

Agile Product Management



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By

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**Can Agile methods
work effectively with
Product Management in a
market driven product
environment?**

Terms

- Agile – Agile Software Development methods – <http://agilemanifesto.org>
- Product Management – Managing the evolution, market fit and customer satisfaction of commercial software products
- Agile Product Management – Product Management in an Agile development environment

Attributes of Agile Methods

- Close collaboration between developer and business experts (users, customers)
- Face-to-face communication to and within the development team
- Frequent delivery of new deployable business value with short development cycles (4-6 weeks)
- Tight, self-organized teams
- Coding techniques so inevitable requirements churn is not a crisis
- Reduced generation and use of documentation

*Paraphrased from September 2004 Cursor Magazine article
“Competing in the Software Industry – Will Agile Methods Help?”
By Ed Carroll - ProDX*

Attributes of Product Management

- Product Management (PM) is focused on market issues:
 - Product that justifies purchase
 - Product that satisfies customers
 - Product that beats competitor's product
 - Product that anticipates emerging needs
 - Product with applicability, usability, viability, stability, predictability, and sell-ability
- PM Tools: MRD, PRD, System Specifications, User Manuals, Training Material, etc. – document, document, document

The Agile PM Question

“Agile methods work very well in product development environments, it is the way all software will be built in the future.”

Manager in charge of an ISV Agile development team for 3 years

“Agile methods should not be used in software product development situations!”

Director of Product Marketing with experience at two Agile product organizations
VP of Marketing with three years experience working with Agile methods

Agile PM Challenges & Suggestions

Objectives - Agile vs. PM



Agile software development has been equated to driving a car, applying constant refinements that respond to the never-ending changes in road conditions (developing), or responding to changes in requirements – **is not the primary objective.**
Interpreted from "Planning Extreme Programming"

by Kent Beck and Martin Fowler, Addison-Wesley
selling the product is!

Agile PM Challenge



“If you don’t have a stable product you don’t have anything” – VP Marketing

“In commercial software, profit results from building a product once and selling it many times, not building it many times each time you sell it”

- Commercial Software Product Manager

The challenge is knowing whether you’re selling a product or a service

Agile PM - Suggestions

- Know if you're operation is product or service oriented
 - Product
 - Depends on market demand (requirements)
 - Anticipates demand to lead the market
 - Customers can't absorb constant change
 - Is a well defined thing (physical)
 - Service
 - Continuous updating – responding to change
 - Is always behind market
 - Is an activity (operation)
- Get everyone together
 - Market and sell a service or a product, not both
 - Deliver what you market and sell

Agile PM Challenge



- Who is the customer?
 - Buyers & end users?
 - Sales & marketing people?
 - Product Manager?

Agile PM - Suggestions

- The Agile PM must be the customer:
 - Translate market and customer needs into small enough objectives to fit Agile development cycles
 - Track evolution of functionality from small updates to achieve market, sales and customer goals
 - Track and resubmit scope reductions and simplifications
 - Integrate delivery of un-requested functionality
 - Accumulate delivery of partially implemented functionality

Agile Product Management

Rigid
Expectations of
Executives,
Customers,
Sales

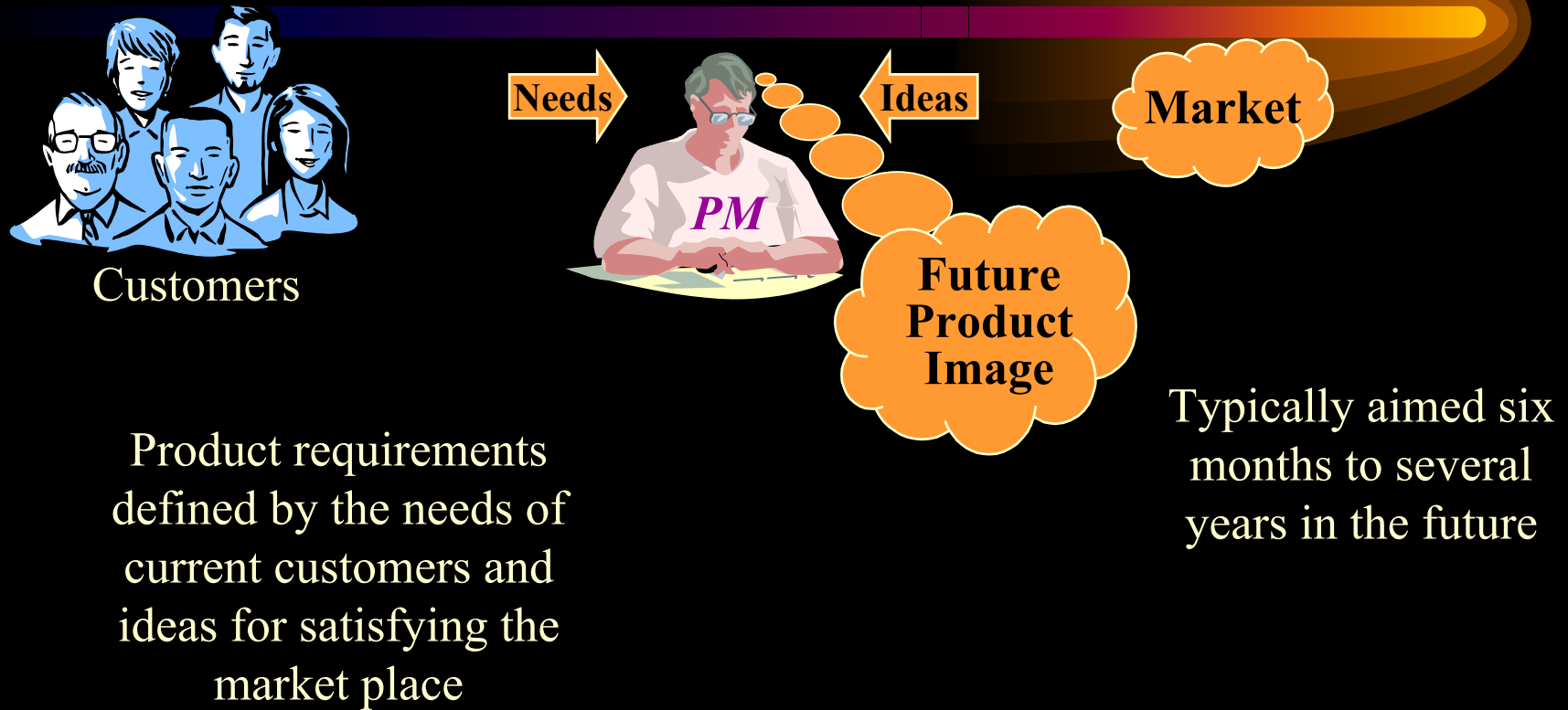
Between a Rock and Soft Spot!



