Leveraging resources from Business Project Management to Development Agile structures

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Modernizing and making mainframe development more effective –

taking it to the next level with agile methods

Agenda

- **The Current IT Environment**

- Challenges

- Approaches, Solutions and Techniques

Businesses are facing an unprecedented rate of change

Meet increasingly unique customer needs

Enable business agility while doing more with less

Make better decisions

Exploit globalization

Manage regulatory mandates

React to market shifts

Excel at quality

Deliver innovation to differentiate products

Seize business opportunities

Execute with reduced risk and cost

Achieve precision in desired business outcomes

Successful businesses *will be those that effectively deliver innovation while controlling cost and risk*

The Symptom

Change is the new norm

There are 1 billion camera phones in use today

IBM Sequoia Super Computer…
t would take the entire population of the earth, about six billion, each of us working a handheld calculator at the rate of one second per calculation, more than 320 years to do what Sequoia can do in one day.

"8 of 10 CEOs see significant change ahead"
- 2008 IBM CEO Survey

The internet of people is over one billion strong. The internet of things is almost one trillion.
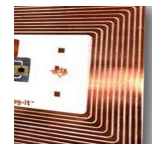
By 2010, there will be 30 billion RFID tags in circulation

Soon there will be over 2 billion people on the web

China sends more text messages in a week than the U.S. does in 1 year

Is your IT infrastructure flexible enough?

IT Infrastructure

"The message for IT is clear; business needs and expects greater agility from IT. A new approach to IT delivery models and sourcing options is required that allows IT organizations to be more responsive to the needs of the business."

– Gartner, October 14, 2008, "Changing the Cost Structure of IT Will Become a Business Imperative for Most CIOs"

Encompassing Change is a Competitive Advantage

Delivery

Awareness

Production

Vision
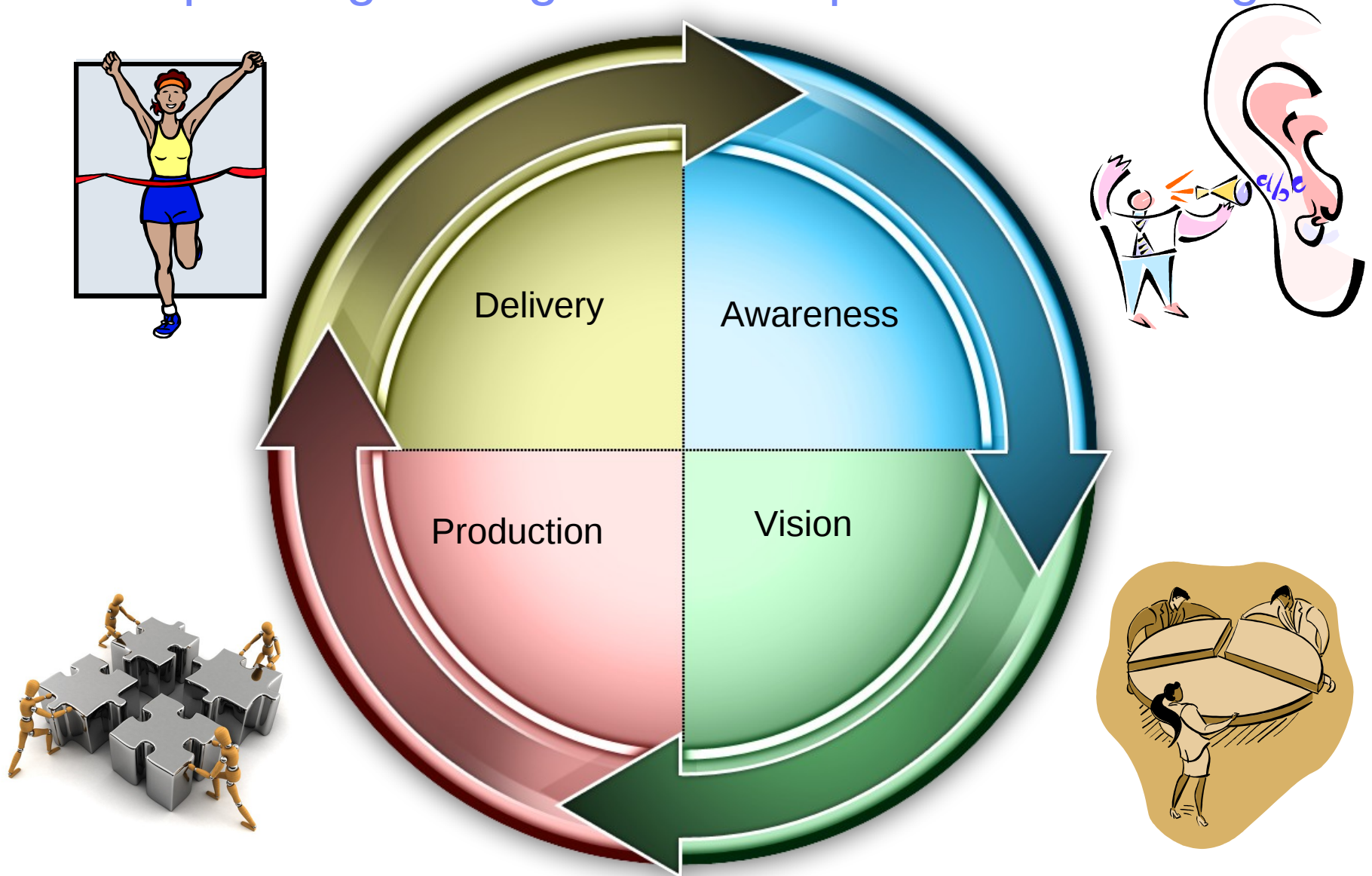
Encompassing Change is a Competitive Advantage

