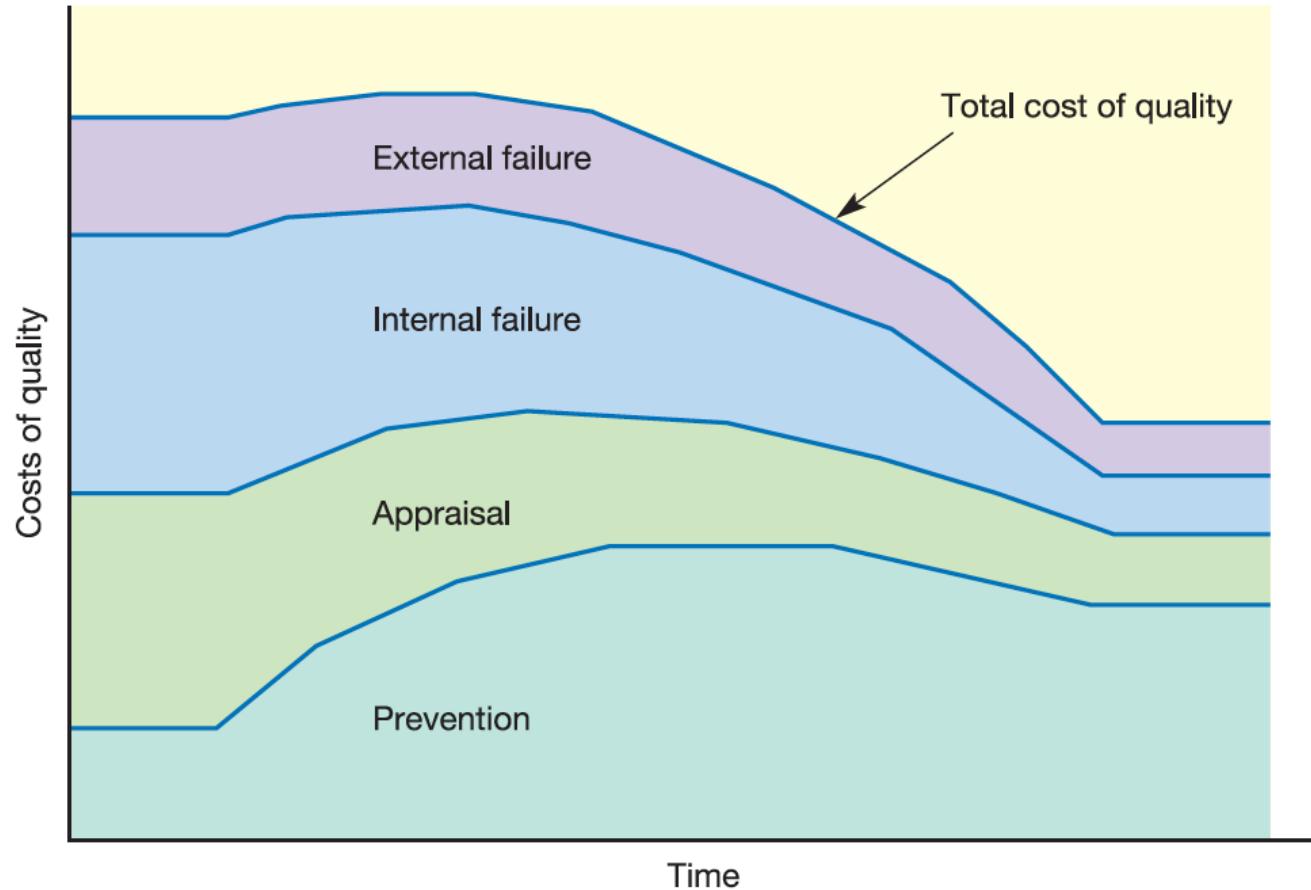


External failure

Related to delivering substandard products or services to customers

Returned goods, reworking costs, warranty costs, loss of goodwill, liability claims, penalties

Costs of Quality – Over Time



Source: Nigel Slack, Alistair Brandon-Jones, Robert Johnston, Operations Management, Pearson, 7th edition, 2013.

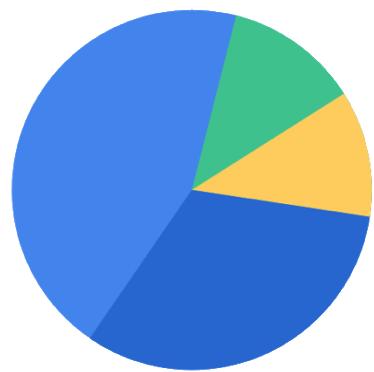
Benefits of Good Quality



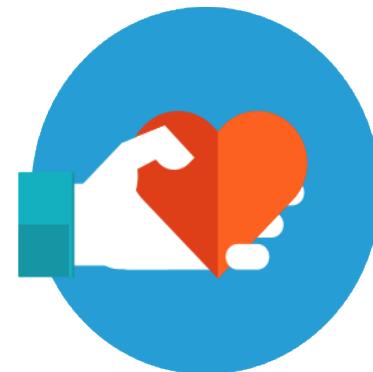
Reputation



Premium price



Increased market share



Greater customer loyalty

Consequences of Poor Quality



Loss of business



Liability



Lower productivity

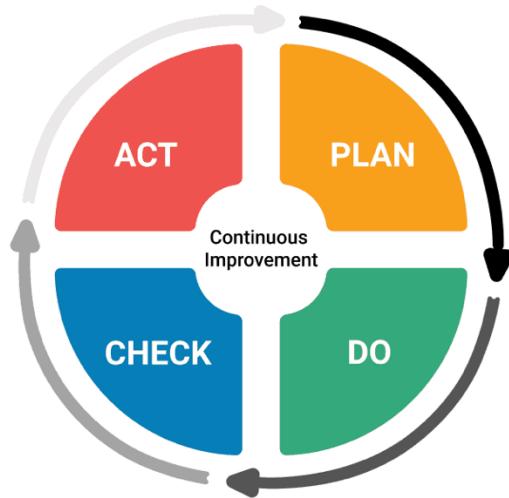


Higher costs

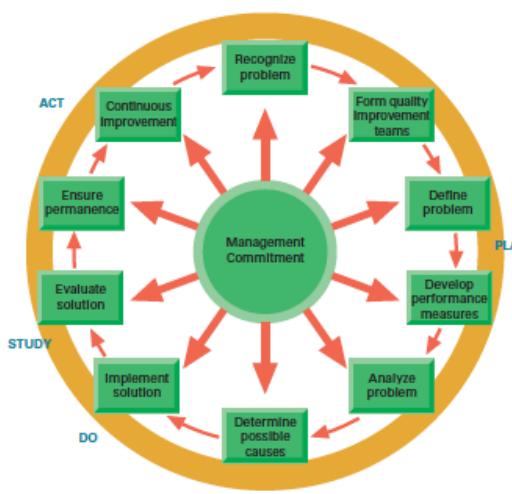
Question 4:

How to Effectively Solve Quality Issues?

Quality Problem Solving – Systematic Process Improvement



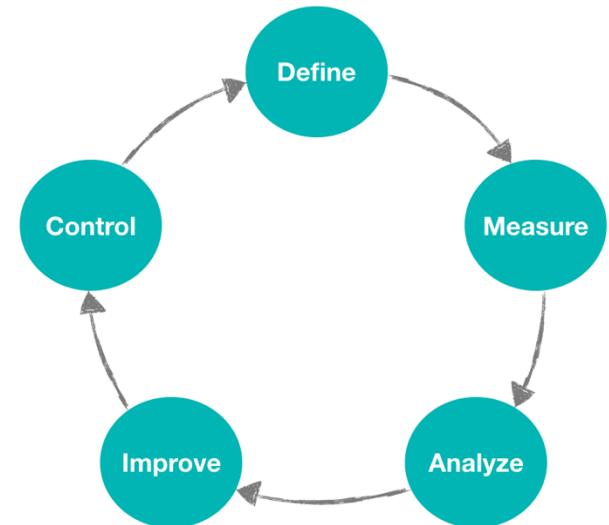
PDCA cycle



Basic steps of problem solving



Process improvement



DMAIC

Sources:

1. The Second Figure from Donna Summers, Quality, 2nd ed., p. 67. Copyright © 2000 Prentice Hall, Inc. Reprinted by permission of Pearson Education, Inc., Upper Saddle River, NJ.
2. William J. Stevenson, Operations Management, Page 388-392, McGraw-Hill Education, 12th edition, 2015.

Systematic Idea Generation



Brainstorming



Quality circles



Benchmarking



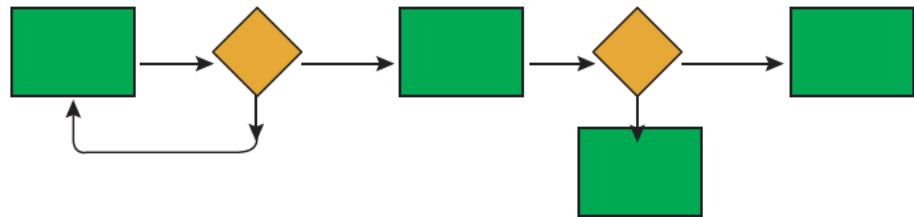
Design Thinking

Question 5:

