

Success factors

# 1. Management support



# 1. Management support

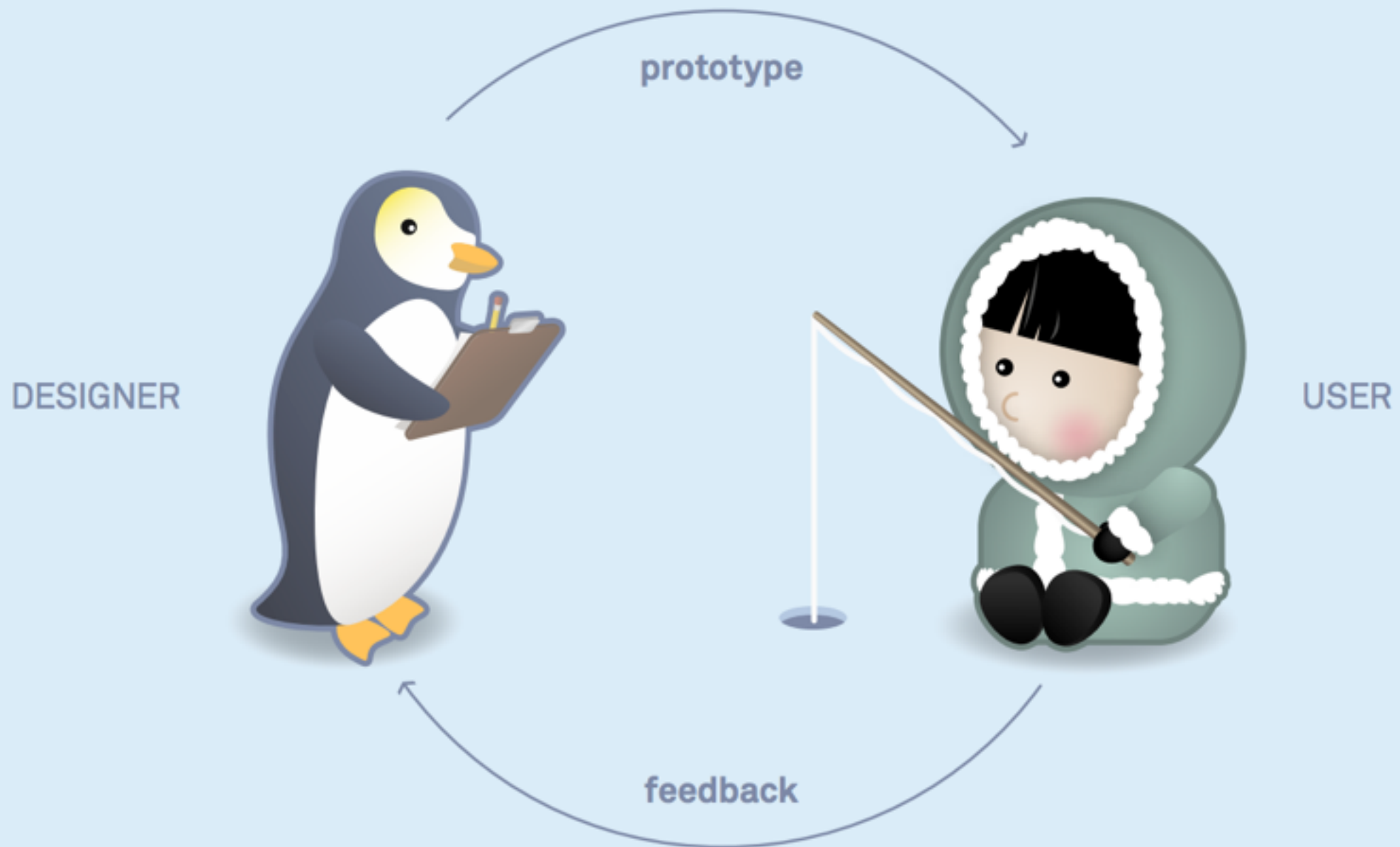
- Simple vision (stakeholders visions)
- Commitment (from executives)
- **Blink** (make decisions)
- Velocity (stepping stones / milestones)
- Education (project understanding)
- Kill switch (triggers)
- Celebrate (success)

# 1. Management support

## **Blink**

- The larger the project, the more decisions that have to be made.
- A general rule is 1.5 decisions for every \$1,000 in labor cost.
- A million-dollar project will have 1,500 decisions, while a \$10 million project will have 15,000.
- The executive sponsor will be required to participate in about 20% of these decisions.
- The difference is 300 decisions versus 3,000 decisions.

# 2. User involvement



# 2. User involvement

- Identification (key users)
- Rapport (user relationship)
- Soapbox (communication channels)
- Outcomes (stepping stones / milestones)
- **Schooling** (teaching)

# 2. User involvement

## **Schooling**

- Schooling is the teaching, learning, and transfer of information to and from the project team and to and from the users.
- The reason small projects have greater success is because the road is shorter with fewer exit ramps.
- Generally, in small projects there are fewer things to transfer to fewer people, yet it allows for greater creativity and breakthrough solutions.