Accommodating Change

In your product allows you to

- Innovate

- Respond to market forces

- Satisfy demand

In your process allows you to

- Improve productivity

- Empower your work force

agile

An ideology supported by a pool of techniques.

Rapid Iteration

Continuity

Availability

Collaboration

Empowerment

Accommodate Change

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Can be applied to **ANYTHING**

Agile

Speed

Quality

Visibility

Contribution

Empowerment

Continuity

Collaboration

Planning
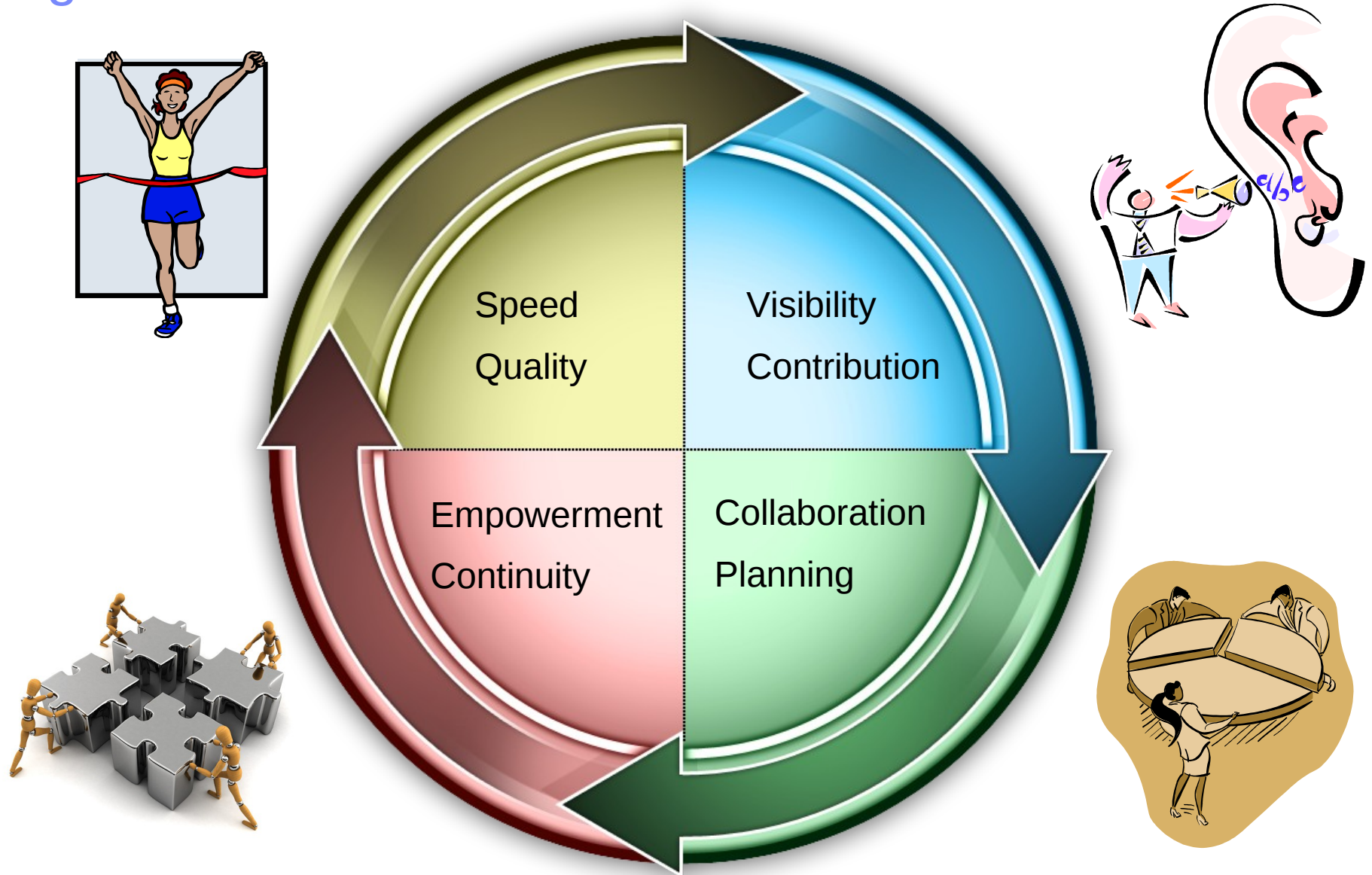
Process Improvement

- Use Agile techniques to do iterative Process Improvement
- Use Tools and Automation to maximize the benefit
    - ▸ Enablement
    - ▸ Expert Advice and Empowerment
    - ▸ Compliance, Audit, Enforcement and Reproducibility