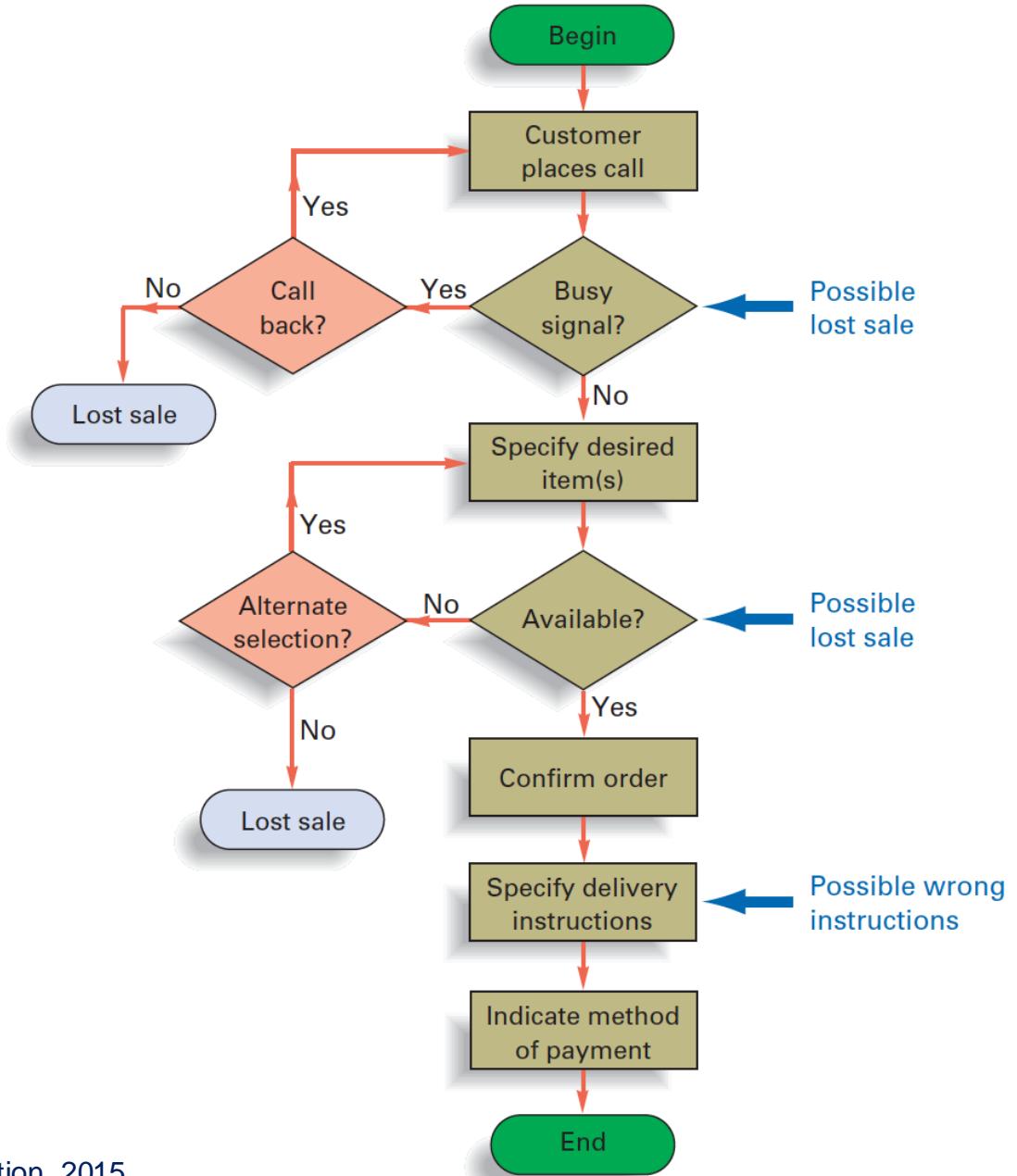
What are the Quality Tools?

Quality Tool (1) – Flowchart

- **Definition:** A diagram of the steps in a process.



Example: Phone call and product delivery



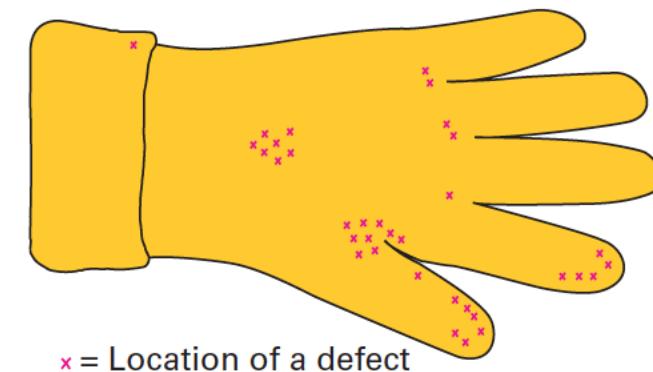
Source: William J. Stevenson, Operations Management, McGraw-Hill Education, 12th edition, 2015.

Quality Tool (2) – Check sheet

- **Definition:** A tool for recording and organizing data to identify a problem.

Day	Time	Type of Defect					Total
		Missing label	Off-center	Smeared print	Loose or folded	Other	
M	8-9						6
	9-10						3
	10-11						5
	11-12					(Torn)	3
	1-2						1
	2-3						6
	3-4						8
Total		5	14	10	2	1	32

An example of check sheet

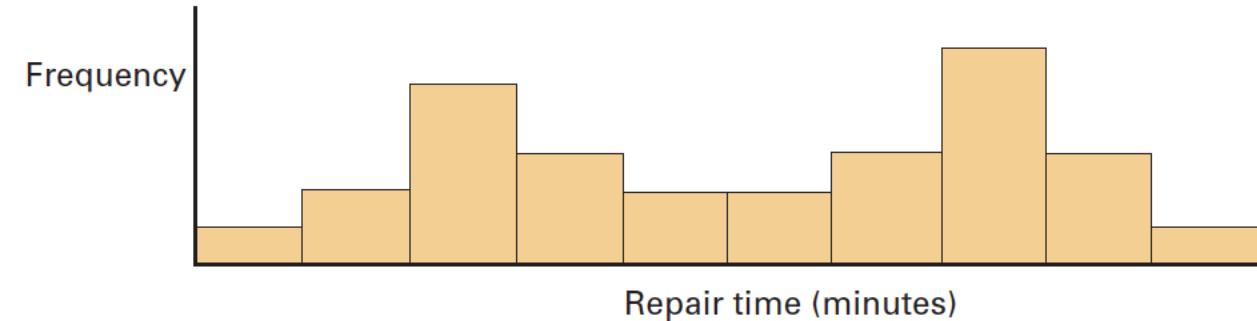
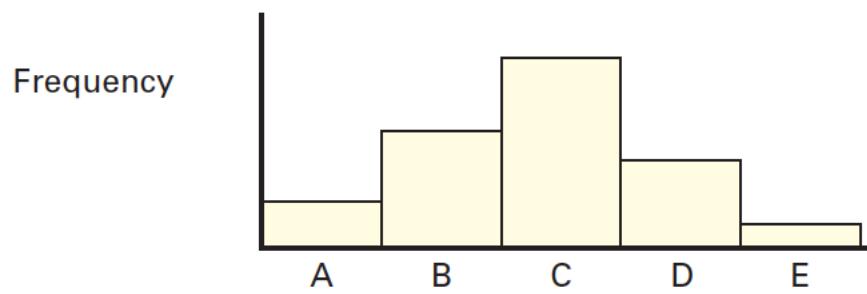


A special-purpose check sheet

Source: William J. Stevenson, Operations Management, McGraw-Hill Education, 12th edition, 2015.

Quality Tool (3) – Histogram

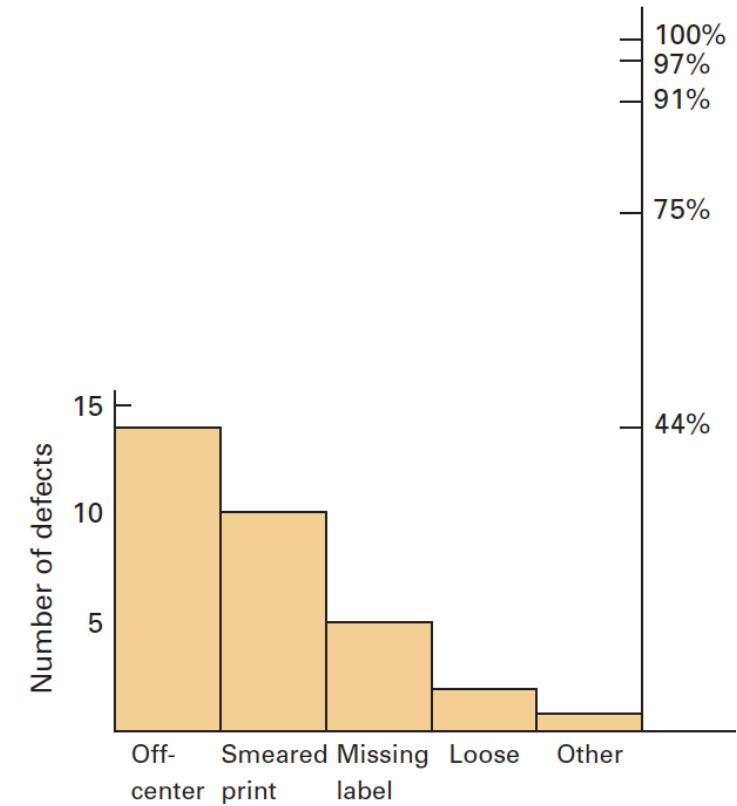
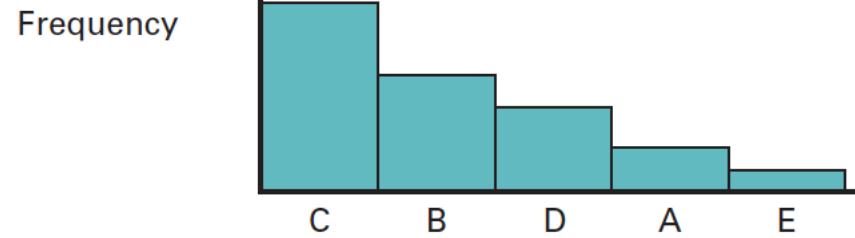
- **Definition:** A chart for an empirical frequency distribution.



Source: William J. Stevenson, Operations Management, McGraw-Hill Education, 12th edition, 2015.