Agile PM Dilemma

- Perhaps Agile does not fit a commercial product development environment
- Perhaps Agile can be adjusted to fit commercial Product Management without losing advantages
 - This is the most common approach when problems start
 - Tends to evolve toward the chaos of reactionary and ad hoc procedures (do whatever – whenever)
- Perhaps Product Management functions can be adjusted to work more effectively with an Agile methodology

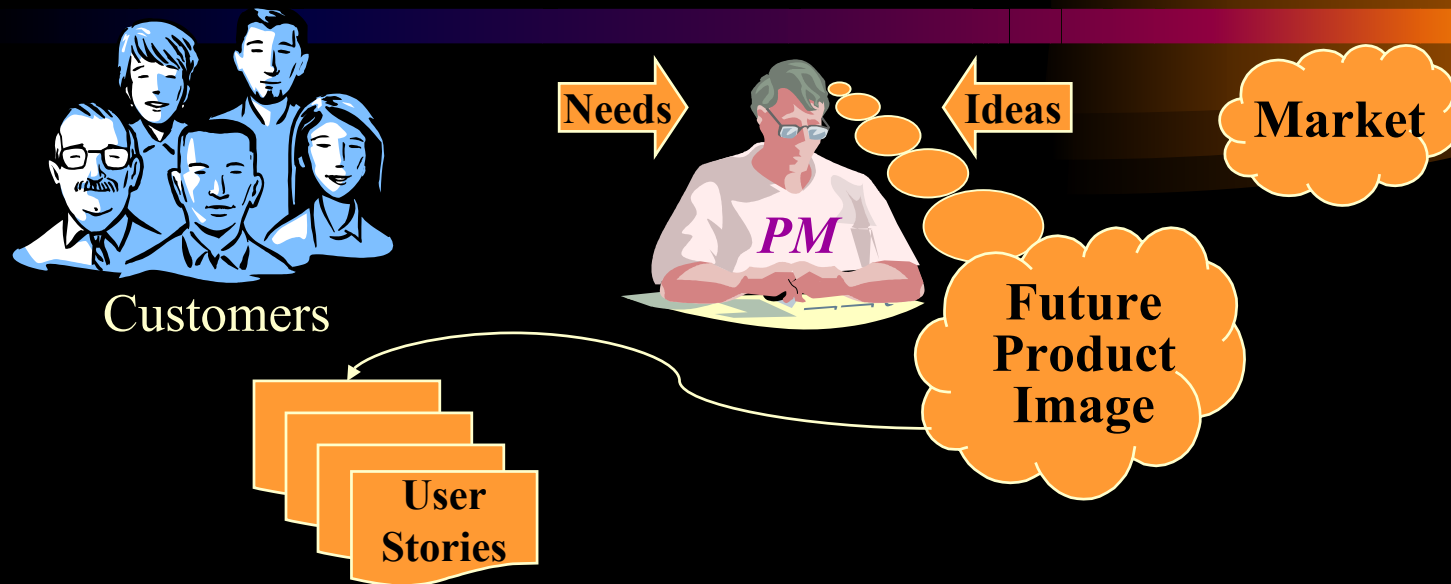
Product Manager Being Agile



Product requirements defined by the needs of current customers and ideas for satisfying the market place

Typically aimed six months to several years in the future

Product Manager Being Agile

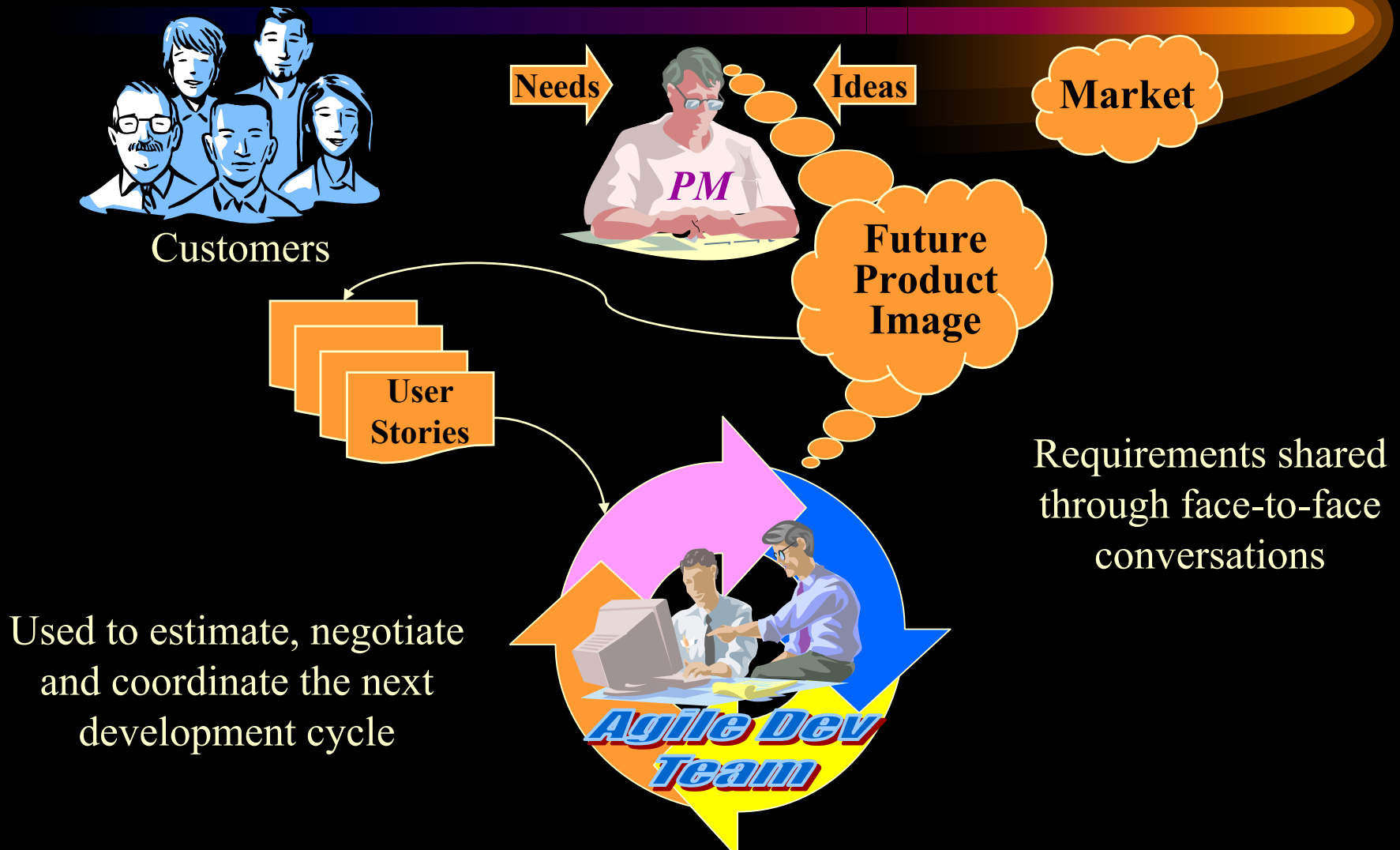


“...story cards are reminders to have a conversation rather than fully detailed requirements...”