# 3. Optimisation



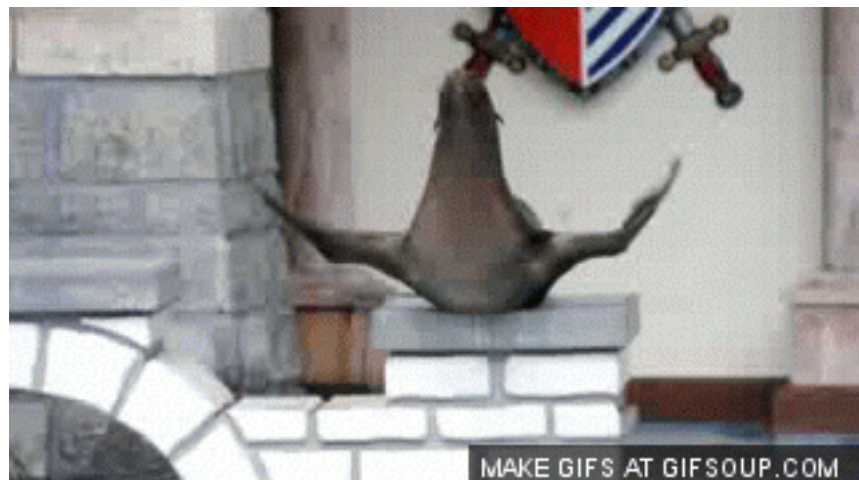


# 3. Optimisation

- Scope (Prioritise tasks)
- Accurate Estimates (Estimate tasks)
- Expectations (managing)
- **Butterfly Effect** (big impact)
- Optimal Team (SEAL - Specialised, Exceptional, Assortment, Love )

# 3. Optimisation

- Scope (Prioritise tasks)
- Accurate Estimates (Estimate tasks)
- Expectations (managing)
- **Butterfly Effect** (big impact)
- Optimal Team (SEAL - Specialised, Exceptional, Assortment, Love )



# 3. Optimisation

- Scope (Prioritise tasks)
- Accurate Estimates (Estimate tasks)
- Expectations (managing)
- **Butterfly Effect** (big impact)
- Optimal Team (SEAL - Specialised, Exceptional, Assortment, Love )



# 3. Optimisation

## **Butterfly Effect**

- Small projects make a big impact.
- Small projects also pave the way for more small projects
- Success creates an environment that breeds further success.
- The challenge is to make sure that the organisation does not get over confident