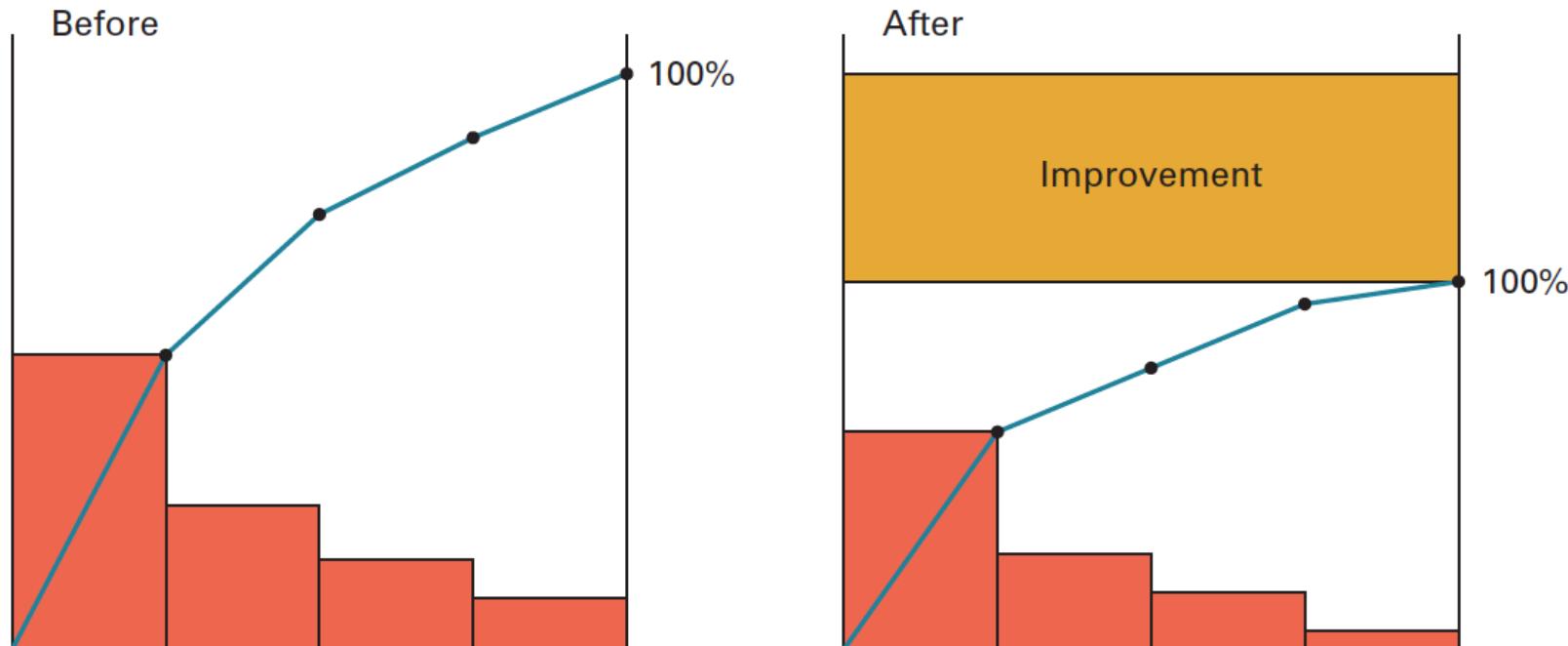
Quality Tool (4) – Pareto Chart

- **Definition:** A diagram that arranges categories from the highest to lowest frequency of occurrence.



Source: William J. Stevenson, Operations Management, McGraw-Hill Education, 12th edition, 2015.

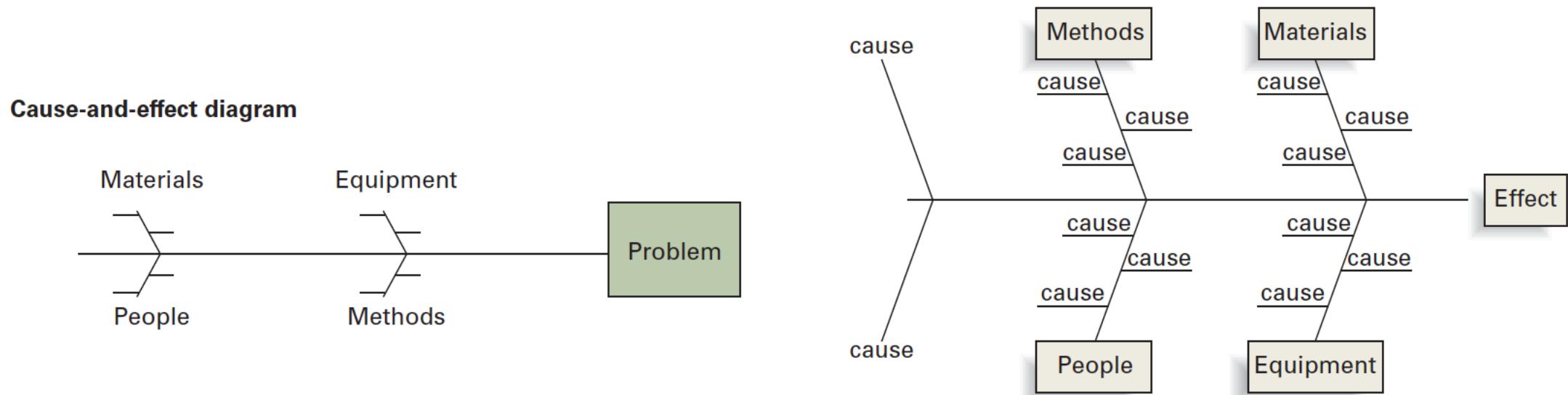
Case 1 – Using Pareto Charts to Track Improvements



Source: William J. Stevenson, Operations Management, McGraw-Hill Education, 12th edition, 2015.

Quality Tool (5) – Cause-and-Effect Diagram

- **Definition:** A diagram used to organize a search for the cause(s) of a problem, also known as a fishbone diagram.



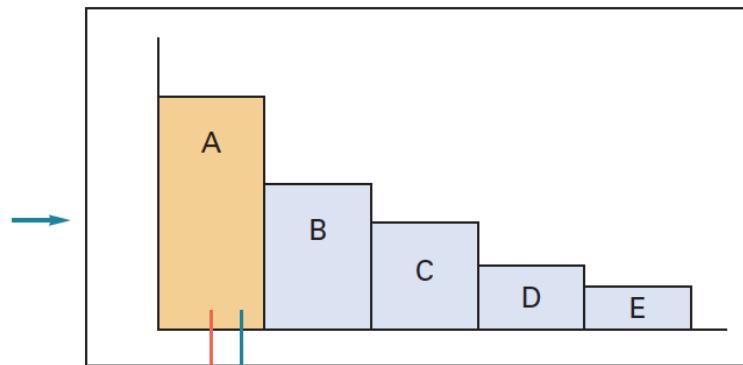
Source: William J. Stevenson, Operations Management, McGraw-Hill Education, 12th edition, 2015.

Case 2 – Quality Improvement with Mixed Tools

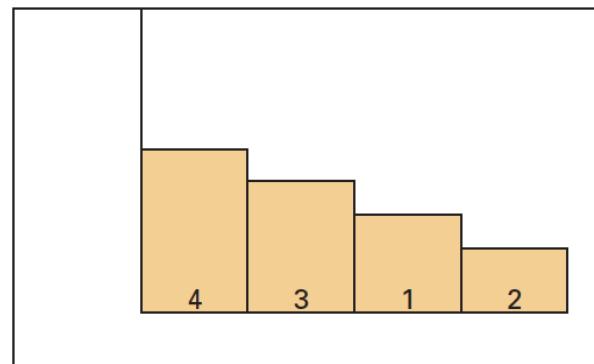
Check sheet: Type of error by location

Location	Type of Error				
	C	B	D	A	E
1					
2					
3					
4					

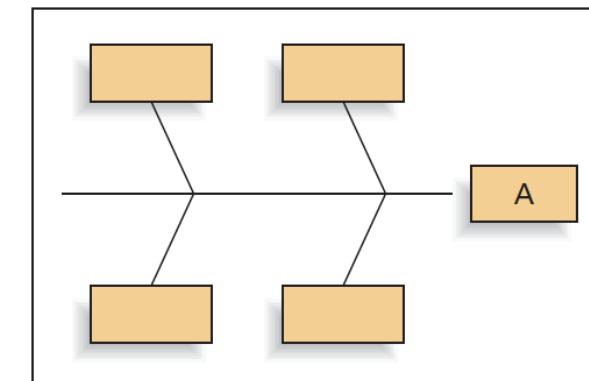
Pareto chart: Type of error



Pareto diagram: A errors by location



Cause-and-effect diagram: A errors

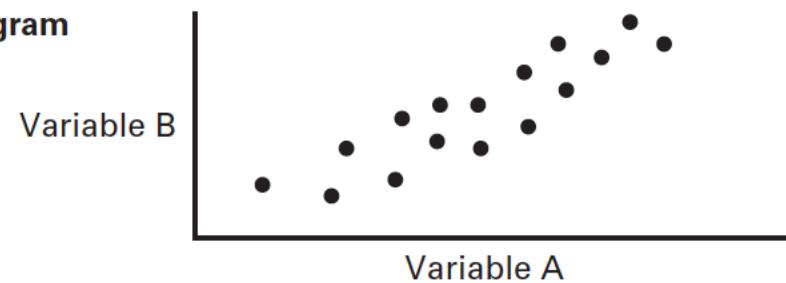


Source: William J. Stevenson, Operations Management, McGraw-Hill Education, 12th edition, 2015.

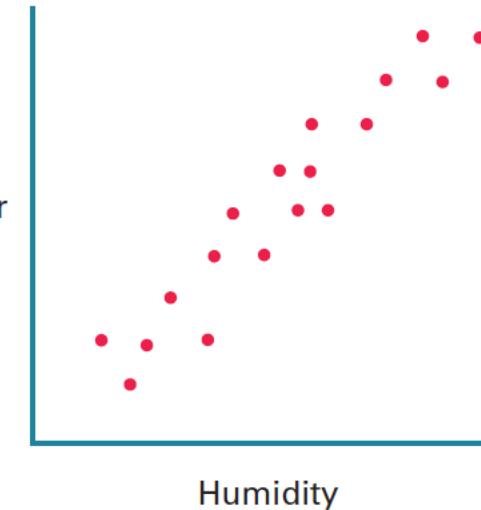
Quality Tool (6) – Scatter Diagram

- **Definition:** A graph that shows the degree and direction of relationship between two variables.

Scatter diagram



Number of errors per hour



Source: William J. Stevenson, Operations Management, McGraw-Hill Education, 12th edition, 2015.

