

Nine Low-Tech Tips for Project Management

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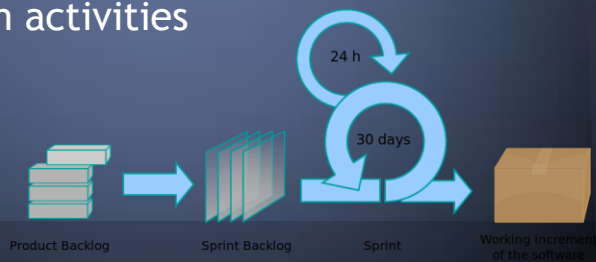
Background

Dentists Management Corporation (DMC) is a subsidiary company of Moda Health.

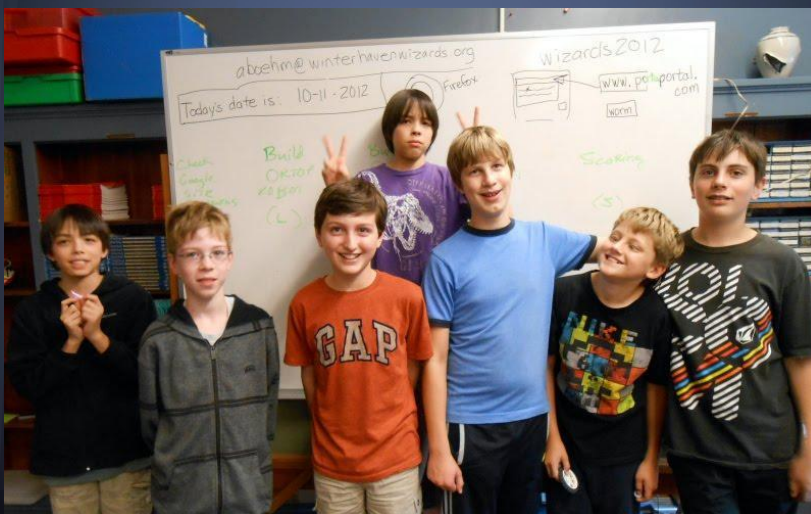
DMC develops clinical and business management systems for dental offices

Background

- Have been using some form of Agile for over 10 years.
- Used Scrum for the past five years
- It took repetition, over multiple sprints and projects, before we realized the full value of the Scrum activities



Lego Team



Because we go about software development in teams and projects and other tightly knit working groups, we are mostly in the human communication business.

Tom DeMarco
Peopleware

Value “individuals and interactions over processes and tools.”

Agile Manifesto

Simpler project management processes improve communication.

Low-tech practices can lead to:

- Higher visibility
- More democratic processes
- Collaborative solutions

How does Scrum affect project management?

“Scrum moves organization from the individual level to the team level”

- Adam Light

What Does This Mean?

- Move ideas into a shared work space
- Get the right people working on the right things at the right time.
- Use feedback cycles to improve solutions
- Increase collaboration

In self-organizing teams, the team leads the project, while the Scrum Master facilitates.

So, how to get the team to lead?

The Tips

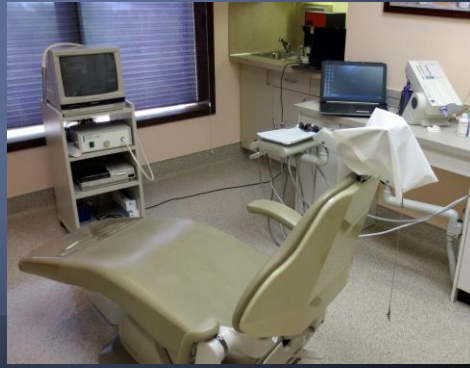
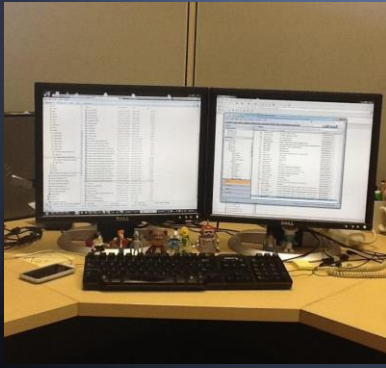
#1 Take a Field Trip

Vision documents are necessarily imperfect

- Fuzzy front end
- Vague descriptions of “users”
- Not enough detail on the workflows

Take a Field Trip

GOOB - Get Out Of the Building
(or... Get Out of the Box)



