/* Talking about code */

Drupal Dev Days, Barcelona

June 16th, 2012

Jakob Persson, NodeOne

Introducing me

Web Strategist and CKO

Co-Founder of NodeOne

Worked with Drupal since 2005

jakob@nodeone.se

http://www.twitter.com/realsolipsist

http://drupal.org/user/37564

Introducing nodeone

Scandinavia's largest Drupal services provider

Employs 70 people

Offices in Sweden, Denmark and Norway

What we do at NodeOne, apart from...

card games...

* No he's not really Dries, but you knew that already.

www.drupalcardgame.com

Druplicons wielding nun-chuks...

Druplicon Road Trip – “Showdown in Paris” (YouTube)

Drupal rock stars...

"The Kitten Killers" Live at DrupalCon Copenhagen (photo by Dries)

Drupal air fresheners...

Drupal air fresheners revealed to the world

Druplicon cookie cutters

No longer available at our booth! ALL GONE! (cutters, not cute babies :))

https://instagr.am/p/Jwg1XUiOIX/

Strategy and Usability *Web strategy, usability studies and effect mapping*

Design and UX *User experience, GUI and graphic design*

Development *Modules, themes, distributions and install profiles*

Hosting and scalability *Hosting, optimization and monitoring*

Training *Courses, books, screencasts and learning library*

Consulting *Technical consulting and solution architecture*

Talking is transfer of knowledge

Knowledge Management

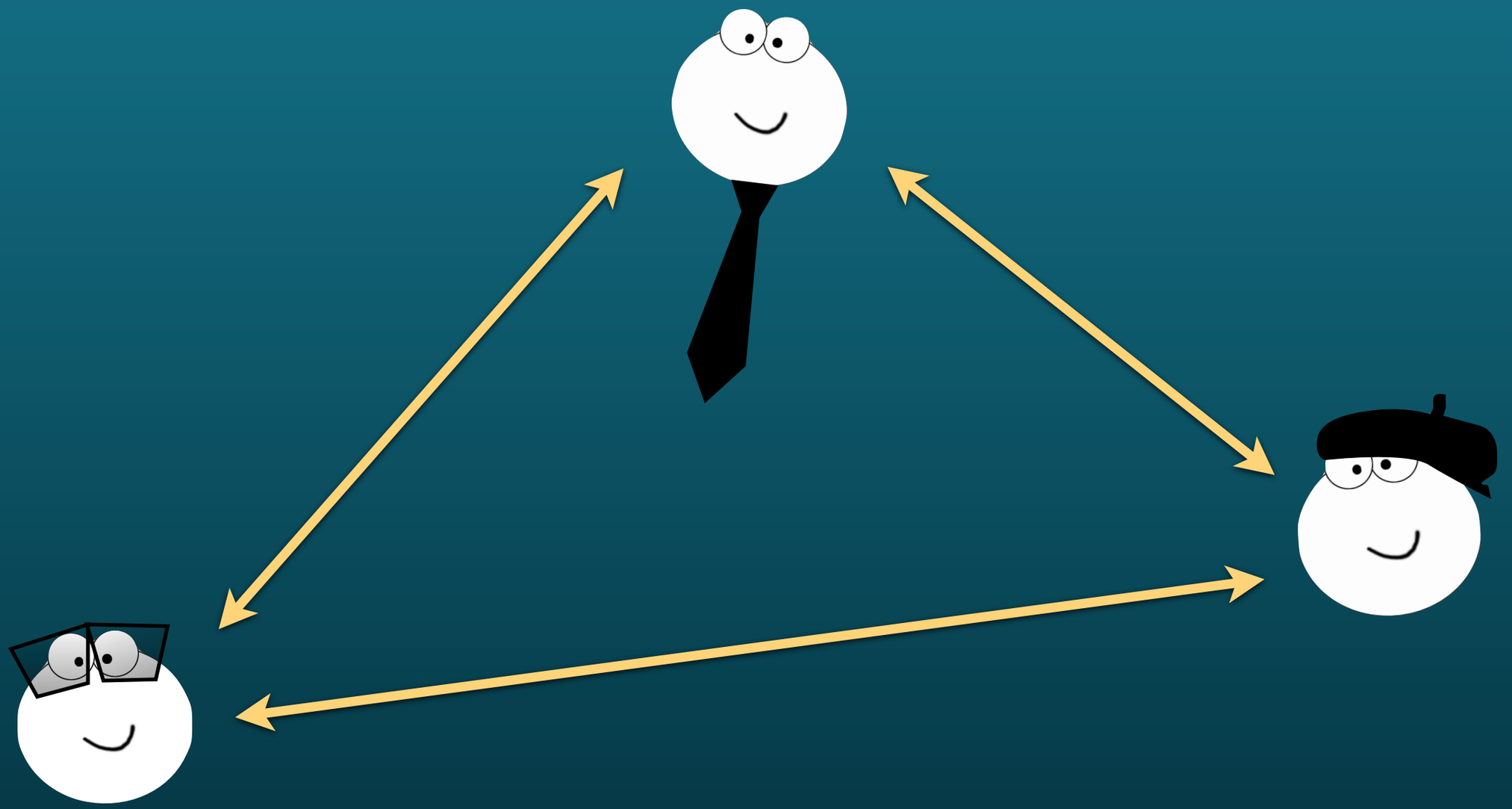
http://commons.wikimedia.org/wiki/Image:Human_brain.png