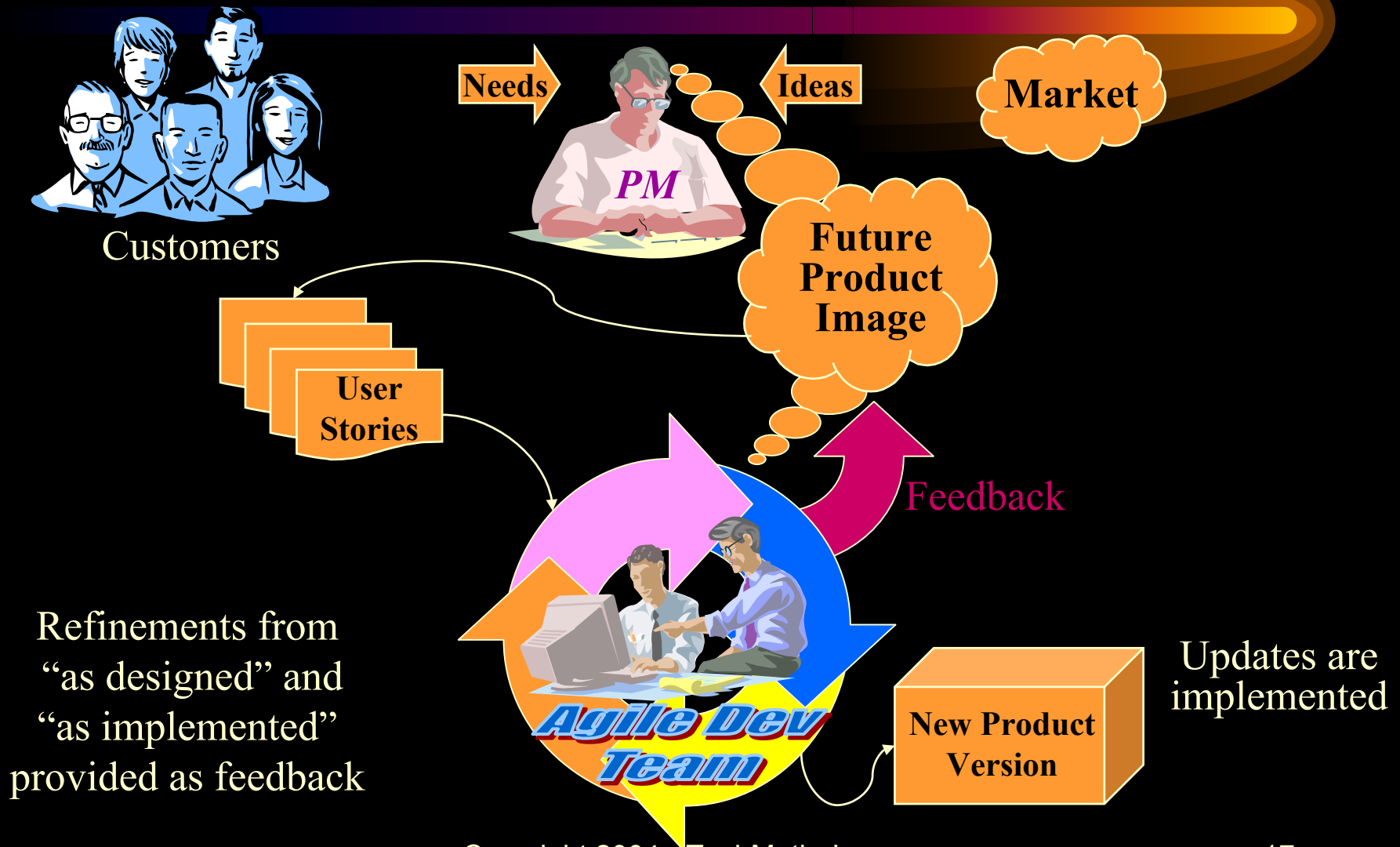
*From “User Stories Applied”
by Mike Cohn,
Copyright 2004 by Addison-Wesley*

Describes functionality to be created in the next development cycle (four to six weeks)