# 4. Skilled resources

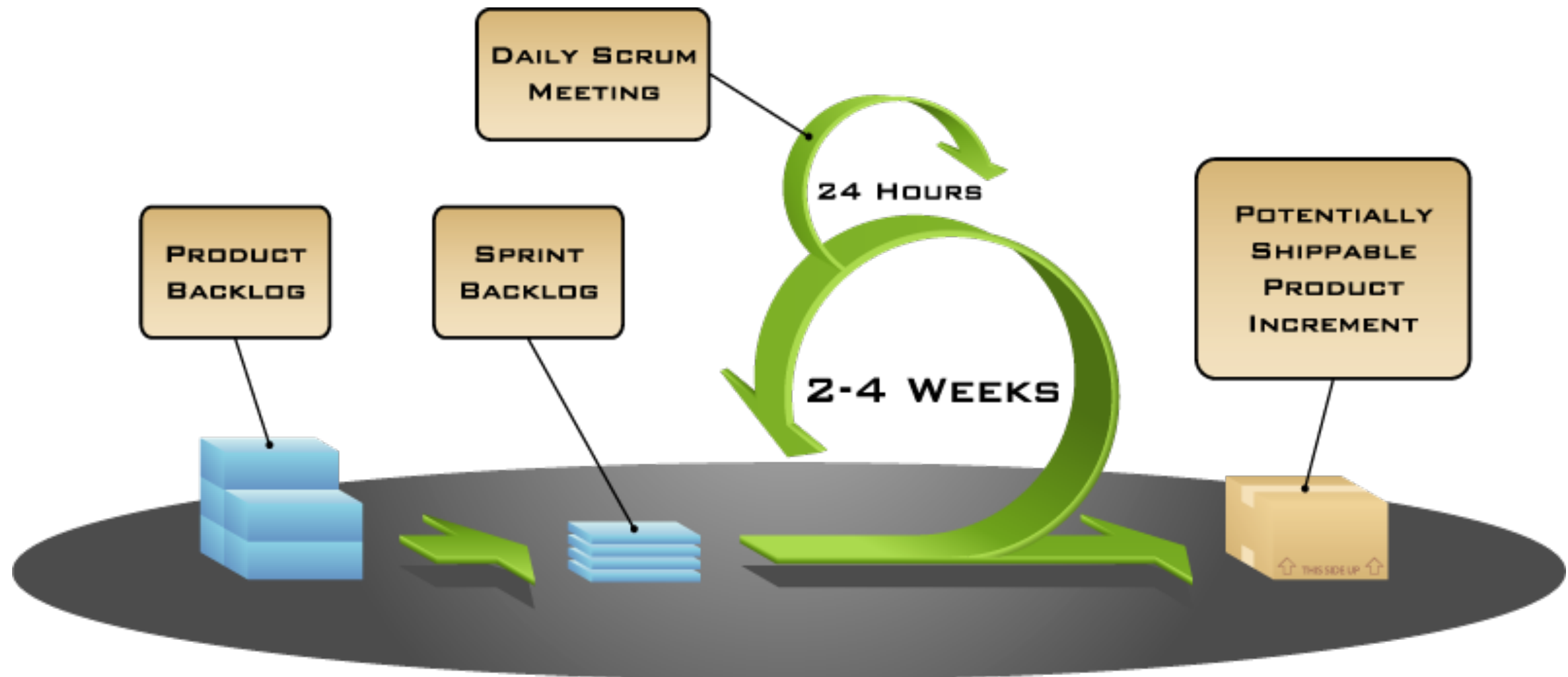


# 5. Project management expertise





# 6. Agile process



# 7. Clear objectives





# 8. Emotional maturity

## The Emotions of Chuck Norris



Guilt



Suffering



Pleasure



Remorse



Anger



Kindness



Surprise



Desire

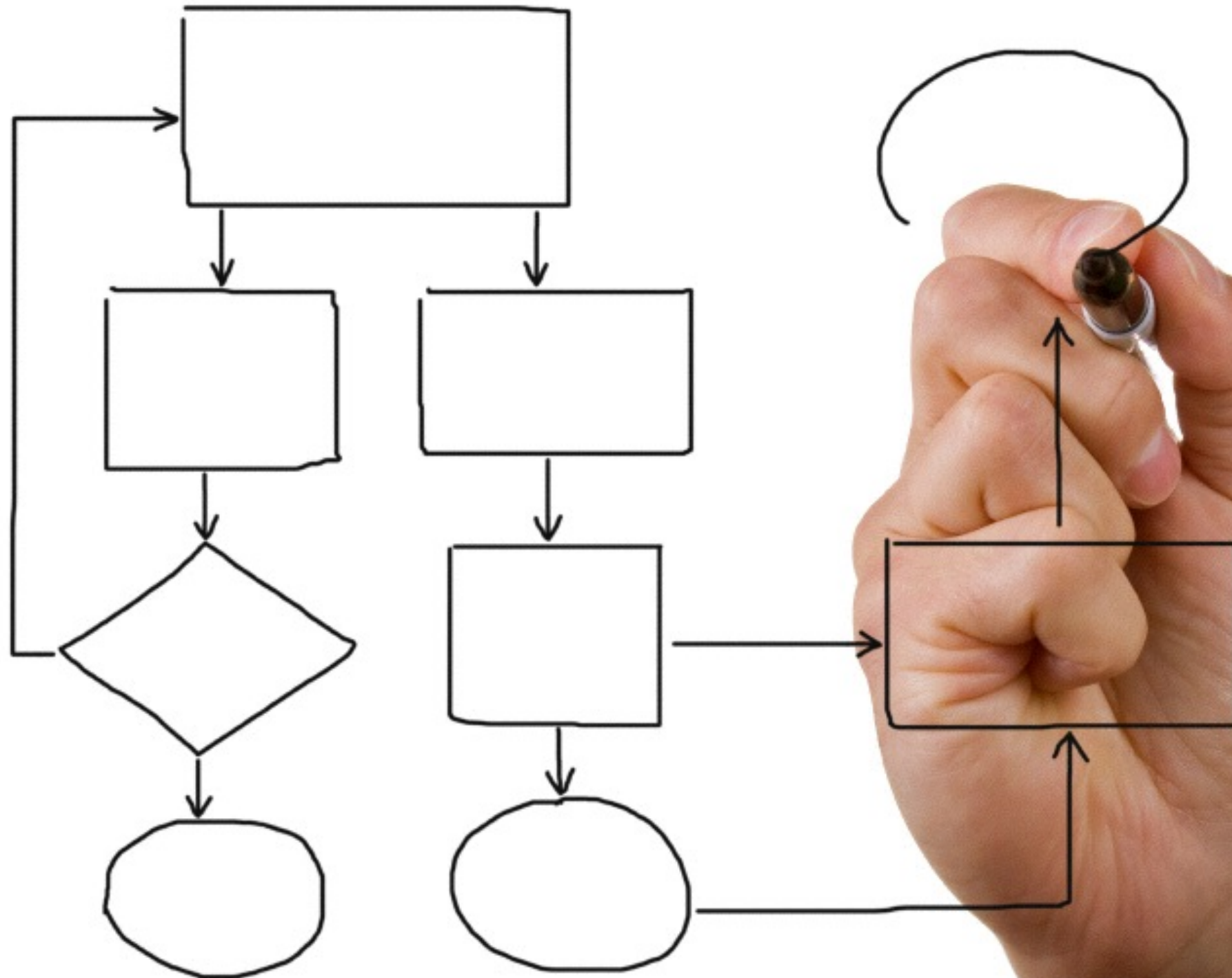


Love



Despair

# 9. Execution



# 10. Tools and infrastructure

The screenshot displays a Jira Kanban board for the project 'EDH'. The top navigation bar includes links for Dashboards, Projects, Issues, Agile, and a 'Create issue' button. The board is organized into columns representing different stages of the workflow: To Do (15 items), Blocked (3 items), Next (2 items), In Progress (12 items), Review (3 items), To Test (2 items), and Done (39 items). Each column contains task cards with details such as issue ID, title, and status. For example, in the 'To Do' column, tasks include 'Same risk added multiple time in' (ED...-5135) and 'Switching language creates new' (ED...-5556). The 'In Progress' column shows tasks like 'For UCL remove contract' (ED...-5256) and 'Add new document statuses' (ED...-5643). The 'Done' column lists completed tasks such as 'Add "General comments"' (ED...-5697) and 'Fix the "General comments"' (ED...-5698). The interface also features a search bar, a 'Board' dropdown, and a list of quick filters for various project areas.

EDH

Plan Work Report Board

QUICK FILTERS: Activiti Migration Support calls Snow Only My Issues Andrew Andrey Daniil Dmitry Guillaume Joao Nicolas Pavel

15 To Do 3 Blocked Max 10 2 Next 12 In Progress 3 Review 2 To Test 39 Done Release...

Tasks 2 10 issues

- ED...-5135 Same risk added multiple time in
- ED...-5556 Switching language creates new
- ED...-5566 PHREQ display note the financial
- ED...-5597 Alfresco tutorials - record
- ED...-5599 Alfresco tutorials - UI book
- ED...-5611 Notification on documents and
- ED...-5577 Improve termination checksheet in
- ED...-5603 Translate UCL emails and labels
- ED...-5256 For UCL remove contract
- ED...-5643 Add new document statuses