#2 Make Story Cards Work Overtime

Agile introduces story cards

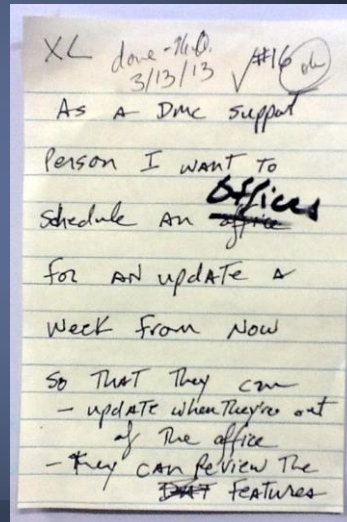
As a <role>, I want <goal/desire> so that
<benefit>

“The cards are merely an artifact to begin the conversation about the full requirements of the feature” - Alistair Cockburn

Make Story Cards Work Overtime

Physical card is a shortcut to...

- Tracking ID
- Story size
- Initial priority
- Champion
- Special conditions



Make Story Cards Work Overtime

Use the position to add meaning

- Temporarily remove the card to remove it from discussion
- Turn it upside down to indicate the feature is in distress
- Use the card as a talking stick

#3 Use an Insertion Sort to Prioritize

Scrum requires a prioritized backlog of stories.

Sounds easy, right? Not always...

Use an Insertion Sort to Prioritize

Mixed priorities are always a problem, and never rare

Problems with other prioritization methods

- One person is usually in charge
- The process isn't efficient
- The process isn't inclusive
- Often priorities change behind closed doors
- Cherry-picking “high” priority items
- Multiple priorities lead to uncertainties

Use an Insertion Sort to Prioritize



Use an Insertion Sort to Prioritize

Insert sort offers the following benefits

- Everyone with a stake can participate
- The Product Owner has the final call
- Negotiations occur openly
- Each feature gets a chance in the spotlight
- The priority is set relative to other features
- The participatory process helps everyone understand the scope of the project

#4 Keep the Sizes Relative

Often the hardest thing about a project is just getting started

Teams may be unwilling to estimate story sizes because there are so many uncertainties

Keep the Sizes Relative

- Relative sizing is simpler since less information is required.
- Team can recognize which stories are larger than others.
- Organize the stories by T-Shirt sizes (XL, L, M, S, and XS) relative to each other.
- After several sprints the team will have a better idea of the schedule for the remaining stories.

Keep the Sizes Relative



Keep the Sizes Relative



Keep the Sizes Relative

Look for red flags

- Watch out for L and XL stories that have lower priorities
- Large stories late in the project may be riskier
- The majority of the stories should fall into the small, medium and large categories.
- If there's a large number of XL stories, they may need to be re-examined

Keep the Sizes Relative

- Relative sizing only works for stories considered during the same session
- The simplicity of the process makes it accessible for teams and team members new to Scrum



#5 Use Information Radiators



“Generic term for any of a number of handwritten, drawn, printed or electronic displays which a team places in a highly visible location, so that all team members as well as passers-by can see the latest information at a glance” - Cockburn

Use Information Radiators

- Shows project status to people who are not involved day-to-day
- Provides enough information to avoid interrupting questions.
- Implies team is responsible for the status

Use Information Radiators

- The current sprint's stories and related tasks
- A Kanban-style board with work under progress
- The current build number and timestamp
- The most recent release number and timestamp
- All the stories from the product backlog

Use Information Radiators



Use Information Radiators

- A graphical display of the number of tests planned versus passing
- Resolutions discussed during the most recent sprint review
- Status of team members on vacation or otherwise unavailable

#6 Draw Out Ideas

Observing a meeting is boring

Participating in a meeting is productive

Why do people doodle in meetings?

Doodling takes up enough cognitive energy to prevent the mind from daydreaming.

Draw Out Ideas

Telling stories while drawing helps people who learn using different styles.

Drawing is a process *and* a result.