http://www.sxc.hu/photo/336511

Knowledge Management

Knowledge Flow Management

http://www.sxc.hu/photo/468734



Knowledge management (KM) comprises a range of ***strategies and practices*** *used in an organization to* ***identify****,* ***create****,* ***represent****,* ***distribute****, and* ***enable adoption*** *of* ***insights and experiences****.*

Such ***insights and experiences comprise knowledge****, either* ***embodied*** *in individuals or* ***embedded*** *in organizations as processes or practices.*

http://commons.wikimedia.org/wiki/Image:Human_brain.png http://www.sxc.hu/photo/336511

strategies and practices

strategies and practices

identify, create, represent, distribute, enable adoption

strategies and practices

identify, create, represent, distribute, enable adoption

insights and experiences

strategies and practices

identify, create, represent, distribute, enable adoption

insights and experiences

knowledge

strategies and practices

identify, create, represent, distribute, enable adoption

insights and experiences

knowledge

embodied or embedded

strategies and practices

identify, create, represent, distribute, enable adoption

- ✓ Tools
- ✓ Processes
- ✓ Incentives
- ✓ Communities of practice
- ✓ Exchange programs

insights and experiences

knowledge

embodied or embedded

identify, create, represent, distribute, enable adoption

- ✓ Analysis
- ✓ Documents
- ✓ Collaboration
- ✓ Conversation
- ✓ Presentation

insights and experiences

- ✓ How do we gain insight and experiences?
- ✓ Learning
- ✓ Communication
- ✓ Sharing experiences