- ED...-5649 SUPPORT April
- ED...-5655 LVRQ: create missing
- ED...-5661 ais-workflow / workflow-
- ED...-5676 Alfresco
- ED...-5672 Rename cern.info noti + service to
- ED...-5692 Workflow notifications contain
- ED...-5674 Support for the "Share" button in the
- EDH-5540 Better suppo...
- ED...-5697 Add "General comments"
- ED...-5698 Fix the "General comments"
- ED...-5700 Get rid of grey padding in
- ED...-5701 Add a method checking
- ED...-5702 Add "creator signs" into
- ED...-5703

# 10. Tools and infrastructure

**Electronic Document Handling**

Summary

**Description**

URL: <http://edh.com.ch>  
Lead: Ben Coulurier  
Key: EDH

**Issues: Due**

- EDH-2222** Due Date: Last Friday  
Leave Request for ENIC shouldn't follow signature process but should only send information mail
- EDH-2421**  
Modify the Check Sheet overview to search by service concerned
- EDH-508**  
Signal when beneficiary has no CERNID

**Issues: 30 Day Summary**

Issues: 101 created and 85 resolved

**Versions: Due**

- Support Calls
- ToCheck
- Future

**Activity Stream**

October 15 - 9:00 AM

- Kiril Golikov updated 2 fields of **EDH-2375** (NS Framework - validation: add support for custom validation rules)
- Kiril Golikov changed the status to Blocked of **EDH-2439** (TTP: "Conference" flag + should appear in short description)
- Kiril Golikov commented on **EDH-2439** (TTP: "Conference" flag + should appear in short description) saying:  
Waiting for help-texts from Randin Raudat / Magali Pomet

October 14 - 6:00 PM

- Ivan Zeprevan closed **EDH-2340** (Allow not-yet-approved Training Requests to be linked from Travel Request) saying:  
fixed

October 14 - 5:00 PM

- Ivan Zeprevan closed **EDH-2410** (Re-establish supervisor objectives in the MARS form) saying:  
fixed
- Ivan Zeprevan updated 2 fields of **EDH-2410** (Re-establish supervisor objectives in the MARS form)
- Ivan Zeprevan changed the status to Under Review of **EDH-2410** (Re-establish supervisor objectives in the MARS form)
- Ivan Zeprevan updated 2 fields of **EDH-2410** (Re-establish supervisor objectives in the MARS form)