Drawing effects a change in your body

Draw Out Ideas

Drawing out ideas transcends

- Language barriers
- Technical differences
- Differences in jargon

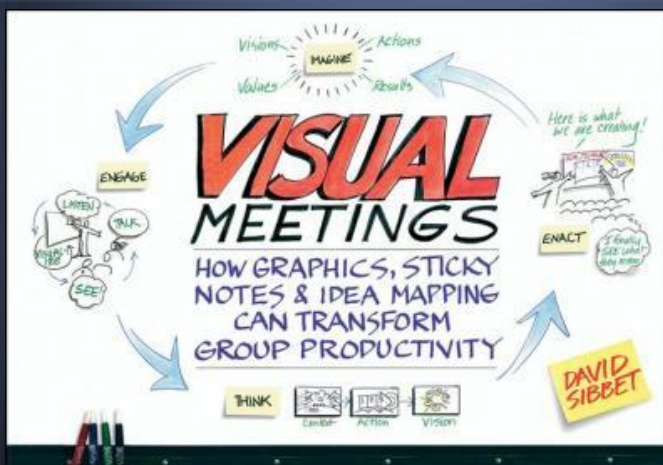
Draw Out Ideas

Drawing is participatory

A completed image gives the impression it is above criticism

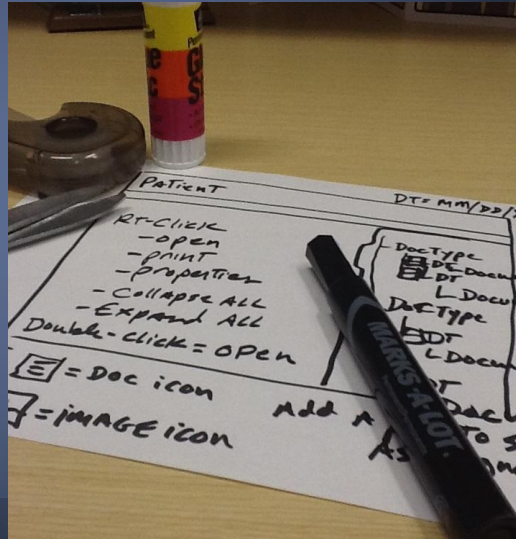
Drawing fosters involvement in the critical thinking process

Draw Out Ideas



#7 Design with Paper Prototypes

Paper prototyping
is like a writing
haiku.



Design with Paper Prototypes

Working interactively on the page turns it into
a shared design problem.

Design with Paper Prototypes



Core Mobile Camera UI design
illustrations by *Tobie Langel*.

Pick Me Up web design by Gabriel
Flores, 6th Grade



Design with Paper Prototypes

Paper prototyping
continues to be useful in
the age of mobile
devices



#8 Increase Communication by Pairing

Scrum relies on a self-organizing, cross-functional team. The Scrum team is self-organizing in that there is no overall team leader who decides which person will do which task or how a problem will be solved.

Increase Communication by Pairing

Agile Manifesto says:

“The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.”

Increase Communication by Pairing

Watch out for personal silos

Expand pair-programming to include cross-functional pairs

Use the sprint planning process to budget time for pairing

Pairing shortens feedback loops

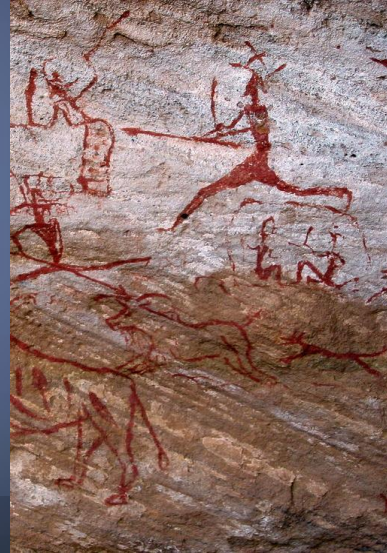
- Developers can pair with testers
- Developers can pair with technical writers
- Product owners can pair with QA and developers

#9 Keep a Project Diary

Recording project activities is not a new idea

Most metrics won't help you personally

Collaborate with your future self



Keep a Project Diary

- Hallway Conversations
- Complex email threads
- Reasons for decisions
- Exceptional efforts by team members
- Gut feelings or intuitions about the project

Keep a Project Diary

Benefits

- "What were we thinking at the time?"
- During retrospectives, the diary can help you prepare your notes.
- Helps if you have to contribute toward employee evaluations
- Provides a "long tail", some thing to give you a history

Conclusion

Vision -> Field Trip

Priorities -> Insertion Sort

Features -> Story Cards

Estimating Schedule -> Relative Sizing

Conclusion

Status Reports -> Information Radiators

UI Design -> Paper Prototypes

Meetings -> Drawing Sessions

Tracking Dependencies -> Pairing

Post-Mortems -> Personal Journal

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