Quality Tool (7) – Run Chart

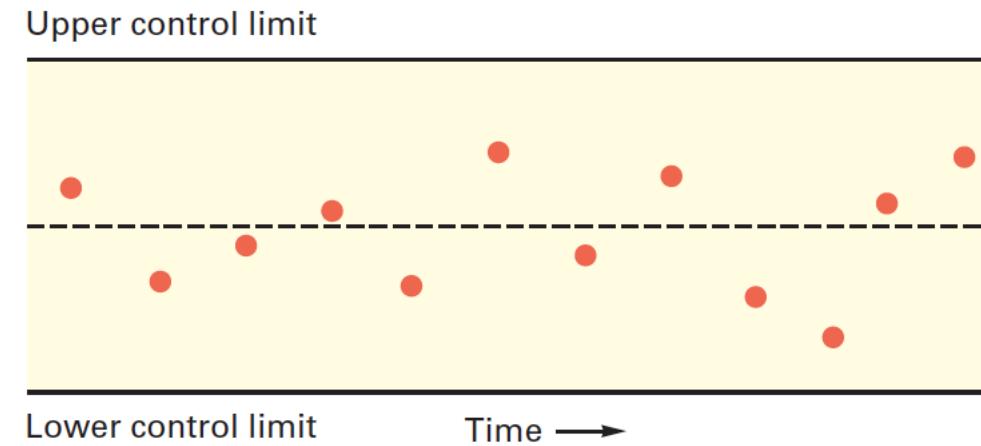
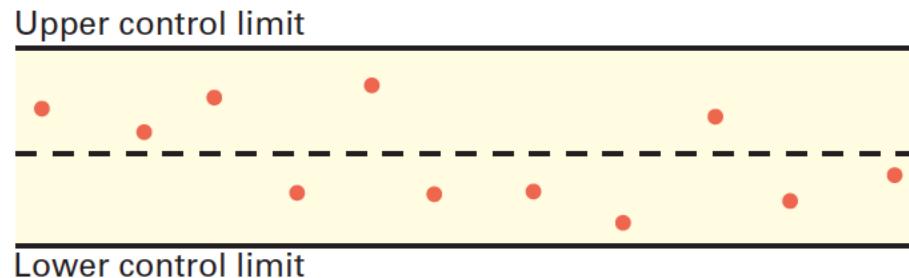
- **Definition:** A tool for tracking results over a period of time.



Source: William J. Stevenson, Operations Management, McGraw-Hill Education, 12th edition, 2015.

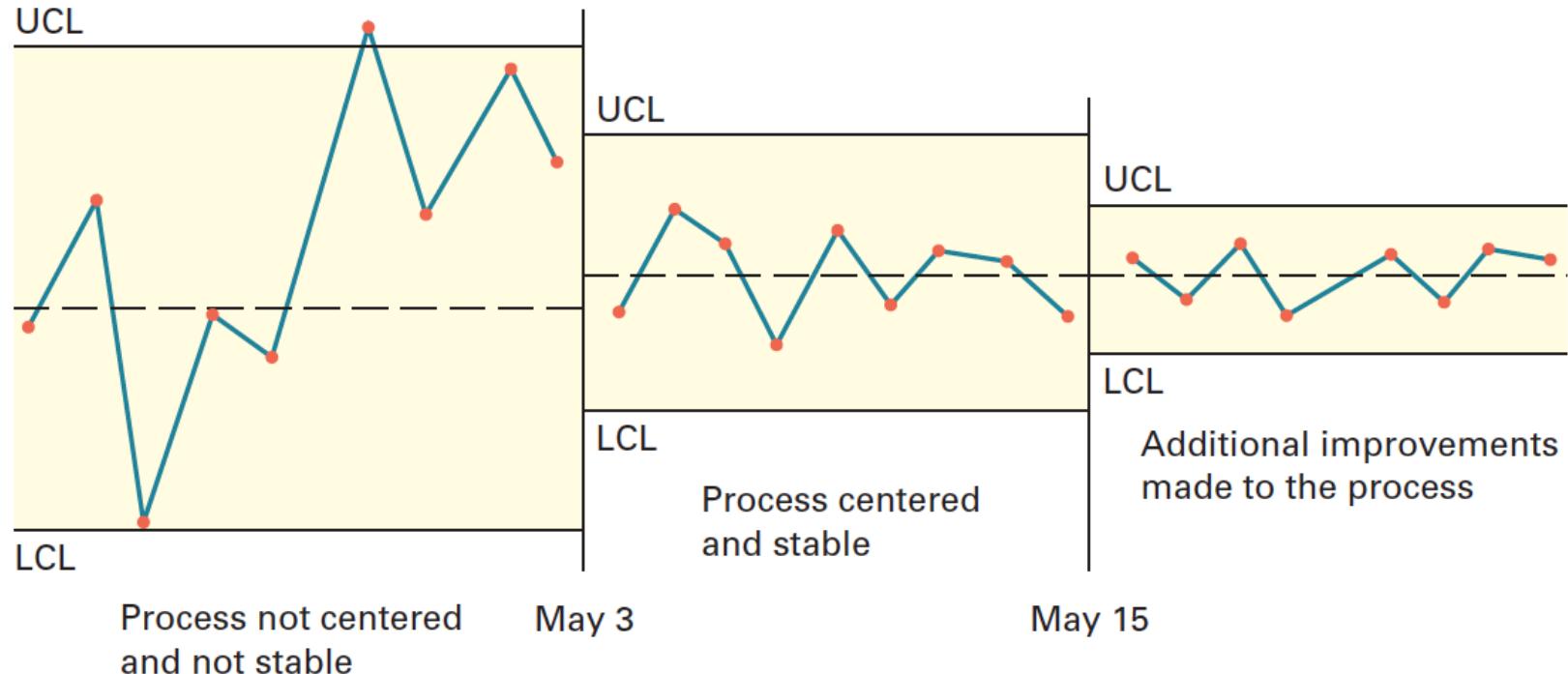
Quality Tool (8) – Control Chart

- **Definition:** A statistical chart of time-ordered values of a sample statistic (e.g., sample means).



Source: William J. Stevenson, Operations Management, McGraw-Hill Education, 12th edition, 2015.

Case 3 – Using Control Chart to Track Improvements



Source: William J. Stevenson, Operations Management, McGraw-Hill Education, 12th edition, 2015.

Assignment 5 – Tasks of Quality Planning

1. Customer: Who is your customer?

- a) List your ideal client profile or persona (Age, gender, education, salary, ...)

2. Quality: Define the term quality related to your case (product/service).

- a) What is the performance of your product/service?
- b) What are your customer expectations?

3. Quality Dimensions: Translate your customer expectations to quality terms and define the quality dimensions of your case (product/service).

- a) Identify your customer priorities since some quality dimensions of a product or service will be more important than others.
- b) Your quality dimensions must be stated in terms of specific, measurable characteristics.

4. Costs of Quality: What are the costs associated with quality in your case (product/service)? Can you quantify them? What would be considered unethical behavior involving management of quality?

5. Quality Tools: What are the quality tools that you use for your case (product/service)? Why?

- a) Illustrate the quality tools in your case.

Hint: Quality tools are data-driven. Use problem solving techniques and methods for generating ideas to solve data related issues (data type, availability, retrieval, cleaning, analysis,...).

Continuous Improvement (CIP)