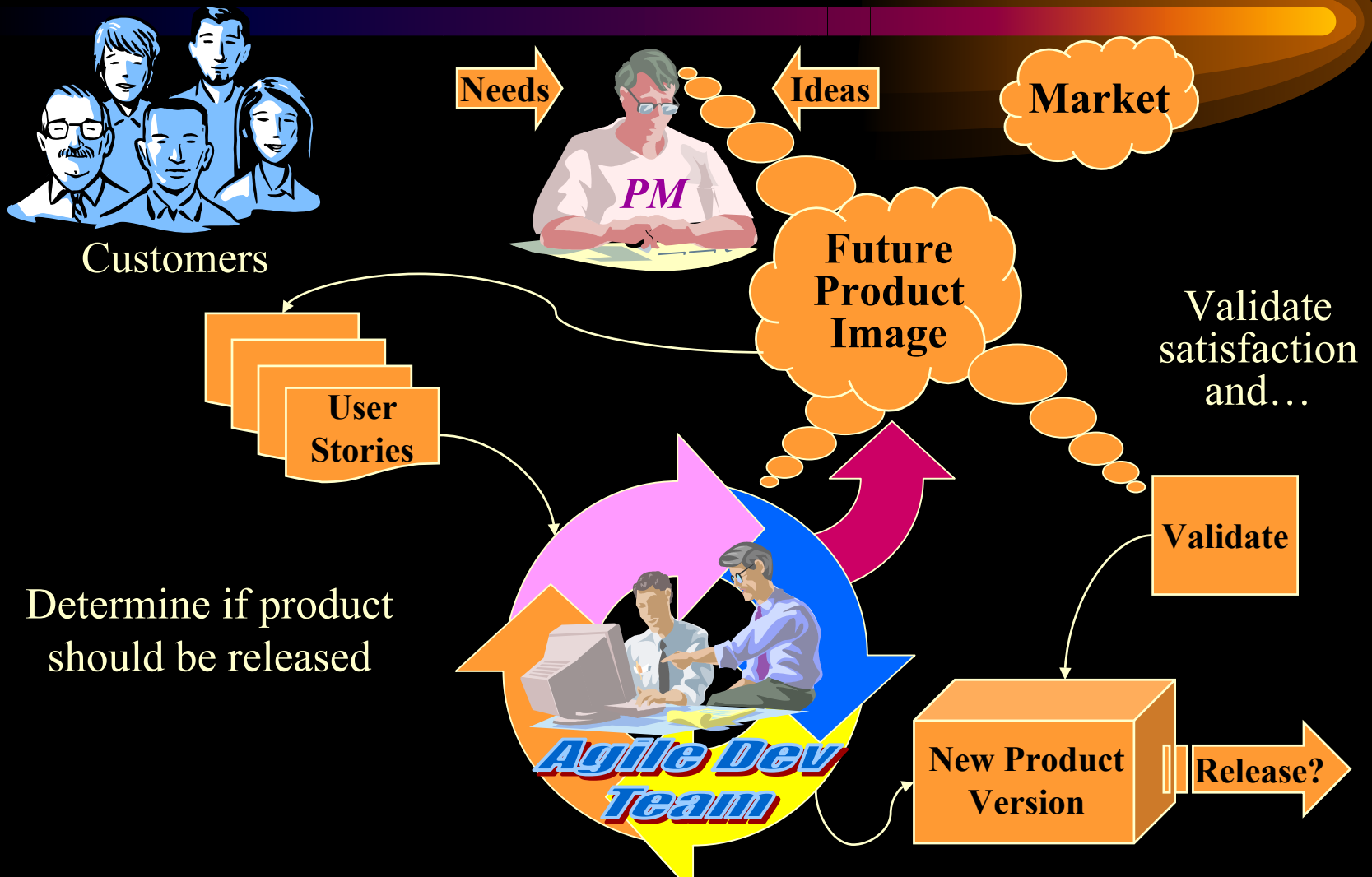
Product Manager Being Agile



Product Manager Being Agile



Product Manager Being Agile



Ready to Release?



- Marketing collateral updated?
- User manuals and help system updated?
- Customer support and consulting trained?
- Data conversion tested & ready to go?
- Customer preparation and planning for installation?
- Customer training planned?

Requirements are a Crux Issue



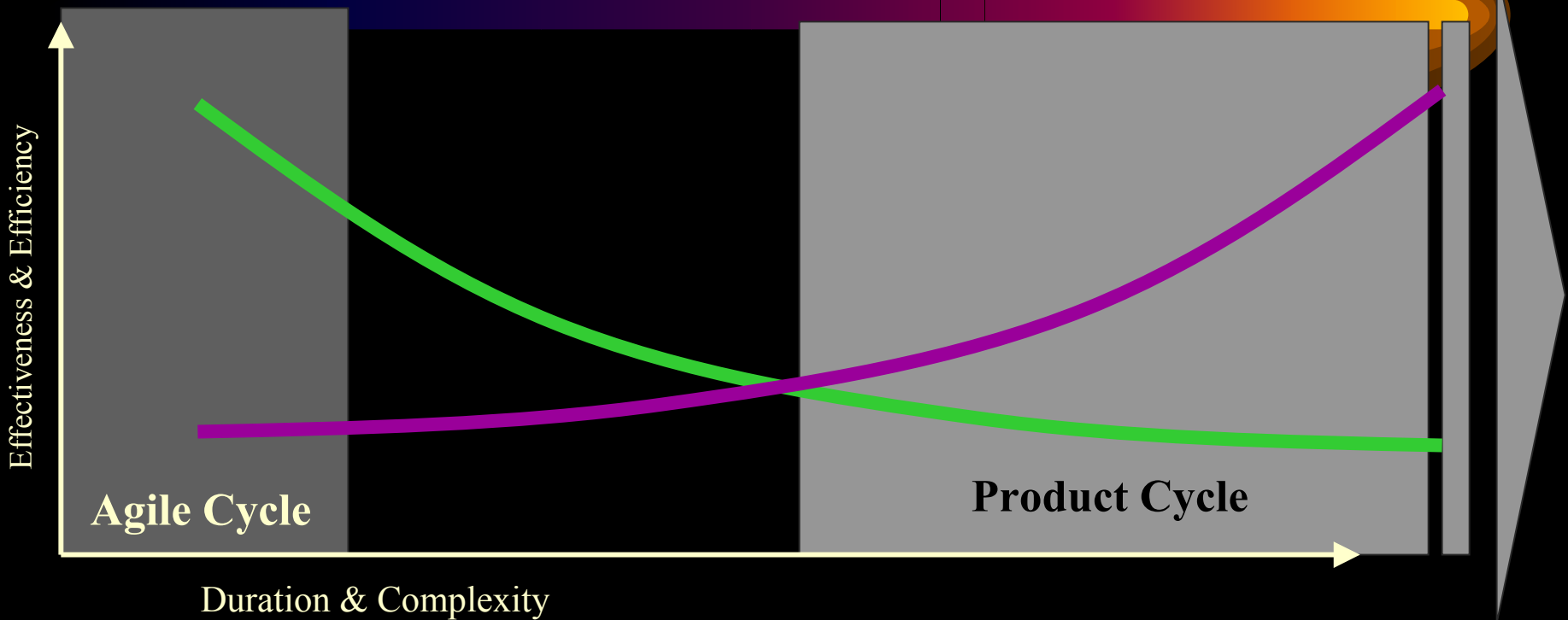
- Agile methods rebuff formal requirements
 - Don't document requirement specifications except in the context of stories describing a user experience
 - Don't develop stories beyond the scope of the next development cycle
 - Don't develop interdependent stories
 - Don't characterize criteria for the acceptability of a solution or the attributes of appearance
 - Limit scope to fit a single cycle
- Assume requirements will change faster than code can satisfy them