    - ▸ Minimize Administration
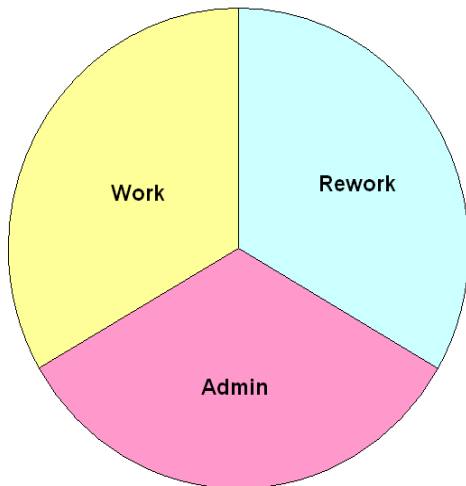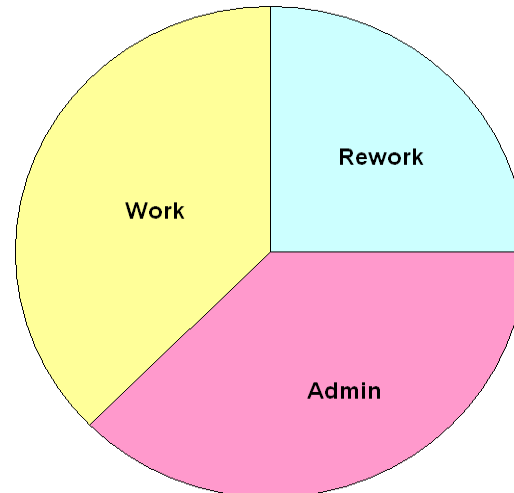
Before   No Automation   Automation
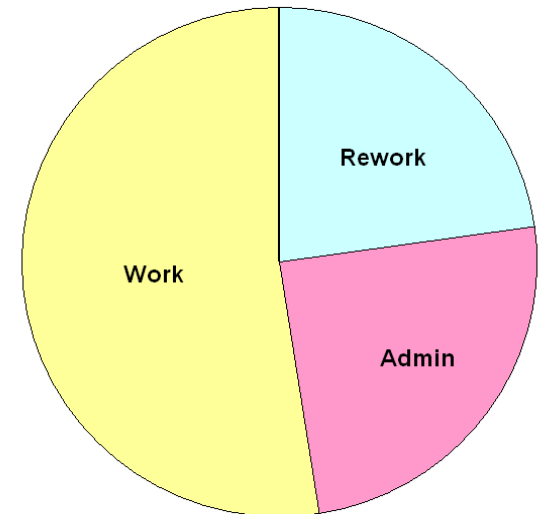
Process Improvement - Manual
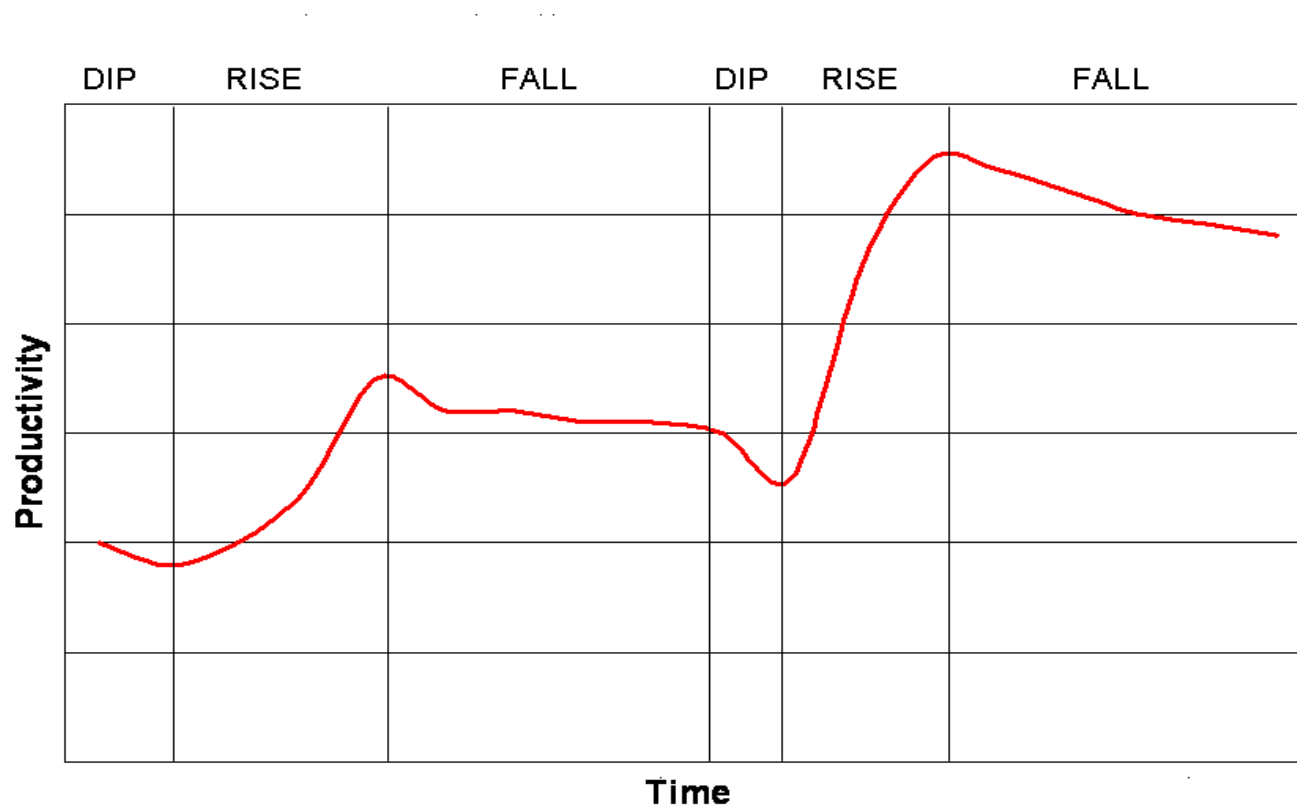
Process Improvement – with Automation
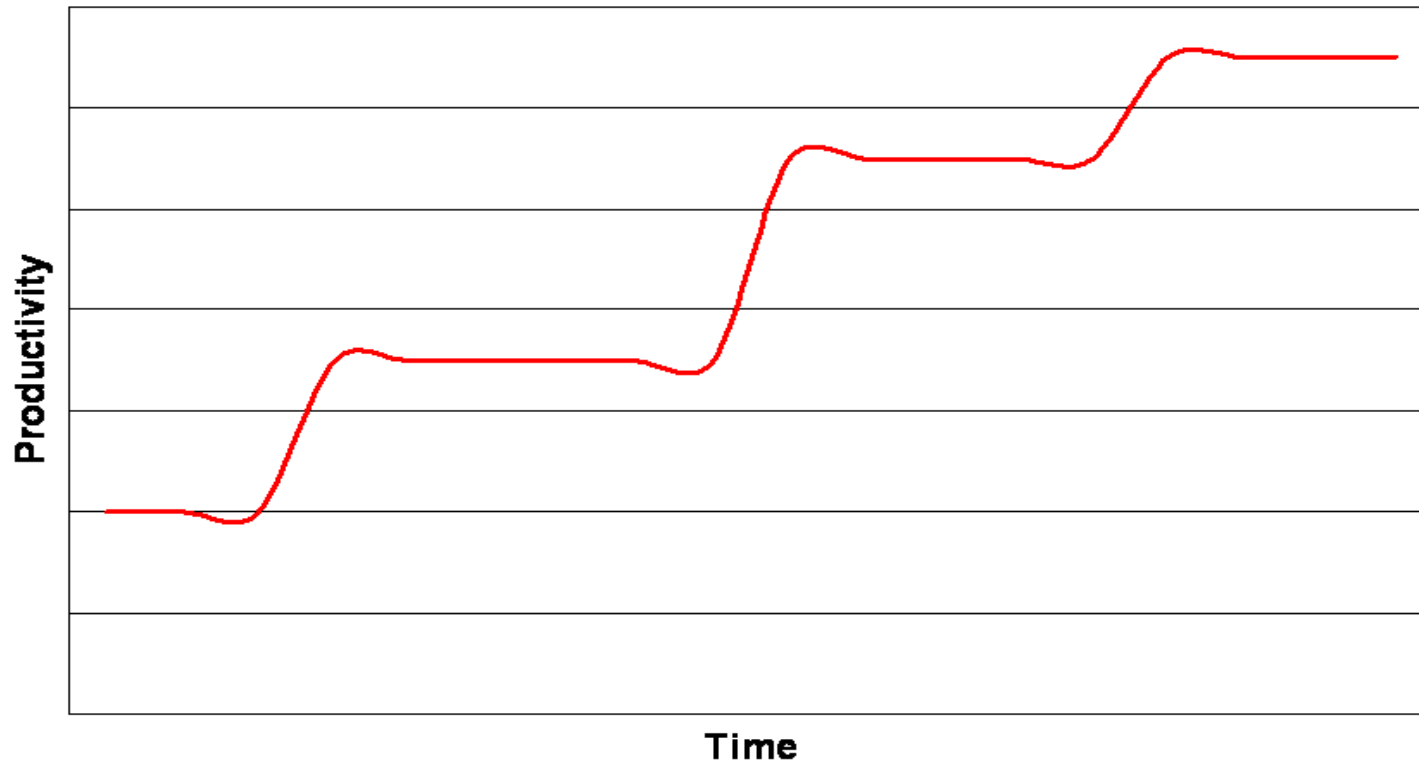
Functional Improvement