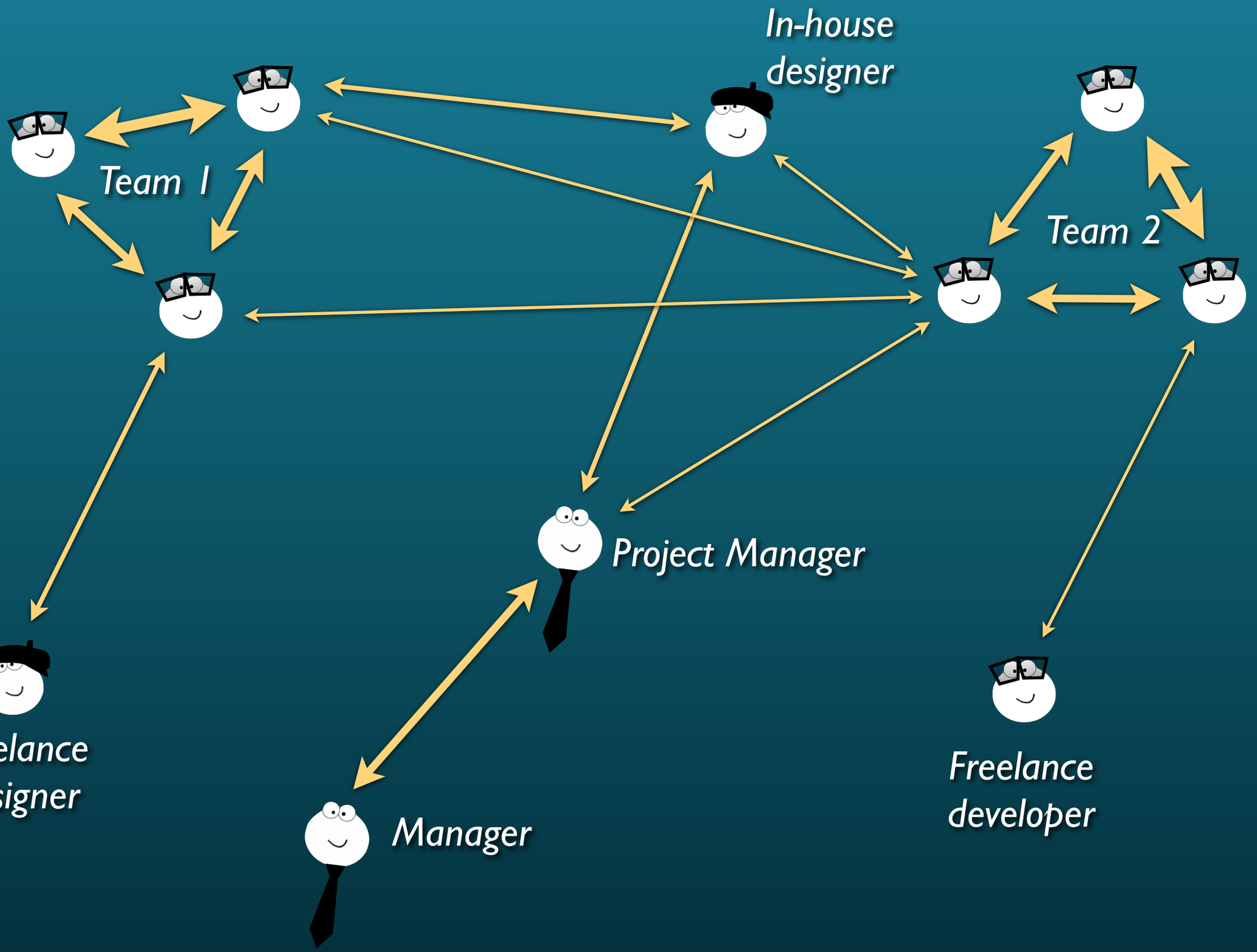
knowledge

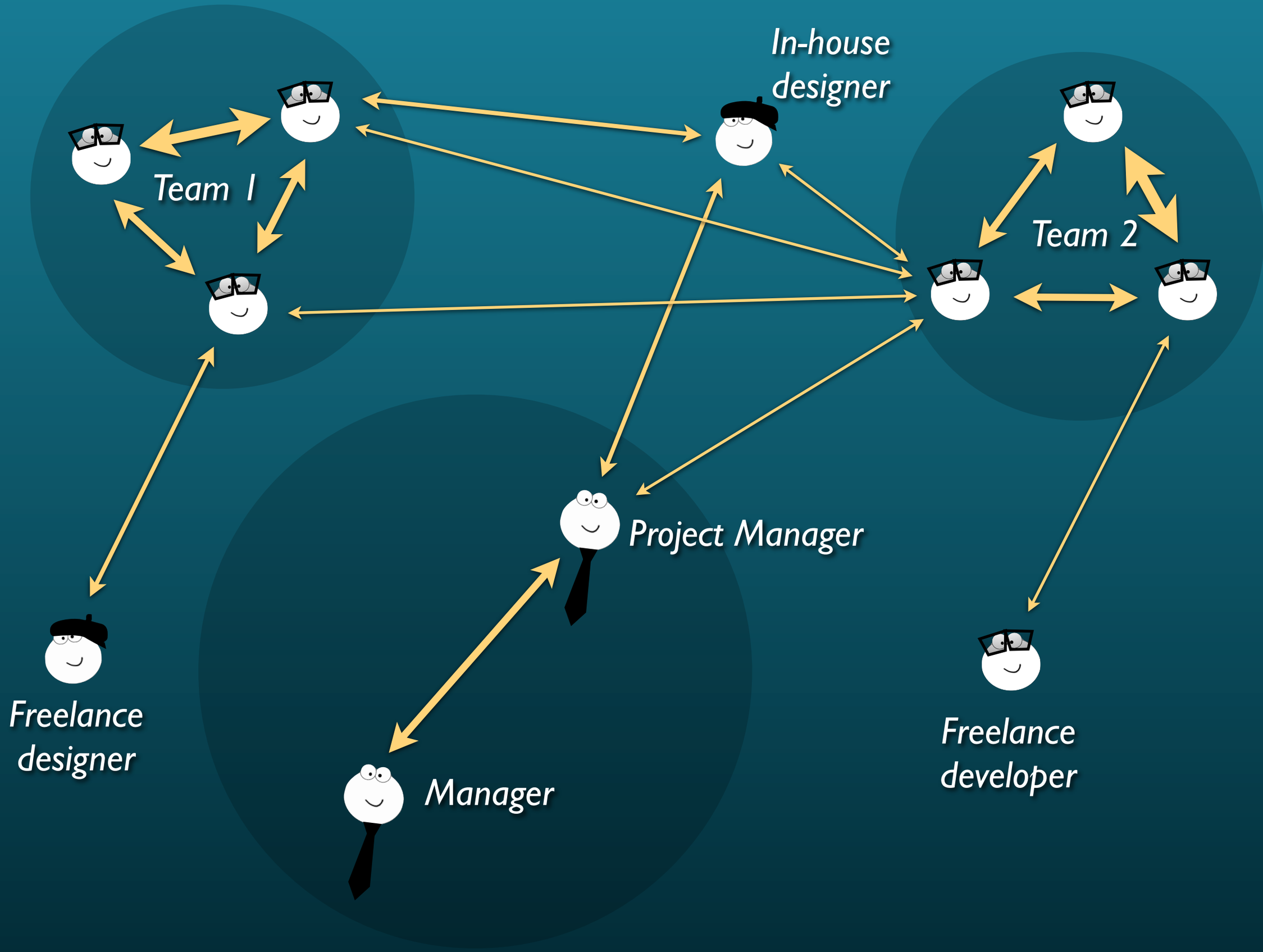
embodied or embedded