# 10. Tools and infrastructure

Jira Dashboards ▾ Projects ▾ Issues ▾ Agile ▾ Create Issue

## GS-AIS-EB Dashboard

**Time Sheet**

Summary for **Andrew Short** and filter **Filter for EDH** (Details)

<< wk mo >>

|  | Mon<br>7/Apr | Tue<br>8/Apr | Wed<br>9/Apr | Thu<br>10/Apr | Fri<br>11/Apr | Sat<br>12/Apr | Sun<br>13/Apr | Tot    |
|--|--------------|--------------|--------------|---------------|---------------|---------------|---------------|--------|
| + EDH-5529 Support task March 2014 ↓                 | 1h           | 4h           | 2h           | 0.25h         | 4h            |               |               | 11.25h |
| EDH-5636 add new depot for CERN and PREVESSIN ↑      |              |              |              | 2h            |               |               |               | 2h     |
| EDH-5669 Alfresco - Create metadata model for DRSC ↓ |              |              |              |               | 2h            |               |               | 2h     |
| EDH-5673 Create alfresco repository svn ↓            | 2h           |              |              |               |               |               |               | 2h     |
| EDH-5676 Alfresco online ECM tutorial ↓              | 1h           |              | 1h           | 0.5h          |               |               |               | 2.5h   |
| EDH-5678 Alfresco local installation ↓               | 2h           |              |              |               |               |               |               | 2h     |
| EDH-5679 Alfresco project plan ↓                     | 3h           | 3h           | 3h           | 1.25h         |               |               |               | 10.25h |
| EDH-5687 Alfresco Meetings - April ↓                 | 1h           | 1h           |              | 4h            | 2h            |               |               | 8h     |
| Total:   | 10h          | 8h           | 6h           | 8h            | 8h            |               |               | 40h    |

**Issues in progress**

| T | Key      | Summary                      | P ↓ |
|---|----------|------------------------------|-----|
|   | EPW-194  | Alfresco                     | ↓   |
|   | EDH-5676 | Alfresco online ECM tutorial | ↓   |
|   | EDH-5687 | Alfresco Meetings - April    | ↓   |

1–3 of 3

**Time Sheet**

Summary for group **eb-developers** and filter **Filter for EDH** (Details)