Requirements are a Crux Issue



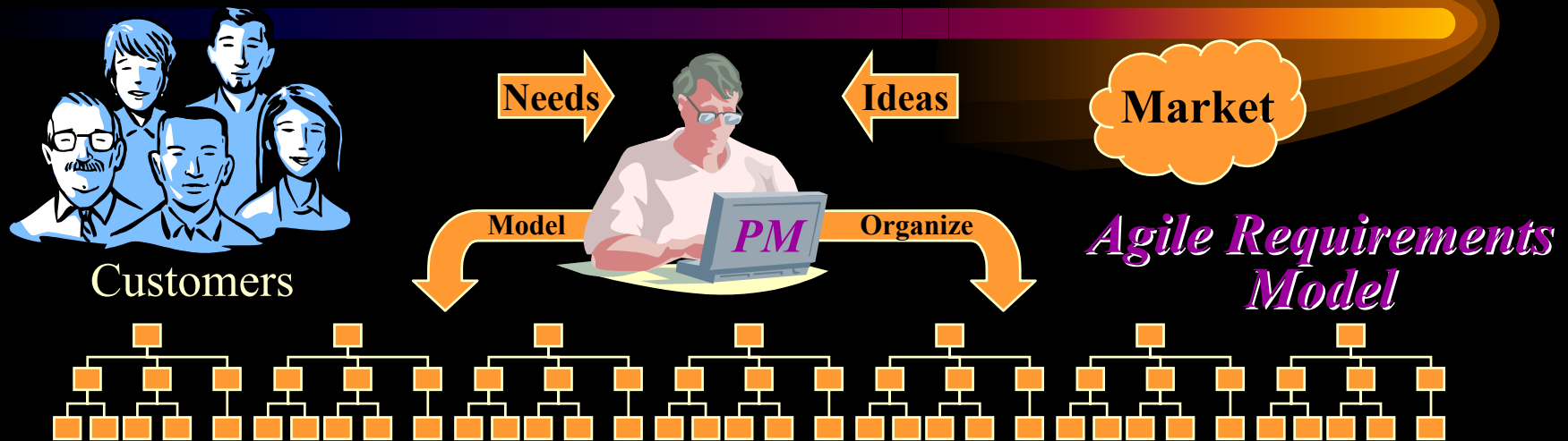
- Product Management relies on requirements
 - Characterize acceptable system behavior and characteristics
 - Identify unresolved needs of customers and prospects
 - Identify competitive advantages and limitations that need to be resolved
 - Visualize a future product version that does not currently exist
 - Prepare documentation, training, sales and marketing materials based on firm grasp of future product vision
 - Track development and testing progress toward releases of new functionality
 - Requirements exist – no choice but dealing with them effectively!

Communication Realities



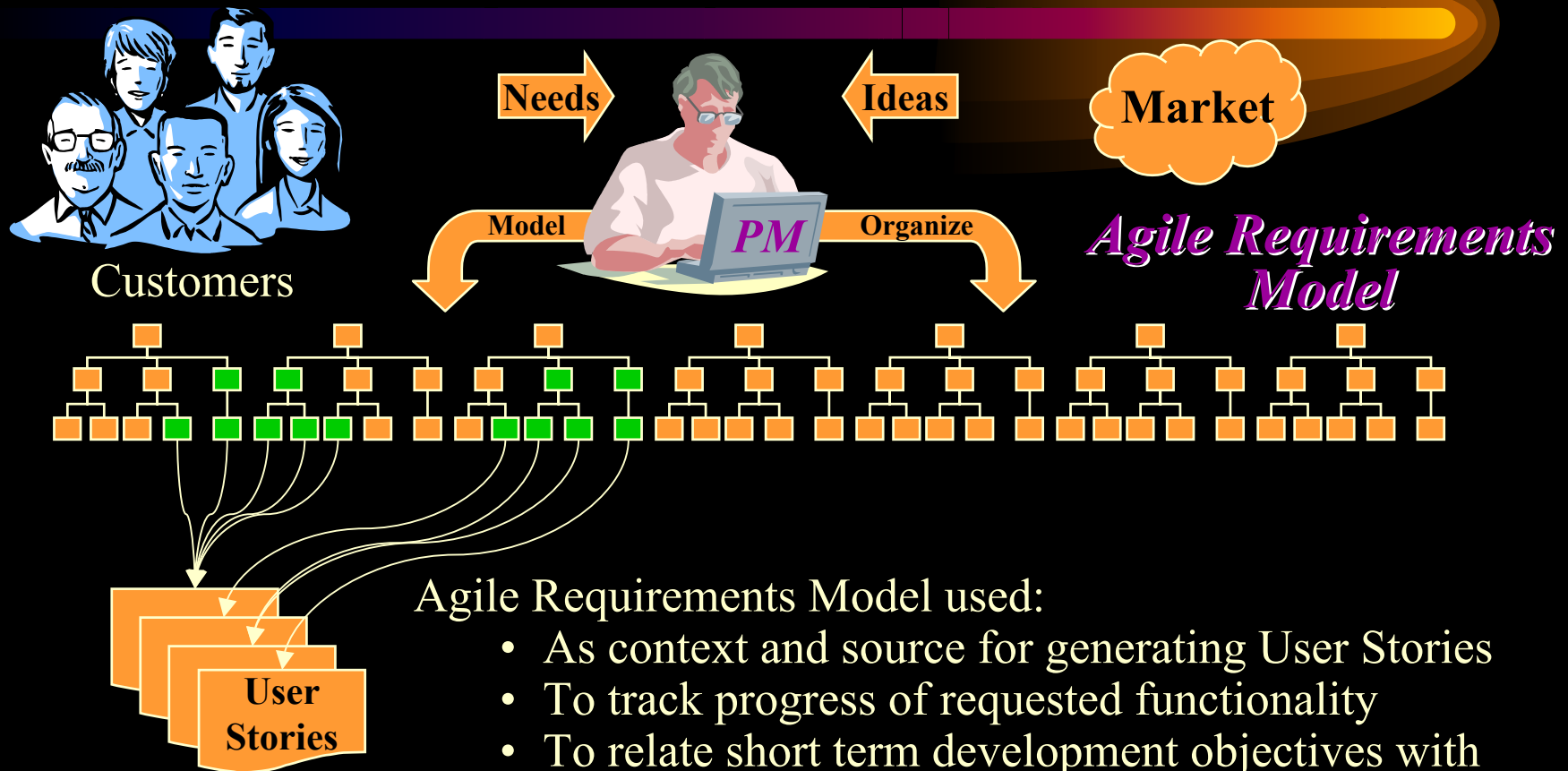
- Verbal Communication
- Written Communication

Agile Product Manager



- Augments the “mental image” of the future product
- Created and maintained by Agile Product Manager
- Organized set of functional requirements
- Includes attributes & characteristics of acceptable solution
- Dynamic and changeable
- Stored in globally accessible repository