- Optimise the cost and duration of activities
  - Automation
  - Assistance
  - Resources
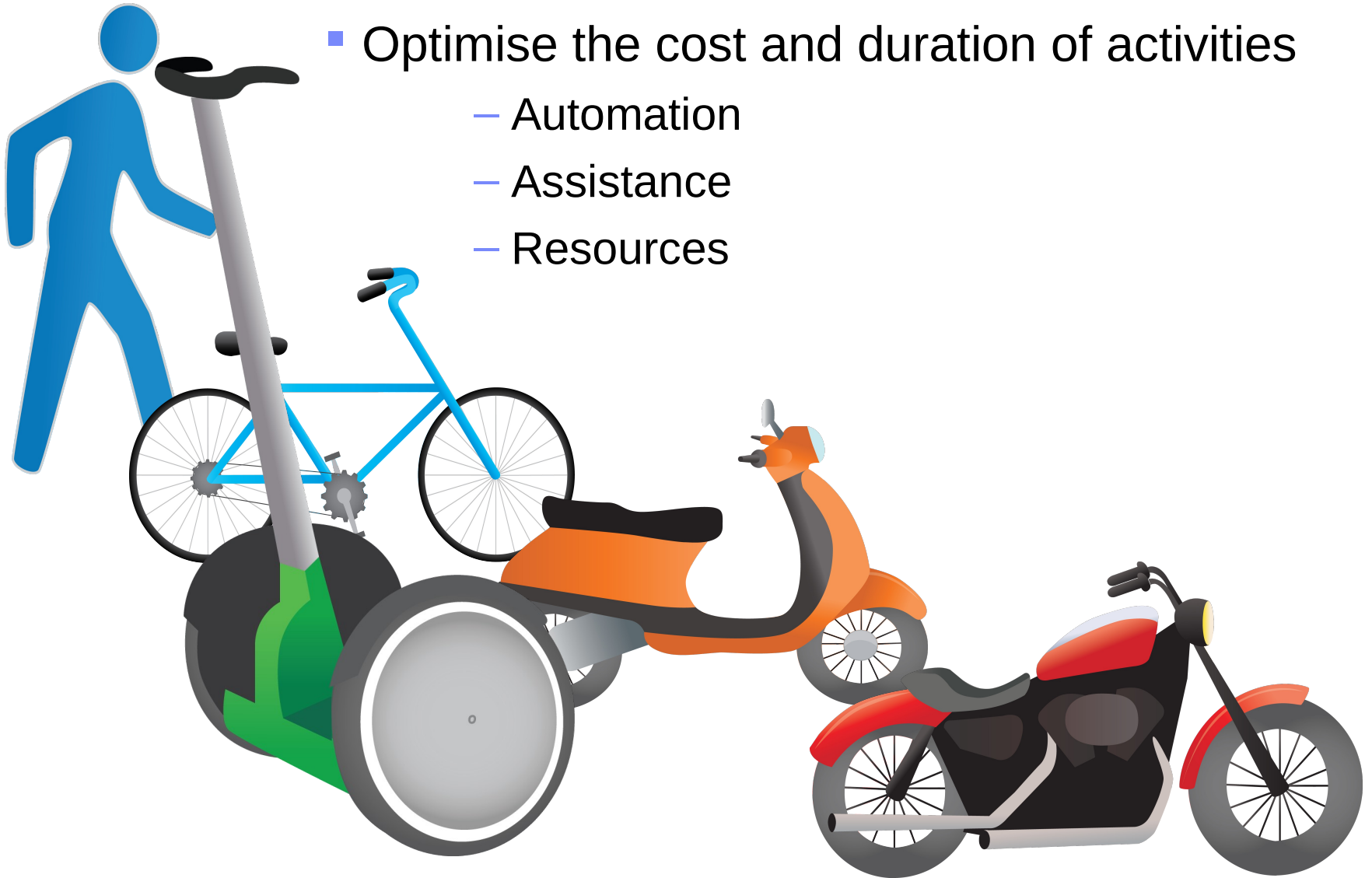
Functional Improvement