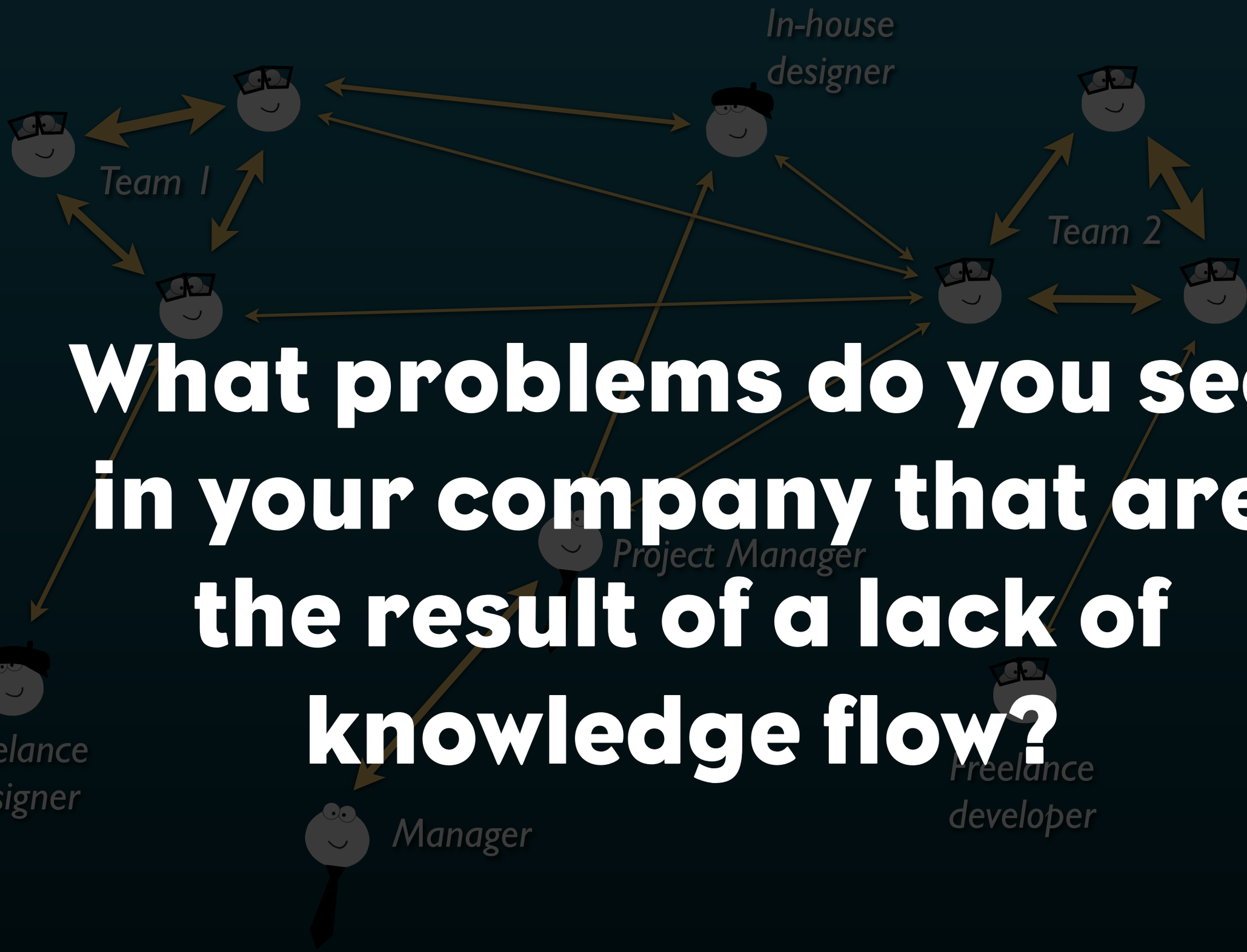
- ✓ Knowledge versus information
- ✓ Learning and teaching
- ✓ Building on the knowledge of others