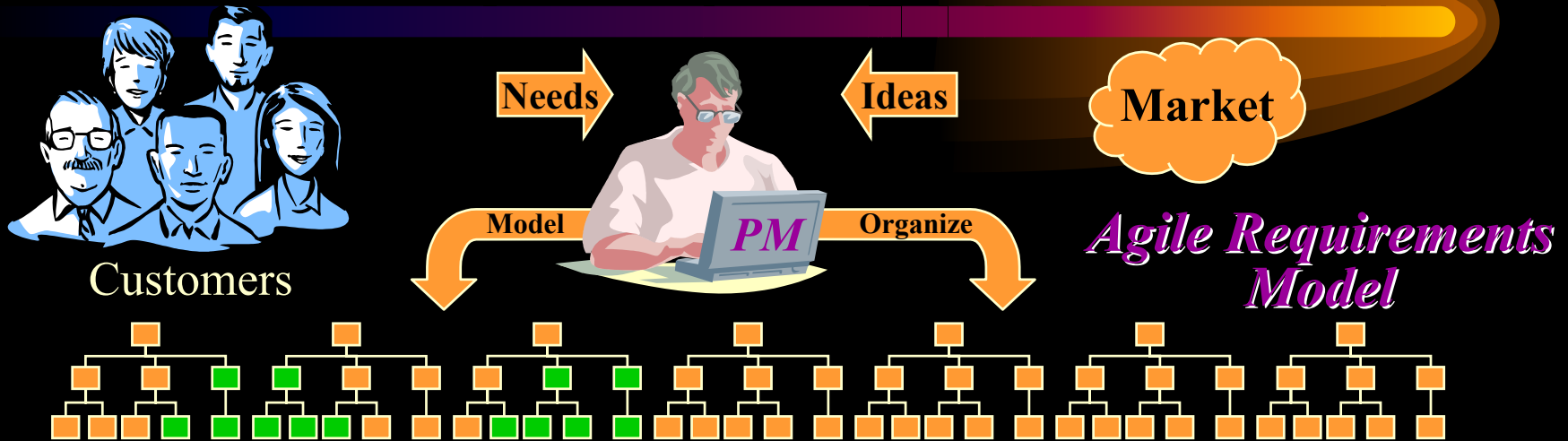
Agile Product Manager



Agile Requirements Model used:

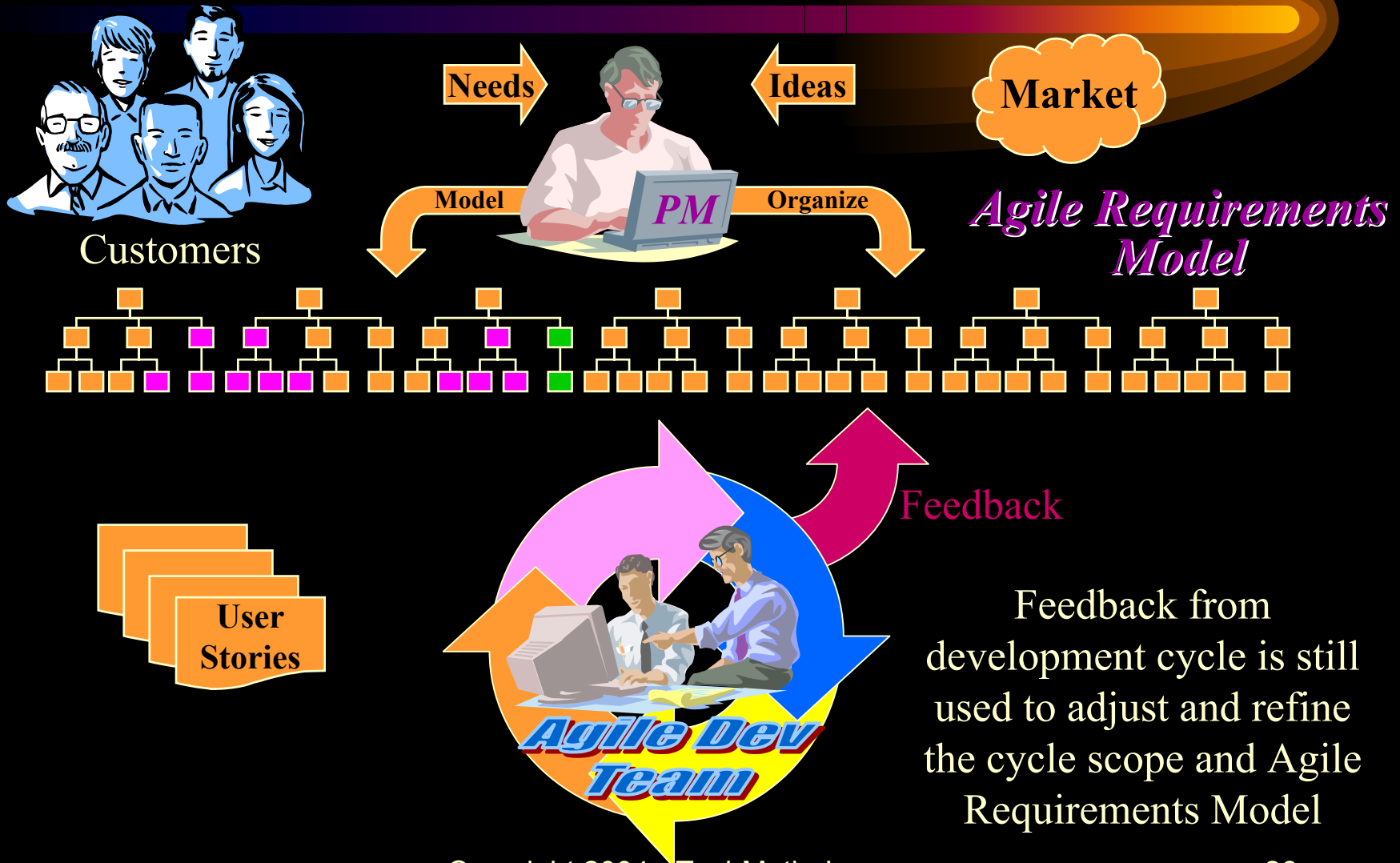
- As context and source for generating User Stories
- To track progress of requested functionality
- To relate short term development objectives with long range goals
- As basis for collaboration between customer, sales, marketing, product management and development