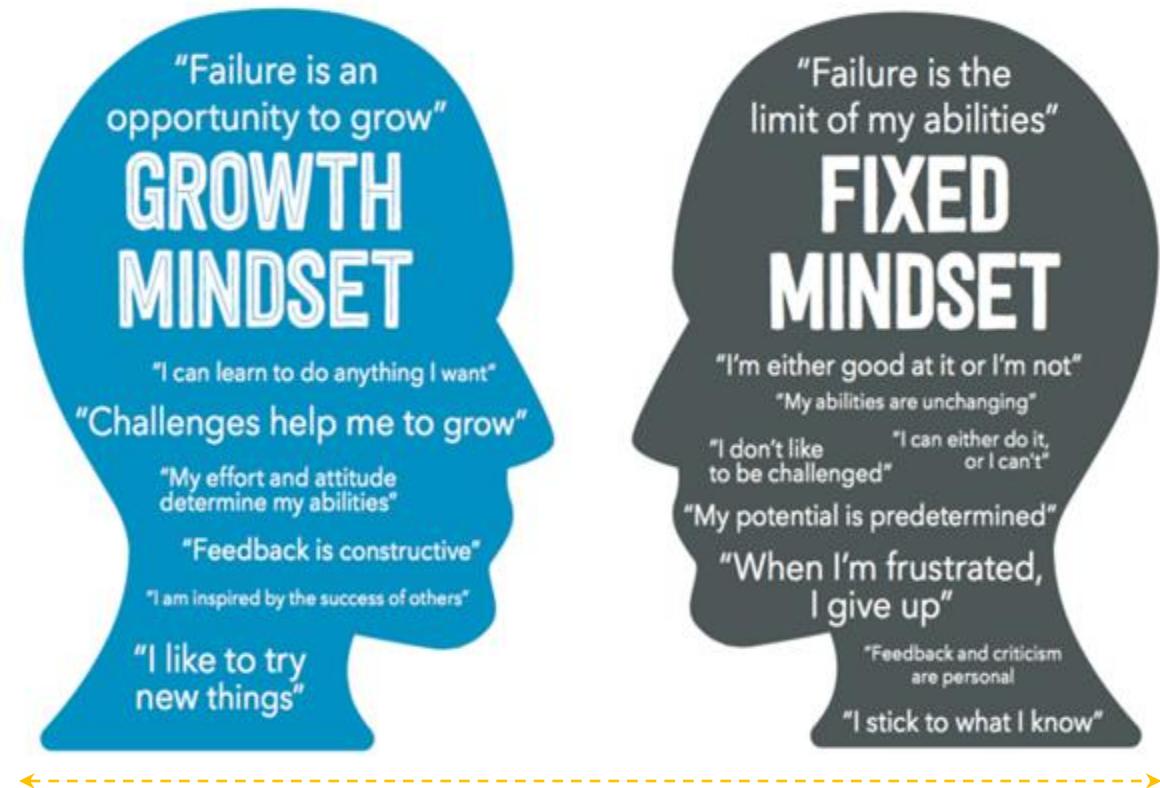
Module 2 – People

Emotional Intelligence

Amin Kaboli

Week 5, Session 2, Mar 21st, 2025

Two Mindsets: Growth vs Fixed

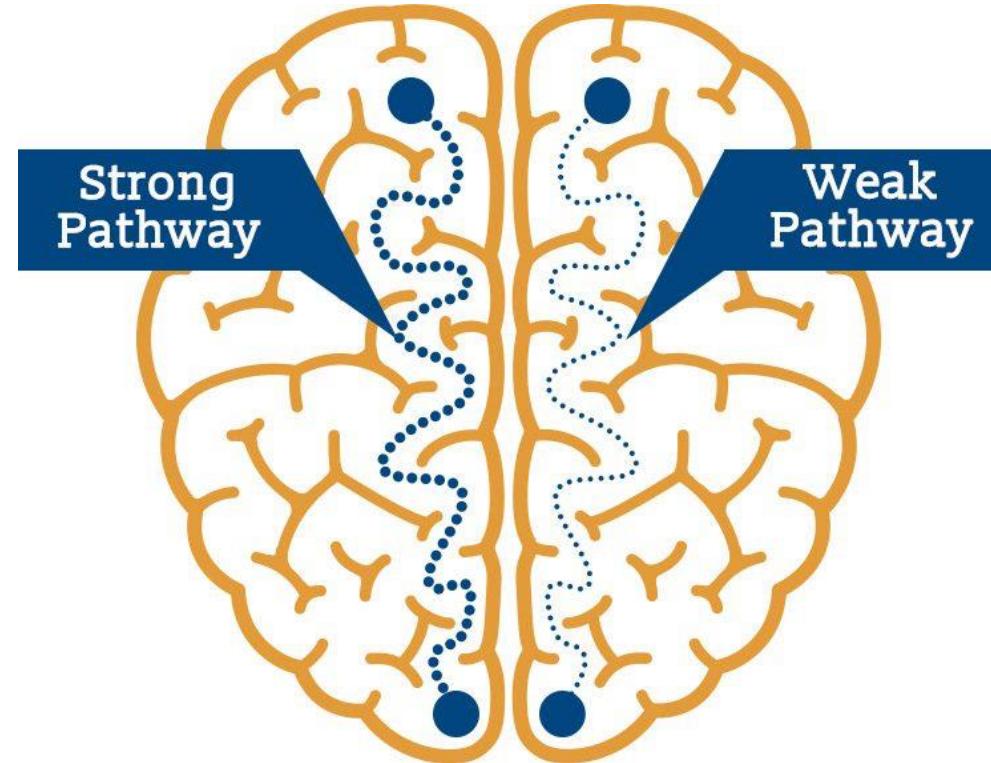


Source: Carol Dweck, *The Growth Mindset*, Random House, 2016.

The Mind



Change – Brain's Neuroplasticity



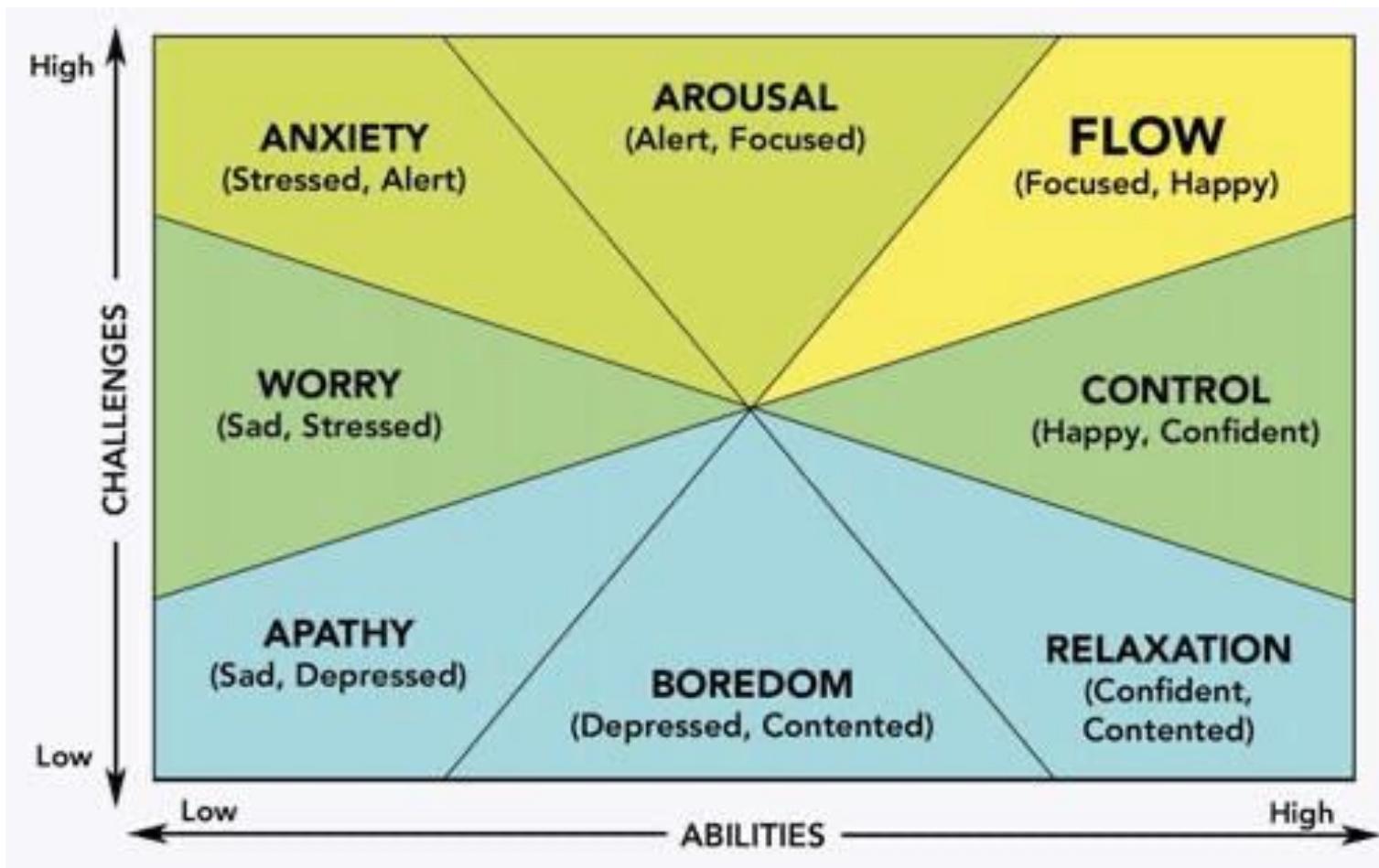
The ability of the brain to change throughout an individual's life

Rewiring the Brain



The starting point to rewire the brain is to know
where you put your **Attention & Focus**

The Map of Everyday Experience



Source: Mihaly Csikszentmihalyi, Good Business, Penguin, 2004.

How Does it Feel to Be in Flow?