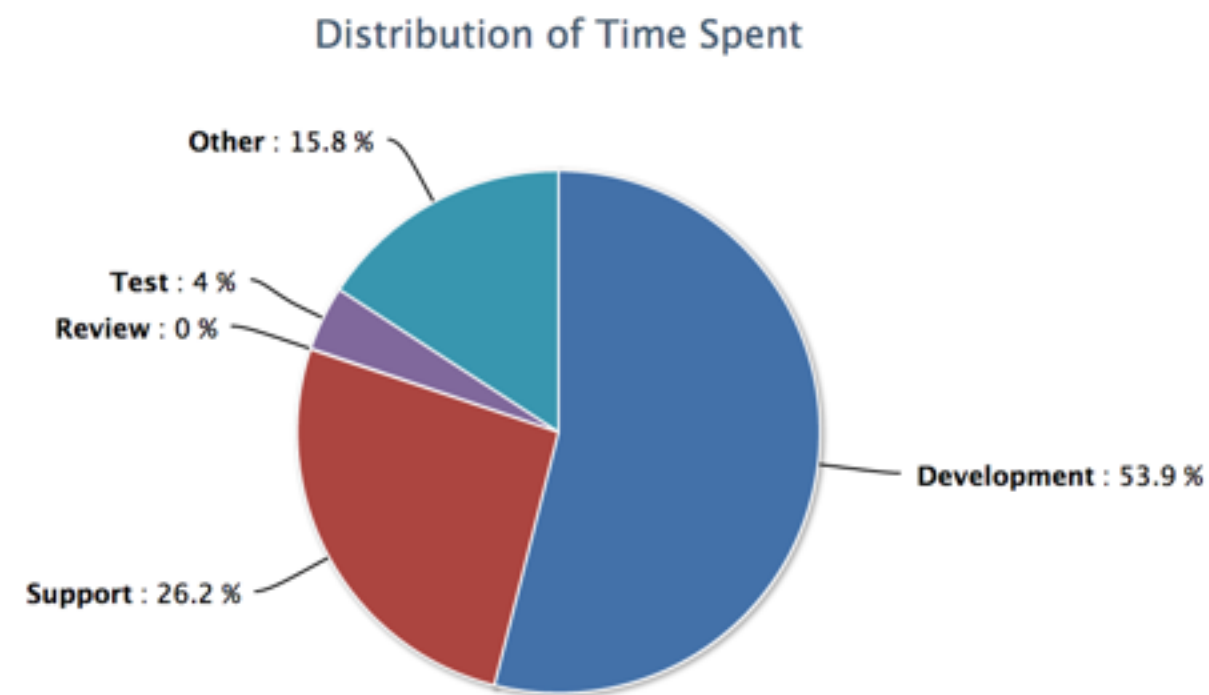
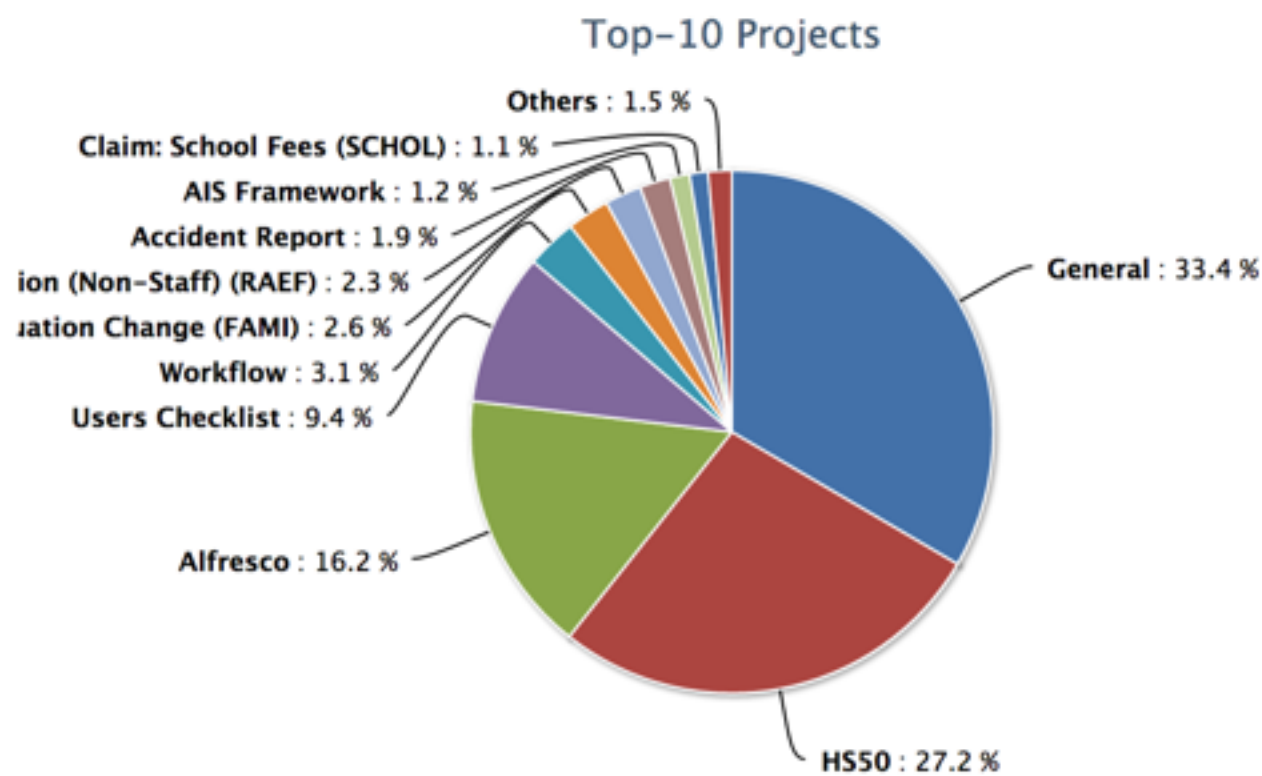
<< wk mo >>

|                             | Mon<br>7/Apr | Tue<br>8/Apr | Wed<br>9/Apr | Thu<br>10/Apr | Fri<br>11/Apr | Sat<br>12/Apr | Sun<br>13/Apr | Tot  |
|-----------------------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|------|
| Andrey Avtomonov            | 7h           | 4h           |              | 6h            | 6h            |               |               | 23h  |
| Aistools Internal app links |              |              |              |               |               |               |               |      |
| Andrew Short                | 10h          | 8h           | 6h           | 8h            | 8h            |               |               | 40h  |
| Daniil Meshkov              |              |              | 1h           |               |               |               |               | 1h   |
| Dimitry Potapov             | 8h           | 8h           | 8h           | 8h            | 7h            |               |               | 39h  |
| Guillaume Ame               | 6.5h         |              | 1h           |               |               |               |               | 7.5h |

**Assigned to Me**

| T | Key      | Summary   | P ↓ |
|---|----------|---|-----|
|   | EPW-17   | MARS Changes for the new competency model   | ↑   |
|   | EPW-18   | EDH CCM Document v1   | ↑   |
|   | EPW-65   | Recruitment Request changes for the new competency model                                  | ↑   |
|   | EPW-92   | CCM release and follow-up   | ↑   |
|   | EPW-140  | Update documentation in Confluence  | ↑   |
|   | EDH-4304 | MARS 2012: Modify development objectives for the reference period to support competencies | ↑   |
|   | EDH-4312 | MARS 2012: Update Rpt Report  | ↑   |