1	2	3	4	5

1	2	3	4	5	6	7	8
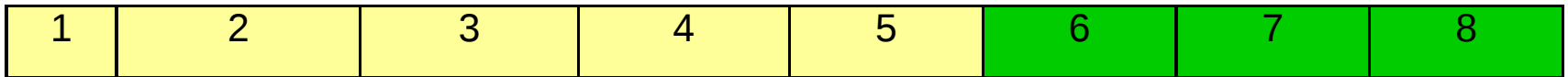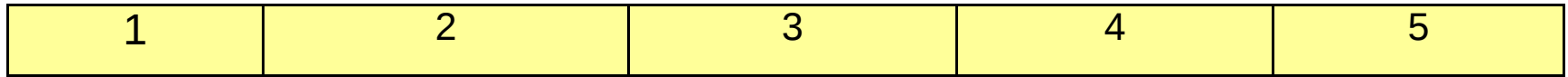
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Enterprise Challenges

Size
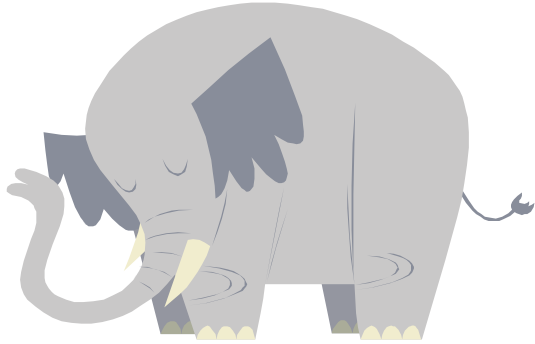
Legacy Applications

Cost

Separation

Standards, Legislation and Method

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Applying the right development practices
Manage, measure and improve your practices with a proven, repeatable approach

- Understand where you are at today, and establish a roadmap forward

- Define the simplest, leanest process that will meet your needs; choose the appropriate tools to support it, and implement the practices of highest value to you

- Accelerate and monitor the adoption of the process and tools

- Continuously assess the business and operational benefits and replicate best practices across your teams

MCIF

Phase 1	**Establish business and operational objectives**
Phase 2	**Prioritize practices and define roadmap**
Phase 3	**Accelerate adoption with tools and services**
Phase 4	**Report, analyze and act on results**

Start next incremental improvement
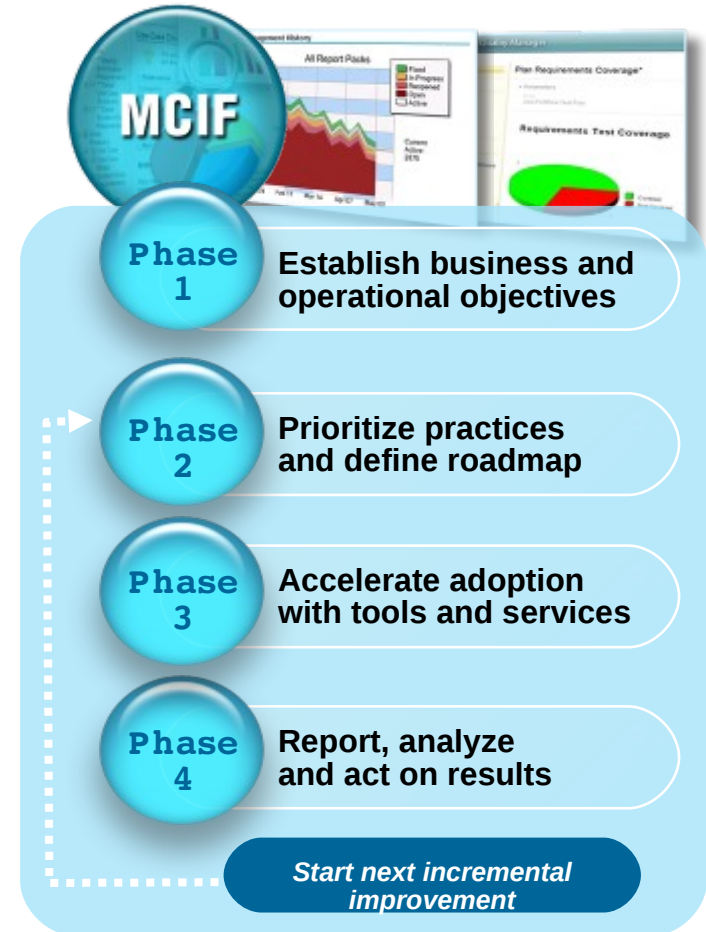
Measured Capability Improvement Framework

Product Development

- In an Enterprise Environment
  - Take Guidance
  - Select Agile Techniques as appropriate
    - Collaboration
      - Stakeholder involvement
      - Visibility
      - 'One Room' or Co-location
      - Communication
    - Rapid Iteration
      - Task identification
      - Planning
    - Empowerment
  - Use Tooling to overcome challenges and shorten activities
    - Enablement (resources/cost/knowledge)
    - Location
    - Platform
    - Technology

Business Process Modelling

Basic Areas of Interest

- Meetings
  - ▶ Status meetings – collect status automatically and display it on dashboards
    - Eliminate a 1hr weekly meeting means 1 week per person per year recovered
    - Conservative cost of a developer £80,000 – recovers £2000 per year per developer

- Reporting
  - ▶ Preparing weekly/monthly status reports
    - eliminate 1hr of this effort per week recovers 1 week of project management time per year
    - Conservative cost of a Project/team leader £100,000 – recovers £2500 per year per person
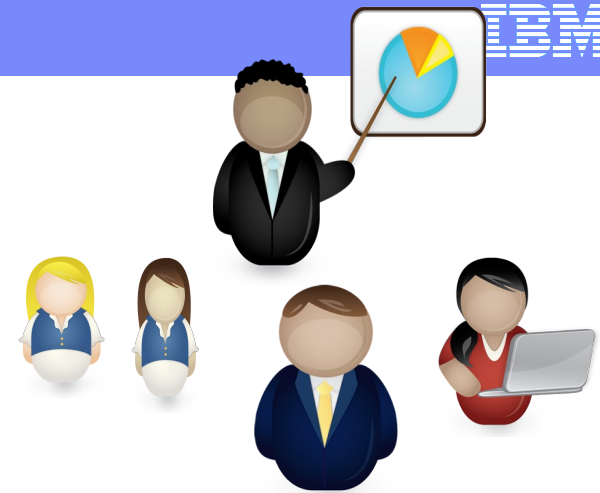
Basic Areas of Interest