Clear goals



Immediate feedback



Balanced opportunity & capacity



Concentration deepens



Present is what matters



Control is no problem



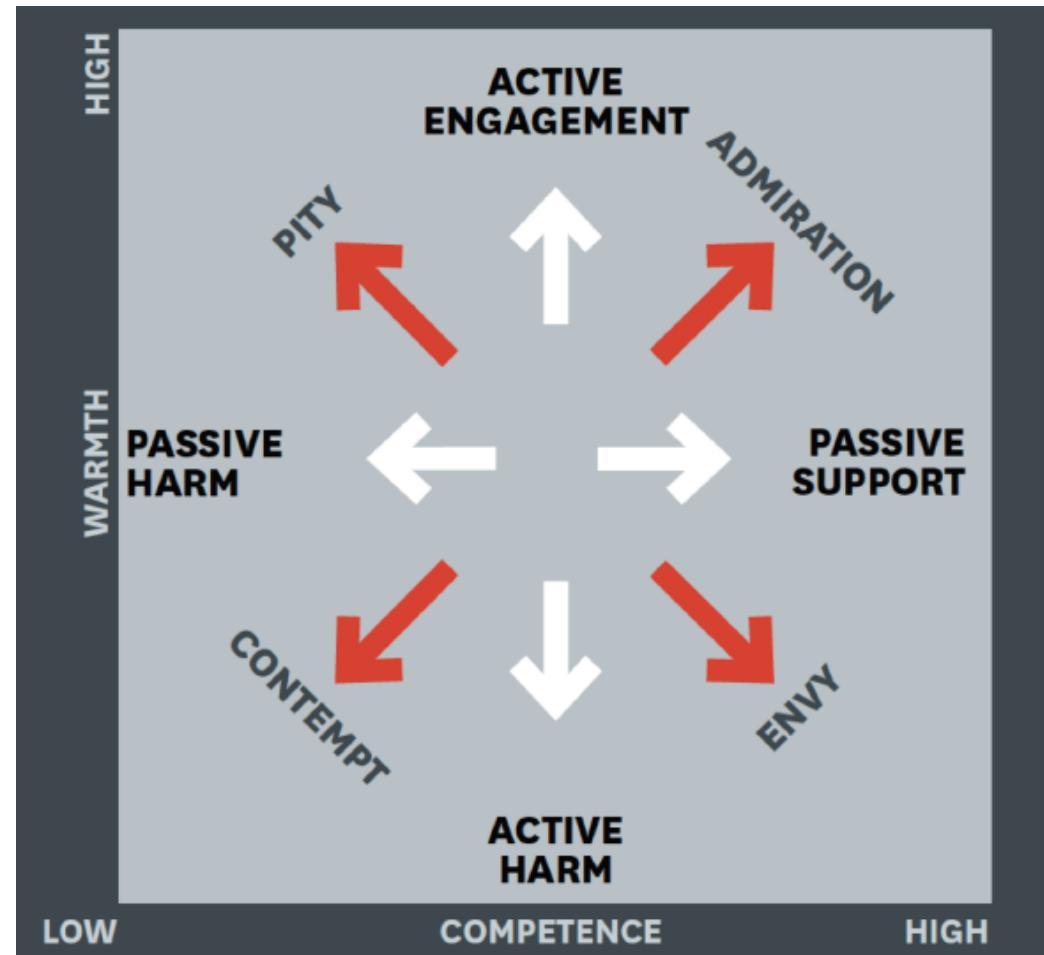
Sense of time is altered



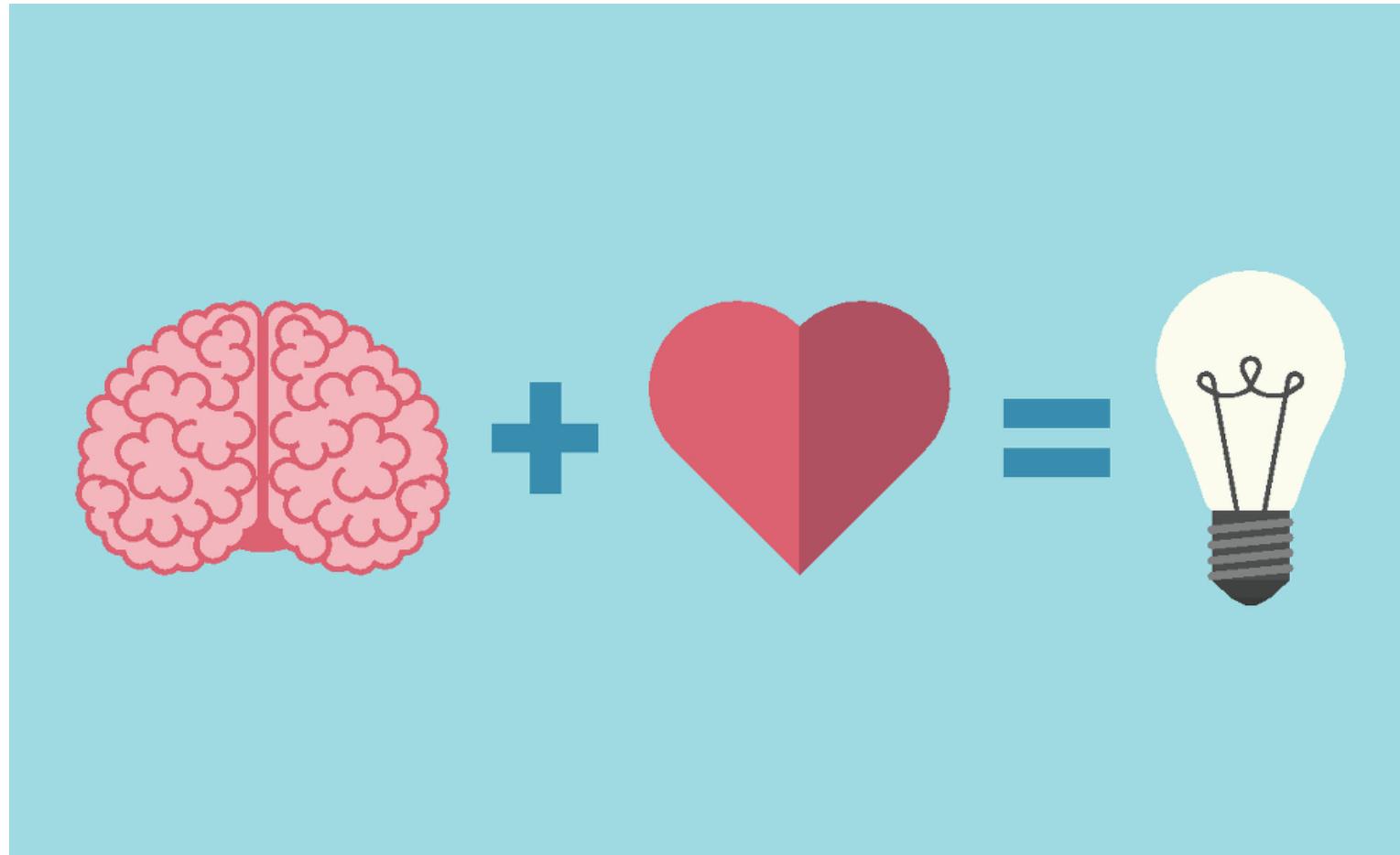
Loss of ego

Source: Mihaly Csikszentmihalyi, Good Business, Penguin, 2004.

Build Human Connection and Maintain Trust

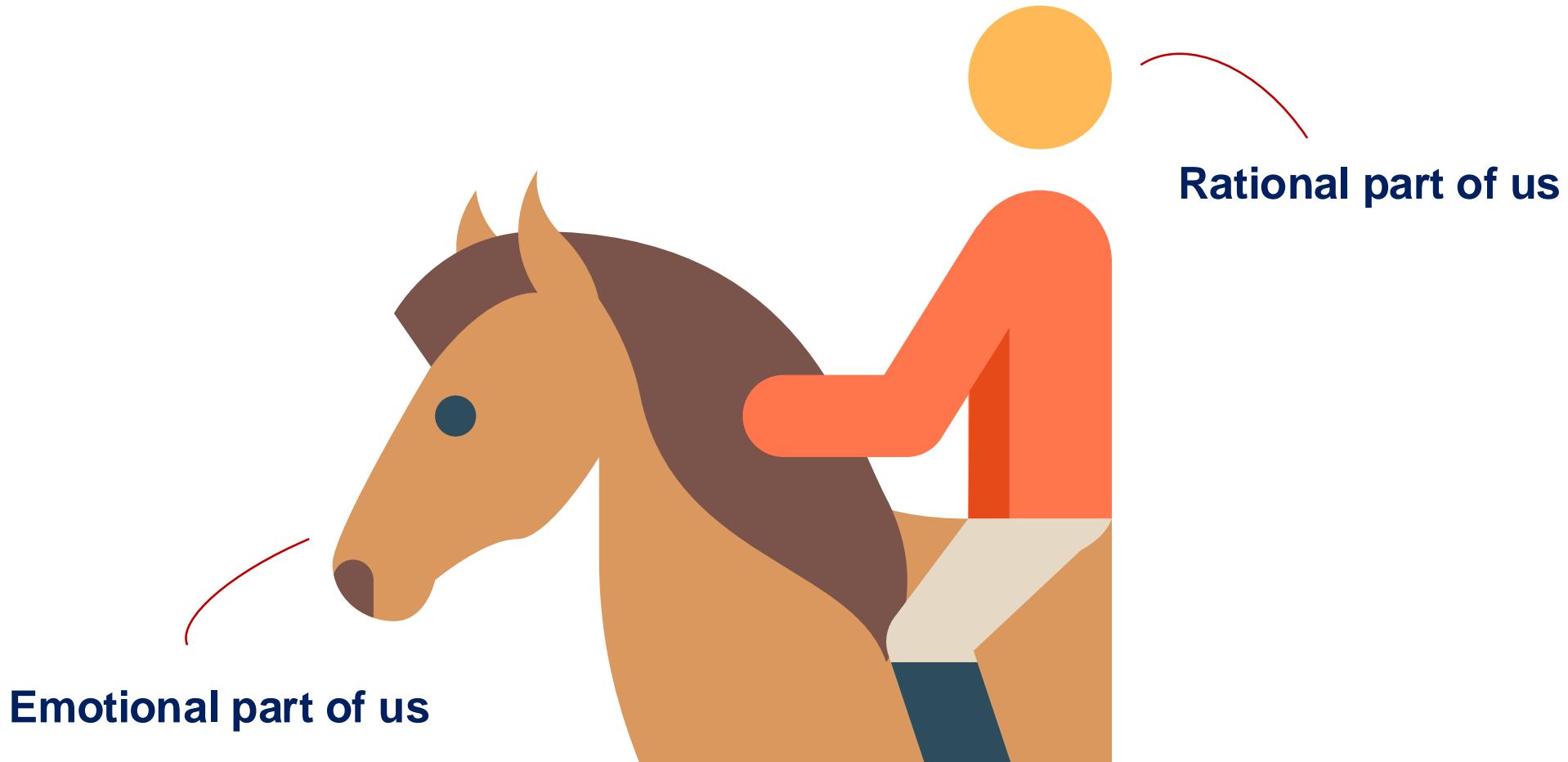


Source: Amy Cuddy, M. Kohut, J. Neffinger, Connect then lead, Harvard Business Review, July-August 2013



“Educating the mind **without educating the heart is no education at all.**” —Aristotle

Change - Horse Rider Metaphor



Horse Rider Metaphor

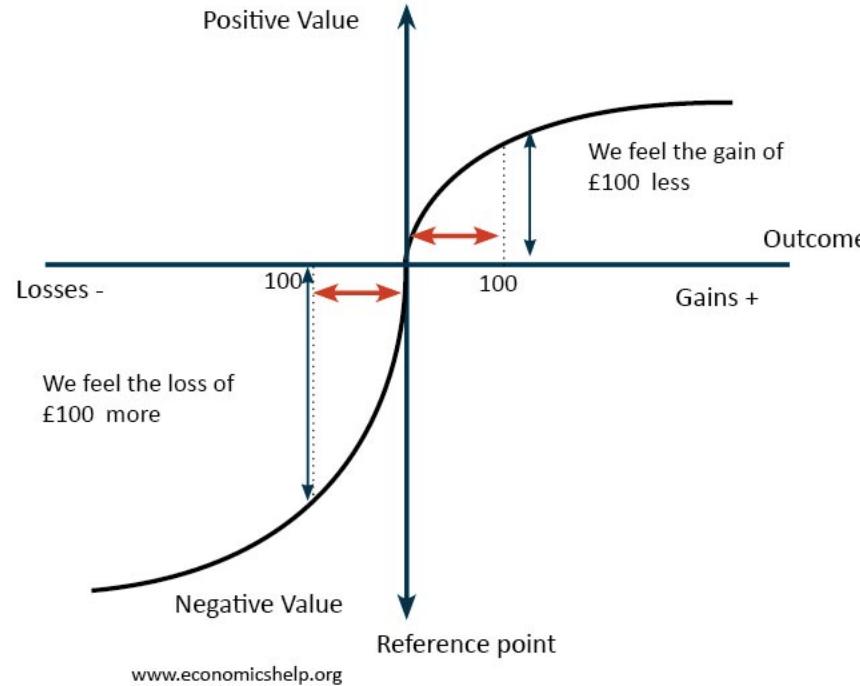


What we desire



What (sometimes?) happens

Why Do We Avoid Failure, Mistake, Conversations?