# 10. Tools and infrastructure



# 10. Tools and infrastructure

The screenshot displays the Atlassian FishEye repository viewer interface. The top navigation bar includes links for Dashboard, Source, Projects, People, and Reviews. The current view is for a code review titled "EDH-2385: Visually highlight periods of hotel unavailability in case reservation for the whole...". The review is closed on 08 Oct. The left sidebar shows the project structure, including the trunk directory and various source files. The main content area displays the code for RoomAvailabilityInfo.java, with a red line indicating the range of changes (3017 to 3151). The code includes private fields for m\_startDate, m\_endDate, and m\_availableRooms, and a public method getTotalNights(). Below the code, there are two review comments. The first comment, from "looker", asks if the end date could be before the start date. The second comment, from "stoy", explains that this is not a concern because the object is created by their own code and follows the GIGO principle.

CR-EDH > CR-EDH-559  
**EDH-2385: Visually highlight periods of hotel unavailability in case reservation for the whole...**  
Closed on 08 Oct  
Author & Moderator Reviewers

CR-EDH-559 5

Details  
Objectives  
General Comments

EDHSVN

- trunk
  - hostel-management/src/main/java/cem/hostel
    - FideliHome.java
    - FideliService.java 1
    - RoomAvailabilityInfo.java 2
  - hostel-management-ui/src/main
    - resources/cem/hostel
      - messages\_en.properties
      - messages\_fr.properties 2
    - webapp
      - css
        - styles.css
      - chooseRoom.jsp

/trunk/.../hostel/RoomAvailabilityInfo.java Changed 2

3017 3151

```
20 23 private Date m_startDate;  
21 24 private Date m_endDate;  
22 25 private List<RoomInfo> m_availableRooms;  
  
76 79 }  
77 80  
78 81 /**  
82  * Get total number of nights for this period  
83  *  
84  * @return The total number of nights for this period  
85  */  
86 public int getTotalNights()  
87 {  
88     if ((m_endDate == null) || (m_startDate == null))  
89         return 0;  
90     else  
91     {  
92         double totalNightsCalculation = (m_endDate.getTime() - m_startDate.getTime());
```

looker says: 07 Oct  
Might it happen that the end date will be before the start date?  
Add to Favourites

stoy says: 08 Oct  
In principle no since the object is created by our own code according to our algorithm. In any case I don't want to do an additional check for it - I like the GIGO (Garbage in, garbage out) principle.

Atlassian FishEye repository viewer with Crucible code review. (Version:2.3.6 Build:20100824065214 2010-08-24) - Administration - Page generated 2010-10-13 18:09 +0200

# Factors of success

1. Executive management support
2. User involvement
3. Optimisation
4. Skilled resources
5. Project management expertise
6. Agile process
7. Clear business objectives
8. Emotional maturity
9. Execution
10. Tools and infrastructure





# case study

- National Health Service (NHS) ( $\approx$  Sistema Nacional de Salud)
- UK, government run
- National Program for IT (NPfIT) 2002 - 2011
- Believed to be the largest IT healthcare system in the world
- >14 billion euros spent... 14,000,000,000!
- Designed to reform the way the NHS uses data



# case study

## **Leadership and management changes**

- Main project leader left taking valuable expertise

## **Staff expressed usability concerns**

- Users involved too late
- When finally involved they expressed serious concerns

## **Skills and capacity shortages**

- Left inexperienced project leaders to take over

## **Complexity**

- Failed to split the project into smaller tasks
- Goals were not achievable



# case study

- Federal Bureau of Investigation (FBI)
- US, government run
- Virtual Case File (VCF) 2000 - 2005
- Would replace several older software systems
- ~123 million euros spent... 123,000,000!
- Designed to modernise IT system



# case study

## **Leadership and management changes and expertise**

- Lack of training, experience and micromanagement
- Contributed to specification problems
- Micromanagement of software developers

## **Users complained system was unusable**

- Users involved too late

## **Lack of Skilled Resources**

- Personnel who had little or no training
- Lack of training, experience and micromanagement

## **Missing clear objectives**

- Requirements were continually added to the system even as it was falling behind schedule



# case study

- National Aeronautics and Space Administration (NASA)
- US, government run
- Mars Climate Orbiter 1998 - 1999
- Built by Lockheed Martin
- ~238 million euros spent
- Designed to study martian climate and atmosphere