- Resource Allocation
  - ▶ Improved monitoring and control
    - Reduce risk
    - Enable more resources to be allocated
    - Controlled parallel development
    - Increase project staffing threshhold
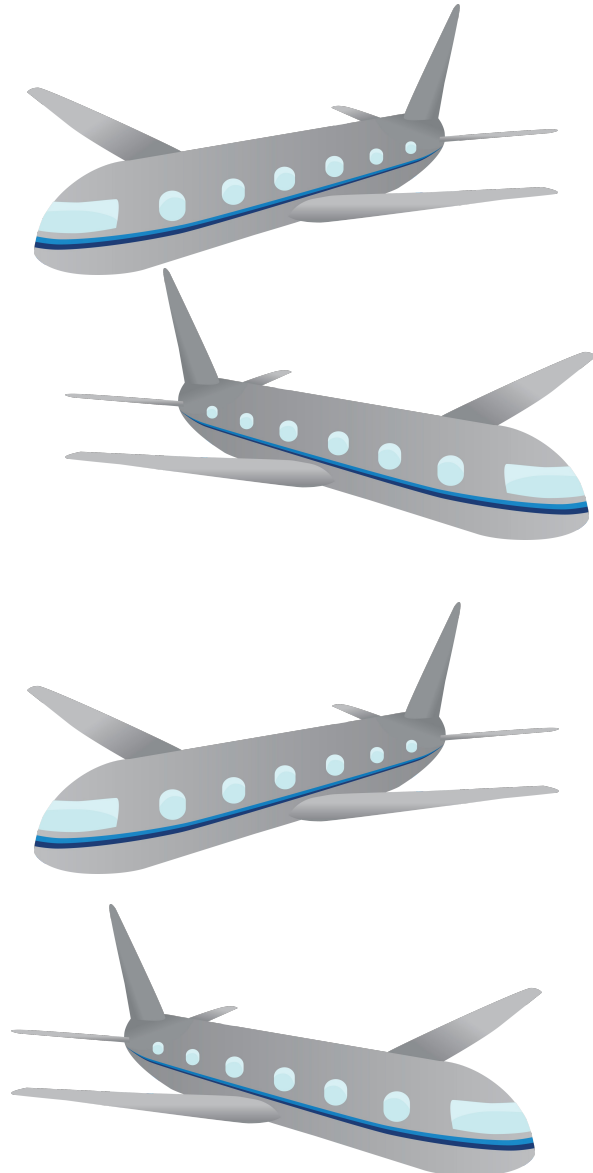
Basic Areas of Interest

- Information management

  - A typical developer will spend several hours a week gathering updating and disseminating information in multiple systems and documents (release contents, application dependencies, test requirements etc...). consolidate the access to the information and provide visibility and traceability

    - Eliminate up to 50% of this time – a conservative 2 hours per week saves 2 weeks per person per year

   - Recover £2500 per person per year
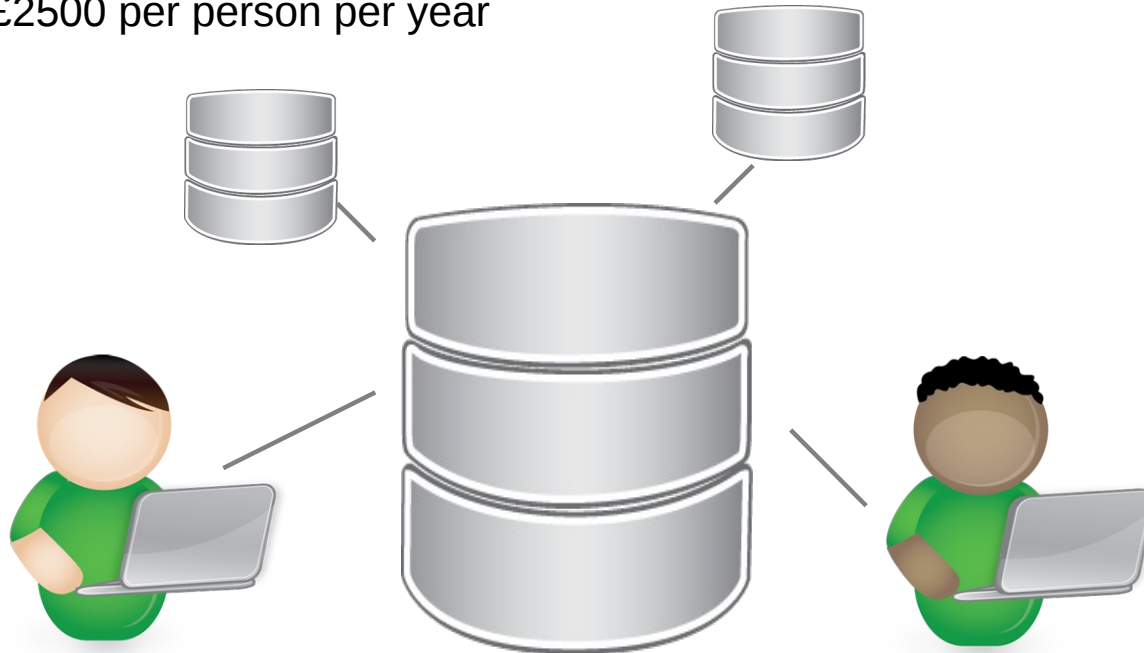
Task Optimisation