Research shows we are hardwired for negativity.

Survival – we are basically driven by fear, loss, ...

Do We Resist to Learn and Change?

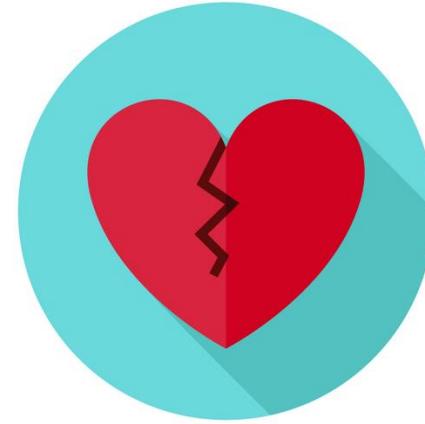


We don't resist to change, we do resist the pain of the change, because
we fear the unknown!

Change – Emotions



Fear of unknown



Loss & grief

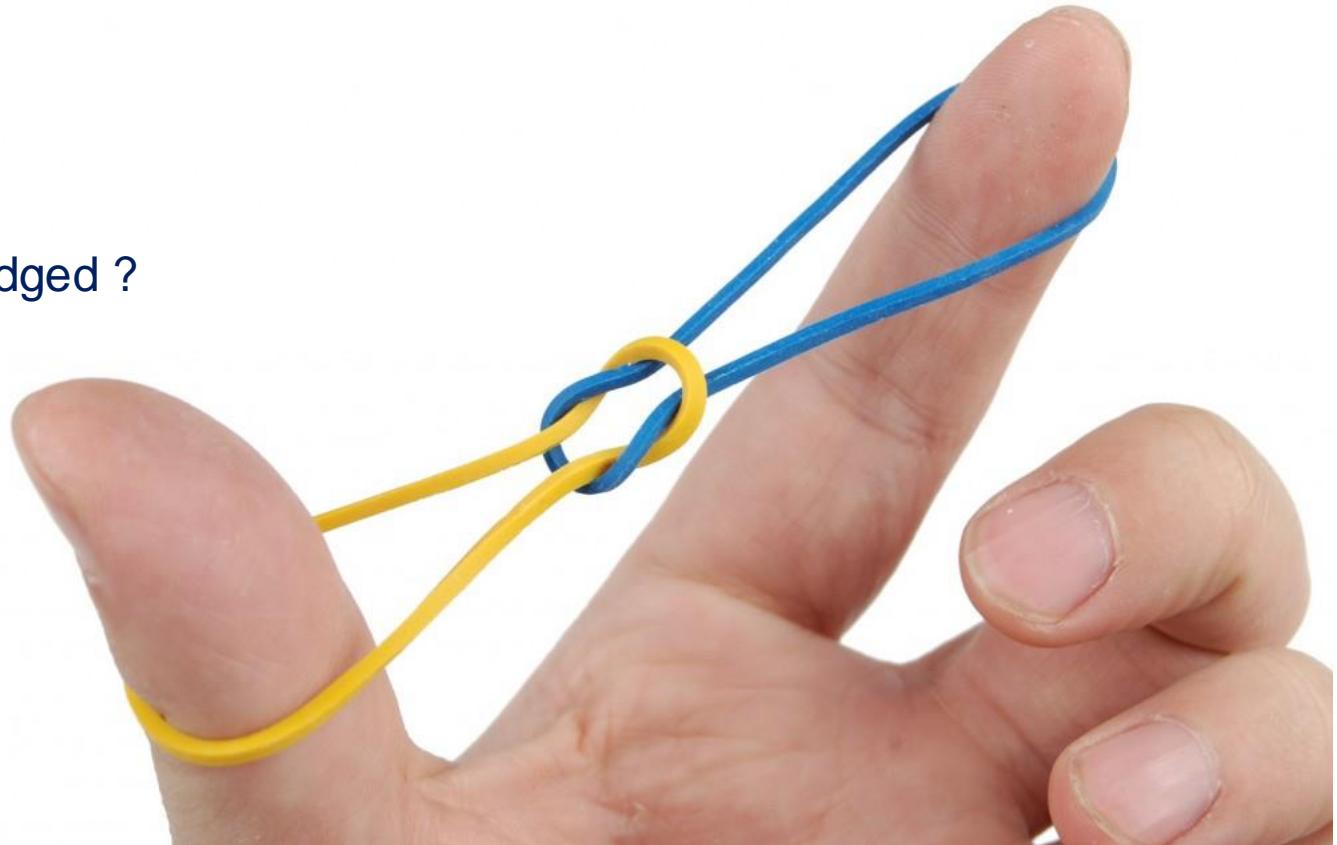
Dealing With The Past

- Research shows unresolved **pain/loss/grieves** of the past impact on the way we feel and on the way we perceive the world around us!

- **Question:** What holds you back?

Do you lead not to lose and not being judged ?

Or you lead to learn and win?



Leading With Unresolved Pain/Loss/Grieves – Swiss Executives



Benoît Violier (2016)
three Michelin star Chef,
Crissier



Martin Senn (2016)
CEO of Zurich



Carsten Schloter (2013)
CFO of Zurich



Carsten Schloter (2013)
CEO of Swisscom

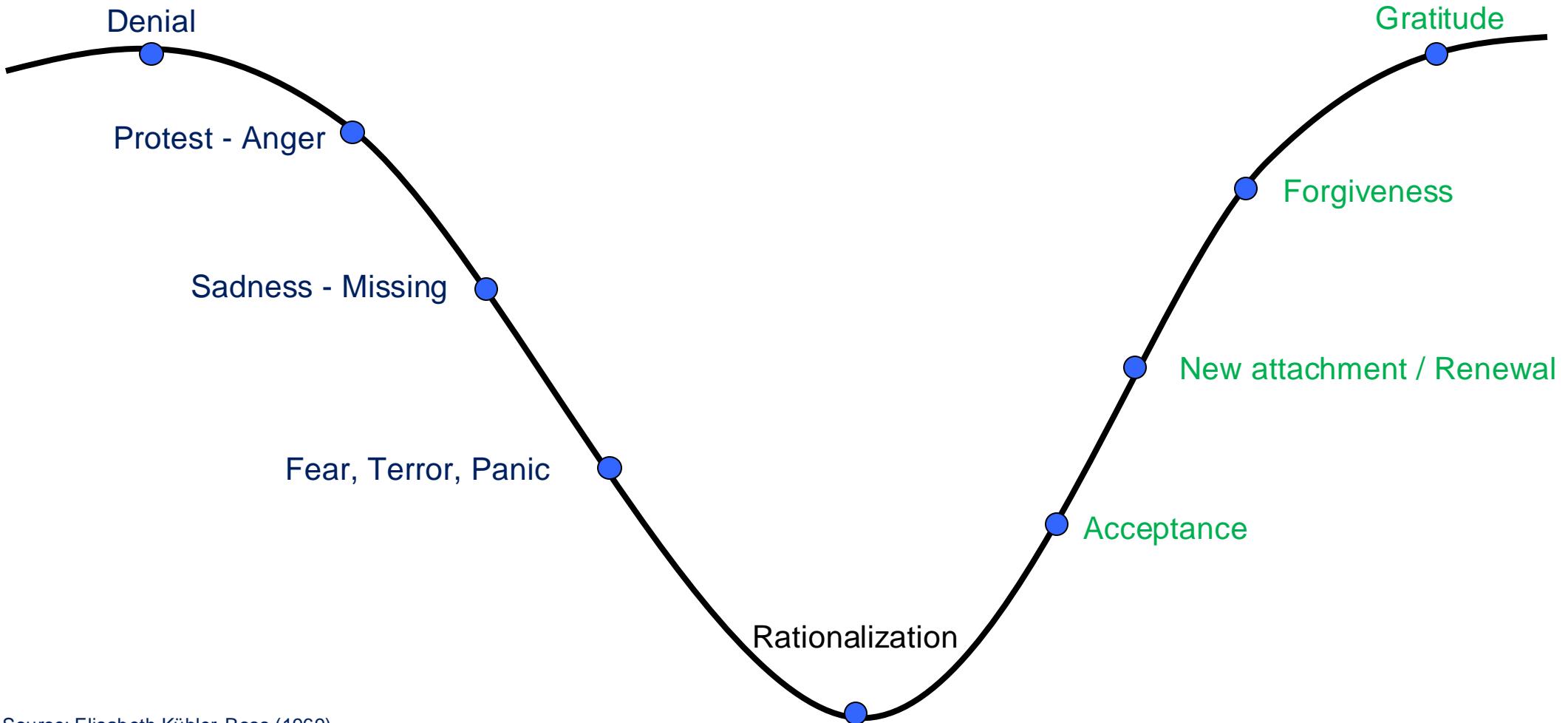
Loss – Definition and Types

- **Loss of attachment** – who am I connected to?
- **Loss of territory** – where do I belong?
- **Loss of structure** – what is my role?
- **Loss of identity** – who am I?
- **Loss of future** – where am I going?
- **Loss of meaning** – what is the point?
- **Loss of control** – I feel overwhelmed

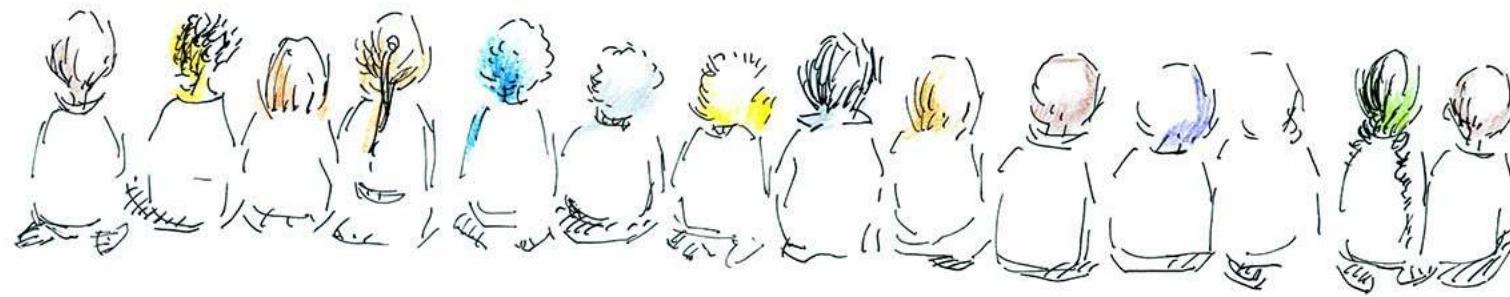


Reference: G. Kohlrieser, Hostage at The Table, Jossey-Bass; 1st edition (June 16, 2006)

Emotions of Loss



What Made You Who You Are Today? – Leadership lifeline



Example:



What Made You Who You Are Today? – Leadership lifeline

Question 1: Your high and low moments:

- What made your high moments that high?
- What made your low moments that low?