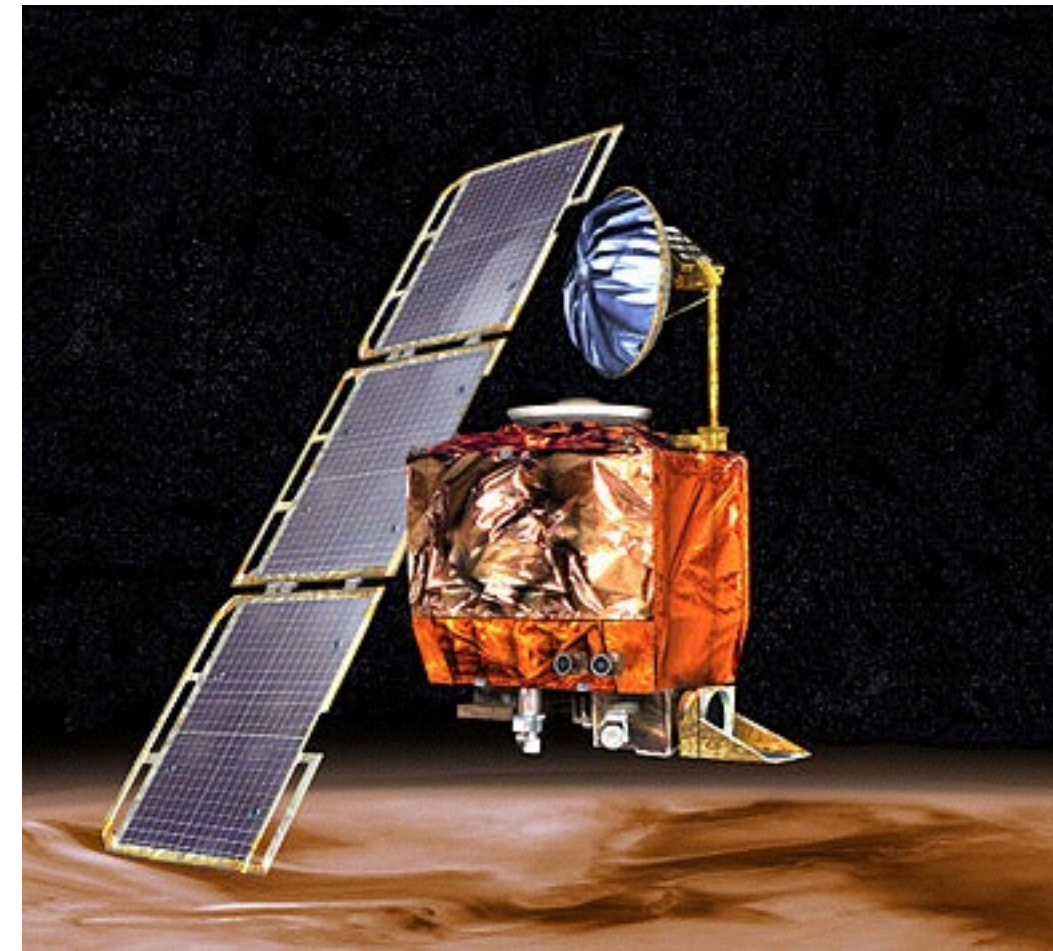
# case study

## **Insufficient testing**

- Testing missed failed to find the issue.

## **Lack of requirements understanding**

- It was assumed that metric units would be used.



# Your challenge

- Come in the top 39% of successful projects
- Don't go over time or cost restrictions.
- Deliver a high quality product and improve the reputation of the IT industry.
- Don't be next years case study!

# Thank you

Speaker: Andrew Short



# References

# References

- Standish Group. 2014. CHAOS Report. [ONLINE] Available at: <http://versionone.com/assets/img/files/ChaosManifesto2013.pdf>. [Accessed 05 April 14].
- Dr. Paul Dorsey. 2014. Top 10 Reasons Why Systems Projects Fail. [ONLINE] Available at: <http://www.hks.harvard.edu/m-rcbg/ethiopia/Publications/Top%2010%20Reasons%20Why%20Systems%20Projects%20Fail.pdf>. [Accessed 05 April 2014].
- UK House of Commons. 2013. The dismantled National Programme for IT in the NHS. [ONLINE] Available at: <http://www.publications.parliament.uk/pa/cm201314/cmselect/cmpublic/294/294.pdf>. [Accessed 01 April 14].
- Shuhab-u-Tariq. 2010. Why do IT projects fail. [ONLINE] Available at: <http://www.shuhab.com/Downloads/WhyDoITProjectsFail.pdf>. [Accessed 01 April 14].
- Douglas Isbell et.al. 1999. Mars climate orbiter team finds likely cause of loss. [ONLINE] Available at: <http://mars.jpl.nasa.gov/msp98/news/mco990930.html> [Accessed 01 April 14].

# Further reading

- List of failed software projects: <http://spectrum.ieee.org/computing/software/why-software-fails>
- List of failures: <http://project-management.com/top-10-main-causes-of-project-failure/>
- Failure of Corporate Websites: <http://www.nngroup.com/articles/failure-of-corporate-websites/>
- Reasons for failure: <http://info.psu.edu.sa/psu/cis/biq/SE501/a/a1/MajorCausesofSoftwareProjectFailures.pdf>