- **Minimise actions and tools required to perform tasks**

  - A typical developer may switch between multiple tools (Project planner, spreadsheet, bug tracking tool, editor, debugger, ...)

  - Information may be on deep unrelated screens requiring multiple key strokes to access

    - Providing information where it is needed can eliminate 50% of key strokes and screen/tool interactions

    - Simplifying user actions to perform regular tasks can easily save at least 1hr per week per developer

- **Provide resources where needed**

  - Developers typically have to wait for compile and testing resources

    - Eliminate the waiting by providing local accessible personal environments for compile and test

      - If a developer has to wait for 20 minutes for each compile to start and performs 3 compiles a day reducing that waiting time by 20% gains 1 hour per week

    - Eliminate 20% of the compiles with intelligent assistance(in-syntax checking etc)

      - Recovered time is 1hr per week

Make Agile work for you in your Enterprise

- Take Control
- Be selective
- Empowerment
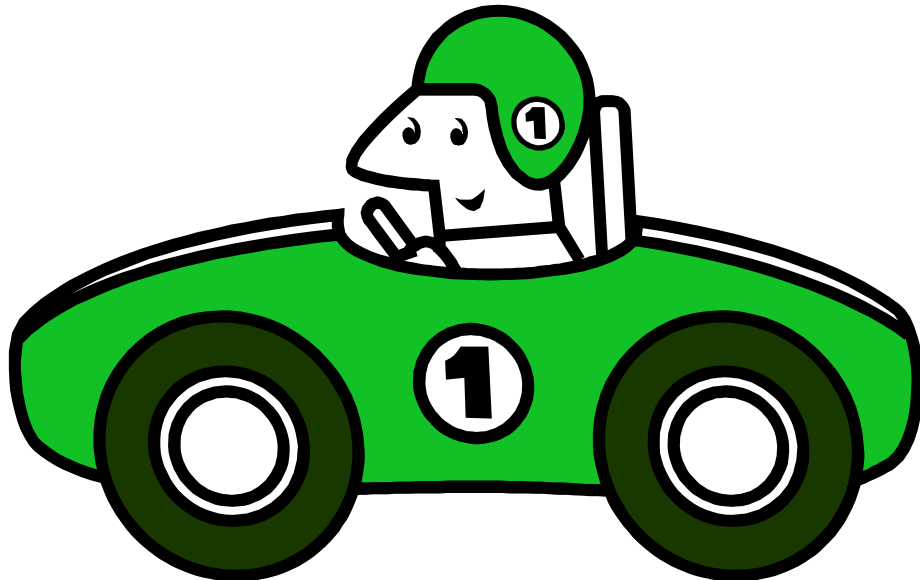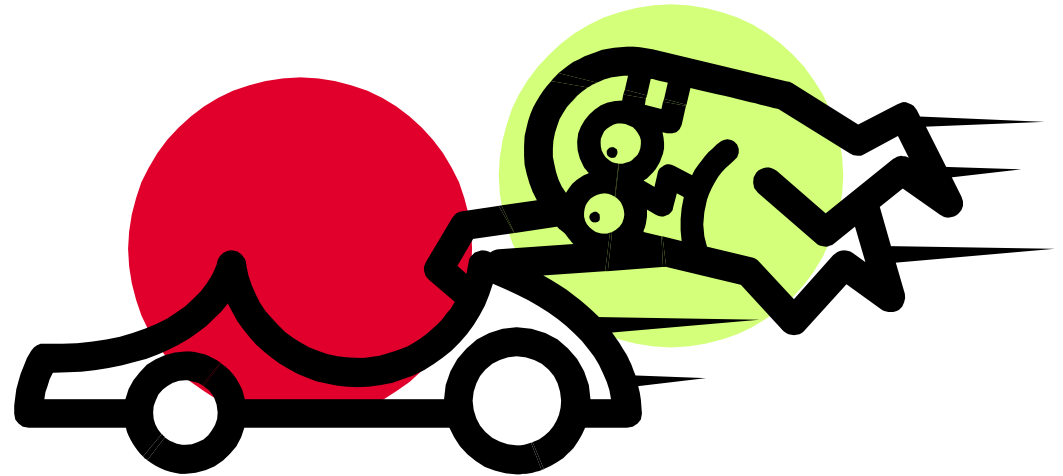
- Iterative Improvement
- Embrace CHANGE
- Collaborate & Communicate