Question 2: What do you feel when you look at your life line?

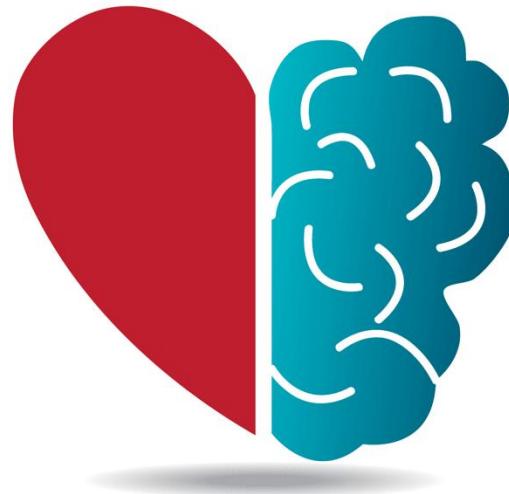
- What was your biggest loss?
- What are you most excited about?
- What are you most grateful for?

Question 3: What is your take away from your leadership lifeline?

- What is your dream?
- What should you do/change to realize your dream?

Presentation: Choose **3 key moments, or periods**, from your lifeline and share how they impacted your leadership – be clear, concise, and sharp in your statements.

Emotional Intelligence (EI)



“The ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional meanings, and to reflectively regulate emotions in ways that promote emotional and intellectual growth” — Salovey & Mayer (1990)

Source: Salovey, P. & Mayer, J. (1990). Emotional intelligence, Imagination, Cognition, and Personality 9: 185-211.

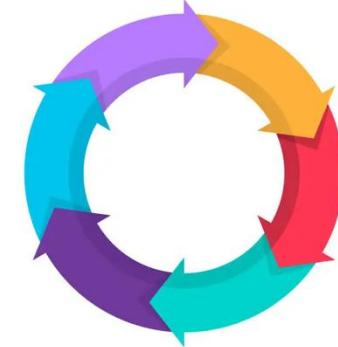
Benefits of Being Emotionally Skilled



Being attuned and connected to the feelings of those we deal with



Being able to handle disagreements, so they don't escalate



Being able to get into flow states while doing our work

Source: Daniel Goleman, Leadership: The Power of Emotional Intelligence, Selected Writings, 2011

Reminder: Leading With Emotional Intelligence



Brain
(Result)

Analyze, Think, Change



Heart
(Feeling)

See, Feel, Change

Components of Emotional Intelligence

Motivation

Using emotions to fulfill one's needs and goals, become highly motivated by internal factors; having the strength to keep going when things get tough

Social skill

Interactions with others, building good relationships based on understanding one's own emotions and emotions of others.

Self-awareness

Understanding a person's own emotions and feelings, ability to properly identify them and knowing how they influence others

Self-regulation

The ability to control and adjust one's emotions properly; prevent the consequences of an emotional outburst by timely regulation

Empathy

Being able to detect the feelings of other people and act according to their emotional state

The Five Components of Emotional Intelligence



1

Self-awareness



The ability to have a clear understanding of your own strengths, weaknesses, thoughts and beliefs.

- **Realistic self-assessment:**

Example: a self-aware person who struggles with deadlines plans ahead.
Self-aware employees welcome feedback.

- **Self-deprecating sense of humor:**

You see this in people who admit to failure easily and with a smile.
You might notice it when asking a job candidate to describe a past mistake.

- **Confidence:**

Self-aware people know their abilities and play to their strengths.
But they don't overreach and aren't afraid to ask for help.

Self Awareness Practice

 Strengths <ol style="list-style-type: none">1. What results are you skilled at generating?2. What abilities do you need to enhance in order to get the results you want?3. What unproductive habits are preventing you from creating the outcomes you desire?	 Values <ol style="list-style-type: none">1. What are your ethics?2. What do you see as your most important responsibilities for living a worthy, ethical life?3. Do your organization's ethics resonate with your own values?	 Contribution <ol style="list-style-type: none">1. Based on your strengths, high-performance work style, and values, how might you make the greatest contribution to your organization's efforts?	 The second half of my life <ol style="list-style-type: none">1. Imagine you are in your 70s, what would you do?, where are you?, describe as details as possible for yourself.2. What would you like to do with your second half of your life?
 Perform <ol style="list-style-type: none">1. In what ways do you work best?2. Do you process information most effectively by reading it, or by hearing others discuss it?3. Do you accomplish the most by working with other people, or by working alone?4. Do you perform best while making decisions, or while advising others on key matters?5. Are you in top form when things get stressful, or do you function optimally in a highly predictable environment?		 The fit <ol style="list-style-type: none">1. Based on your strengths, high-performance work style, and values, in what kind of work environment would you fit in best?	

Inspired by Drucker, P., F. "Managing Oneself" Harvard Business Review, 1999.

2

Self- regulation



Controlling disruptive impulses—and thinking before acting.

- **Thoughtfulness**
- **Comfort with ambiguity and change**
- **Integrity:** the ability to act in a principled way even when tempted to do otherwise

3

Motivation



Motivated people driven to achieve beyond expectations. This isn't for money or status—it's a deep internal desire.

- **Passion for the work**
- **Desire to raise the bar**
- **Commitment and optimism**

4

Empathy



Ability to bond and show caring

- **Empathy means** considering other people's feelings when making decisions.
- **Empathy** doesn't mean trying to please everybody—that is impossible.

5

Social Skill



This isn't simply friendliness—it's friendliness with a purpose.

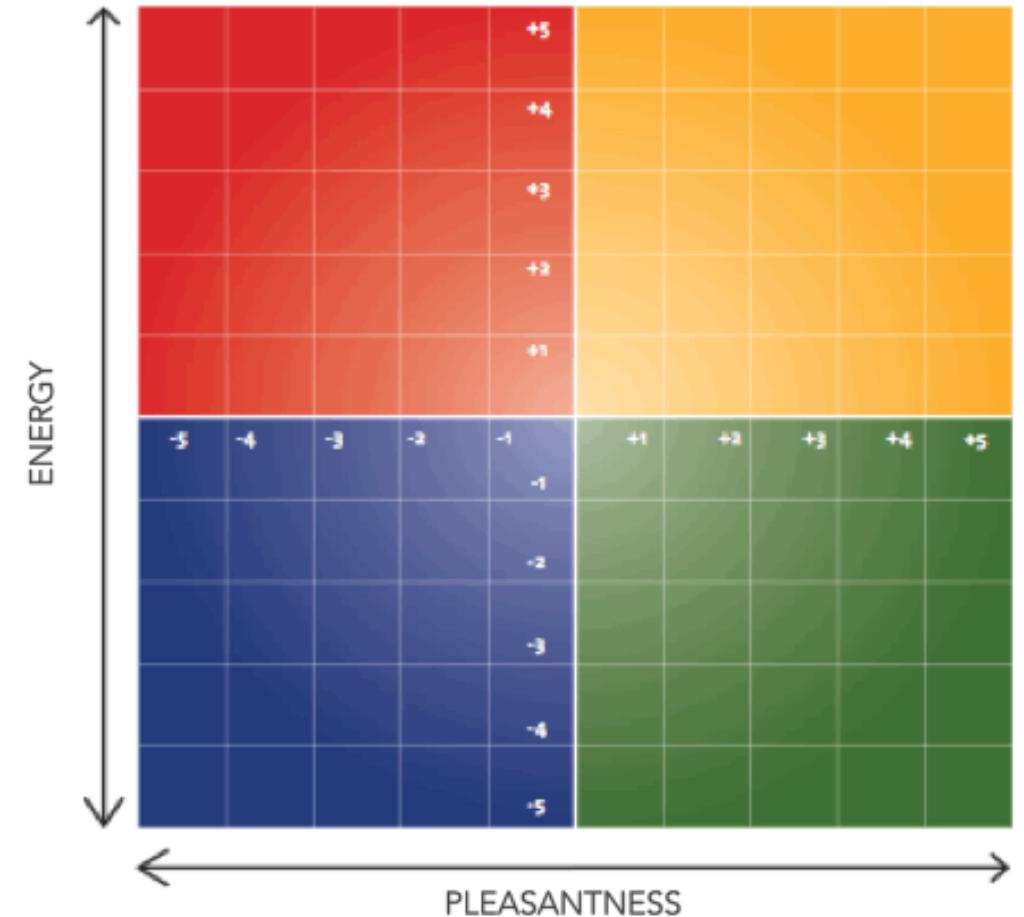
- **Expertise with teams**
- **Persuasiveness**
- **Gift for collaboration**

Let's Explore Your Feeling



5 Min

- 1) How do you feel now?
- 2) What caused you to feel this way?
- 3) How this feeling impacts your posture/body?
- 4) Given how you feel, what can you do now?



Continuous Improvement (CIP)

Module 3 – Process

Quality Planning – Play & Practice

Week 5, Session 3, Mar 21st, 2025

Assignment 5 – Tasks of Quality Planning



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5. Quality Tools: What are the quality tools that you use for your case (product/service)? Why?

- a) Illustrate the quality tools in your case.

Hint: Quality tools are data-driven. Use problem solving techniques and methods for generating ideas to solve data related issues (data type, availability, retrieval, cleaning, analysis,...).

Continuous Improvement (CIP)

Coaching Session

Session 4