Agile Product Manager

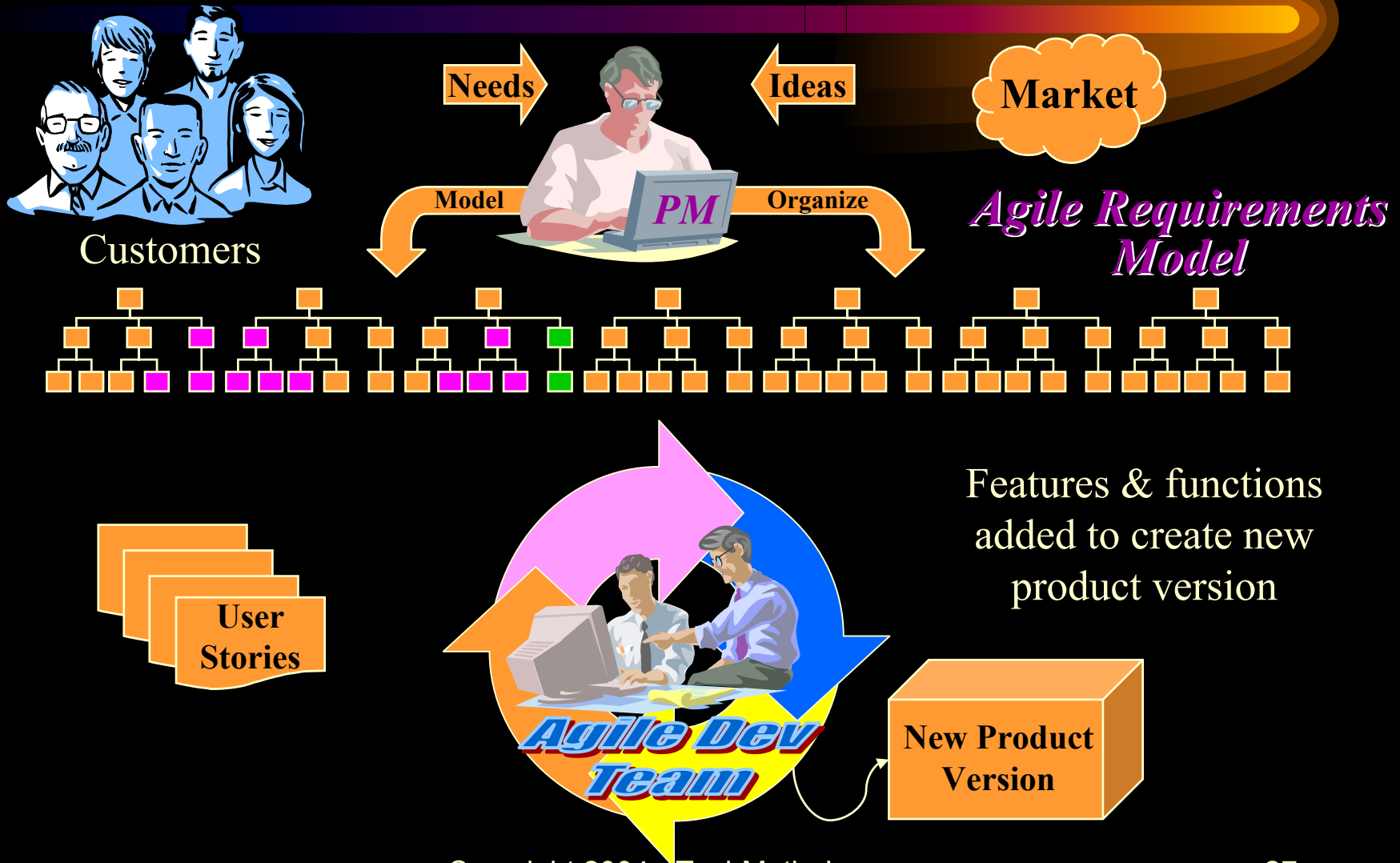


User Stories still drive development cycle

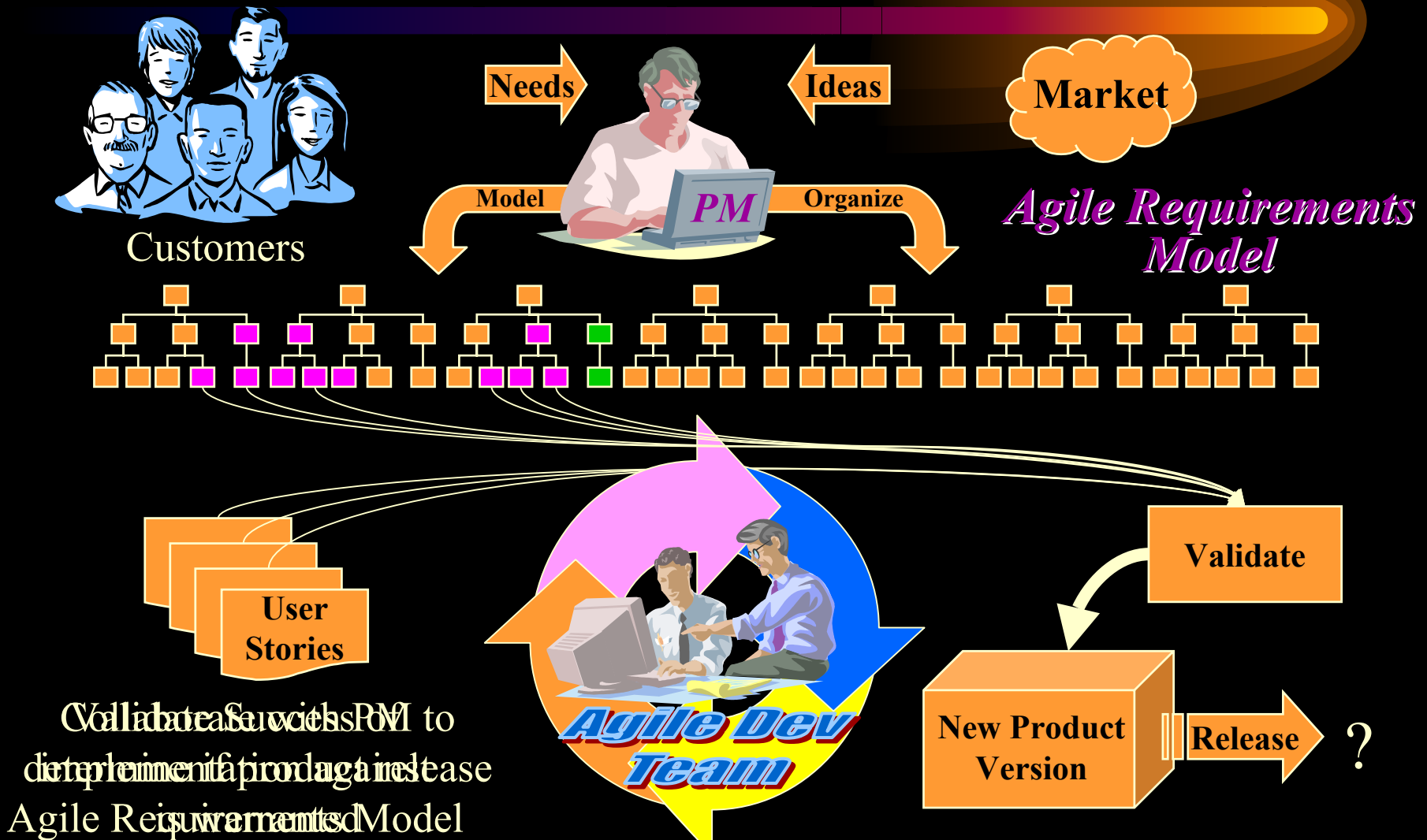
Agile Product Manager



Agile Product Manager



Agile Product Manager



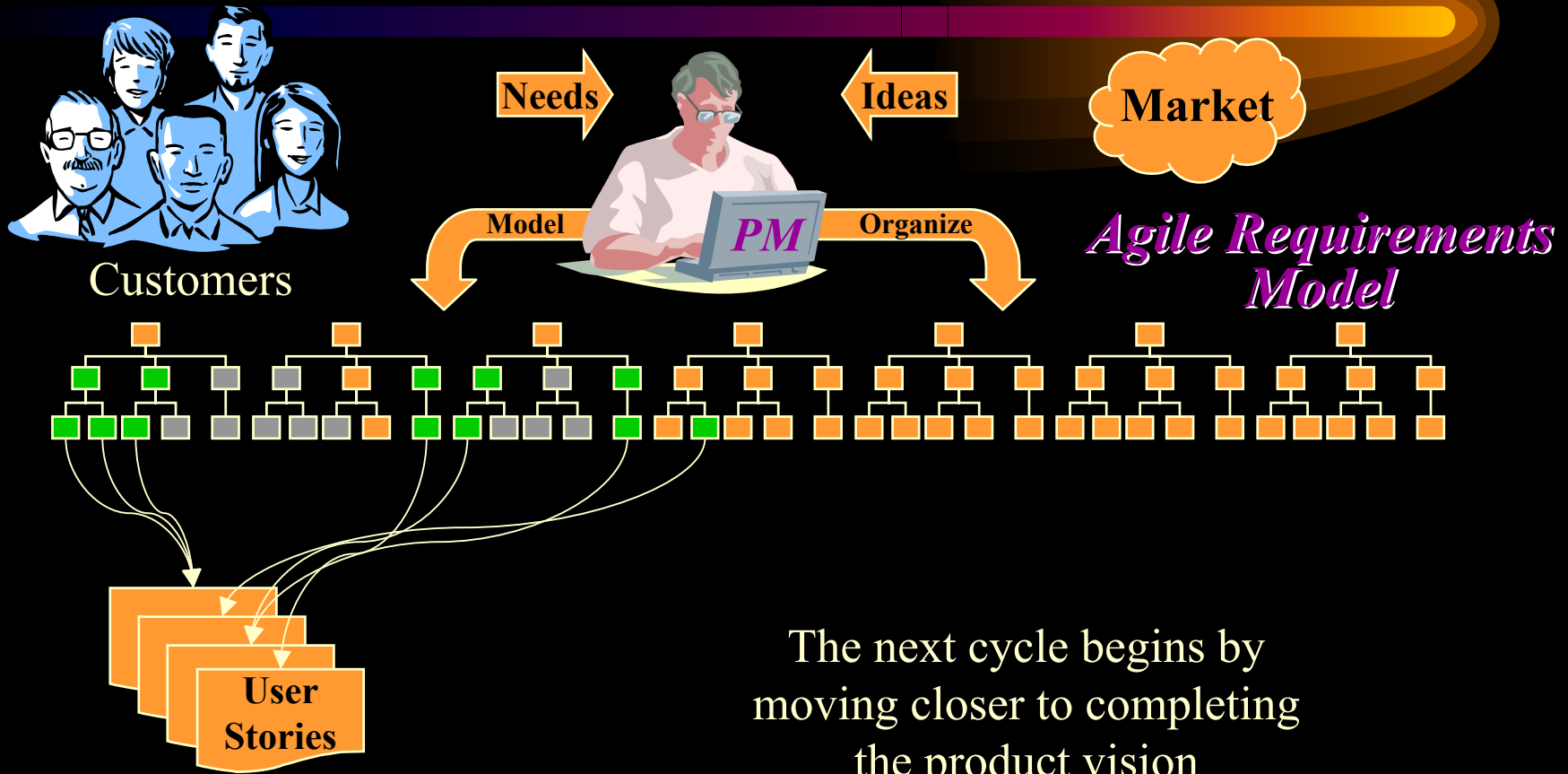
Validate as a series of PM to determine if product will increase Agile Requirements Model

Ready to Release?



- Same issues:
 - Marketing collateral updated?
 - User manuals and help system updated?
 - Customer support and consulting trained?
 - Data conversion tested & ready to go?
 - Customer preparation and planning for installation?
 - Customer training planned?
- Advanced planning and tracking against objectives

Agile Product Manager



Agile Requirements Model



- Used as communication bridge between product evolution cycles and Agile development cycles
- Flexible
 - Not a document
 - Independent
 - Not explanatory
 - Changeable
- Centralized and accessible
- Prioritized, Selectable, Traceable

Conclusions



- Embrace Agile methods for commercial product development with care –
 - Enterprise wide commitment
 - More applicable to mature products
 - Understand the motives of Agile
 - Distinguish creating solutions from coding

Conclusions



- Product or Service?
- Requirements exist – know how to use them to your advantage
 - Use an Agile Requirements Model to bridge between market view and Agile developer view
 - Include attributes to identify acceptable implementation
- Be an Effective Customer!
 - Avoid being a developer
 - Customer satisfaction as the measure of success

Agile Product Management



Questions?

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“The Manifesto for Agile Software Development” (2001)

“We are uncovering better ways of developing software by doing it and helping others to do it. Through this work we have come to value:

- **Individuals and interactions** over processes and tools
- **Working software** over comprehensive documentation
- **Customer collaboration** over contract negotiation
- **Responding to change** over following a plan

That is, while there is value in the items on the right, we value the items on the left more.”

<http://agilemanifesto.org>

Agile Principles

1. Our highest priority is to satisfy the customer's need for **“...continuous delivery of valuable software”** software.
2. **“Welcome changing requirements,...”** Agile processes harness change for their benefit.
3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4. **Business people and developers work together** on the project.
5. **“Build projects around motivated individuals.”** Build trust and support they need, and empower them to take action.
6. **“...face to face conversation.”** Communicate by conveying information to and within a development team.
7. **Working software is the primary measure of progress.**
8. Agile processes promote sustainable development. The sponsors, developers and users should be able to maintain a constant pace indefinitely.
9. **“Simplicity—the art of maximizing the amount of work not done is essential.”**
- 10.
- 11.
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

<http://agilemanifesto.org/principles.html>

Some Better Known Agile Methods

- Adaptive Software Development (ASD)
- Crystal
- Dynamic Systems Development Method (DSDM)
- Lean Software Development
- SCRUM
- Extreme Programming (XP)