embodied or embedded

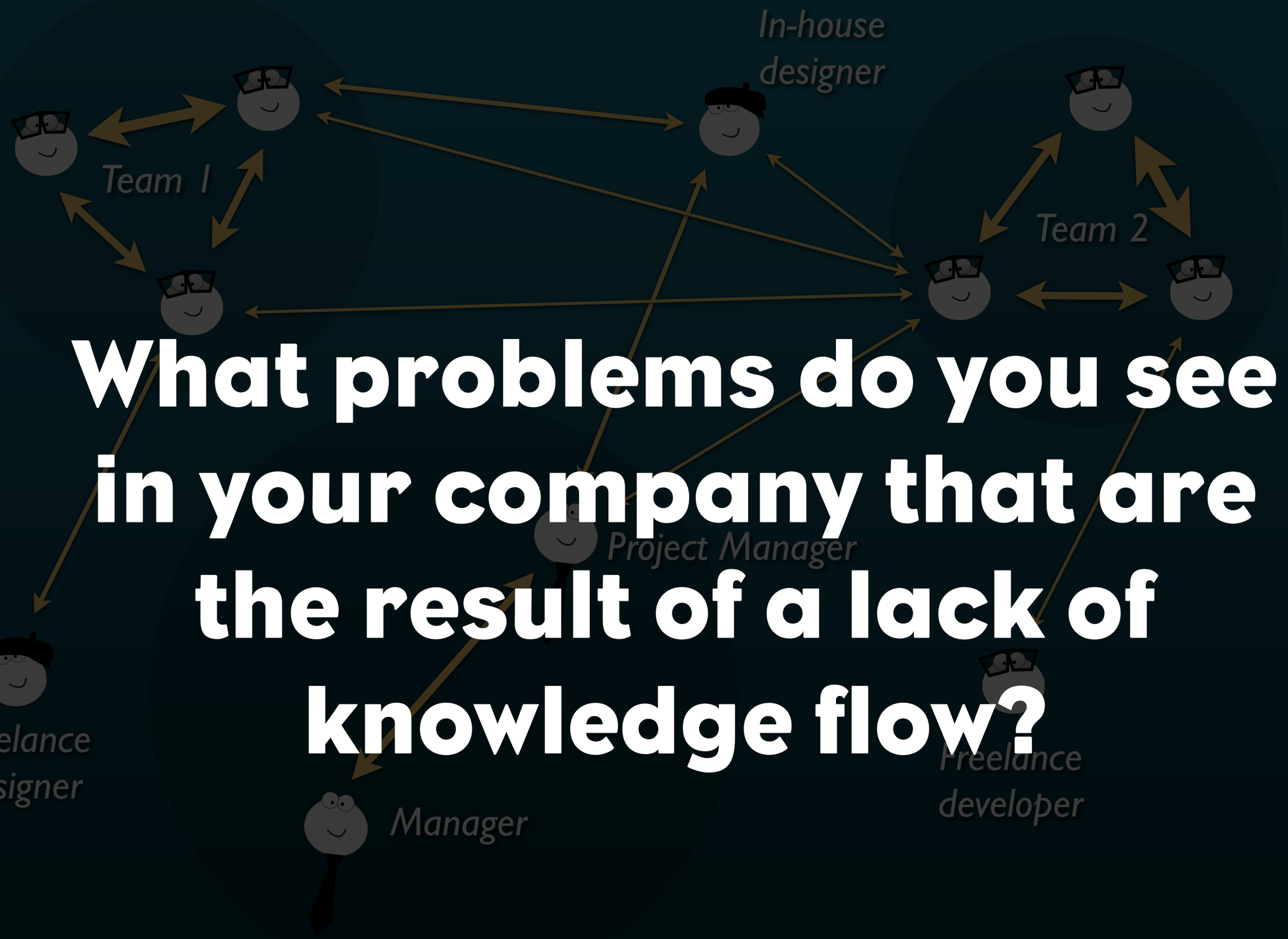
- ✓ Relying on key individuals
- ✓ Relying on practices and processes
- ✓ Shared ownership of knowledge


In-house designer
Team 1
Team 2
Project Manager
Freelance designer
Manager
Freelance developer

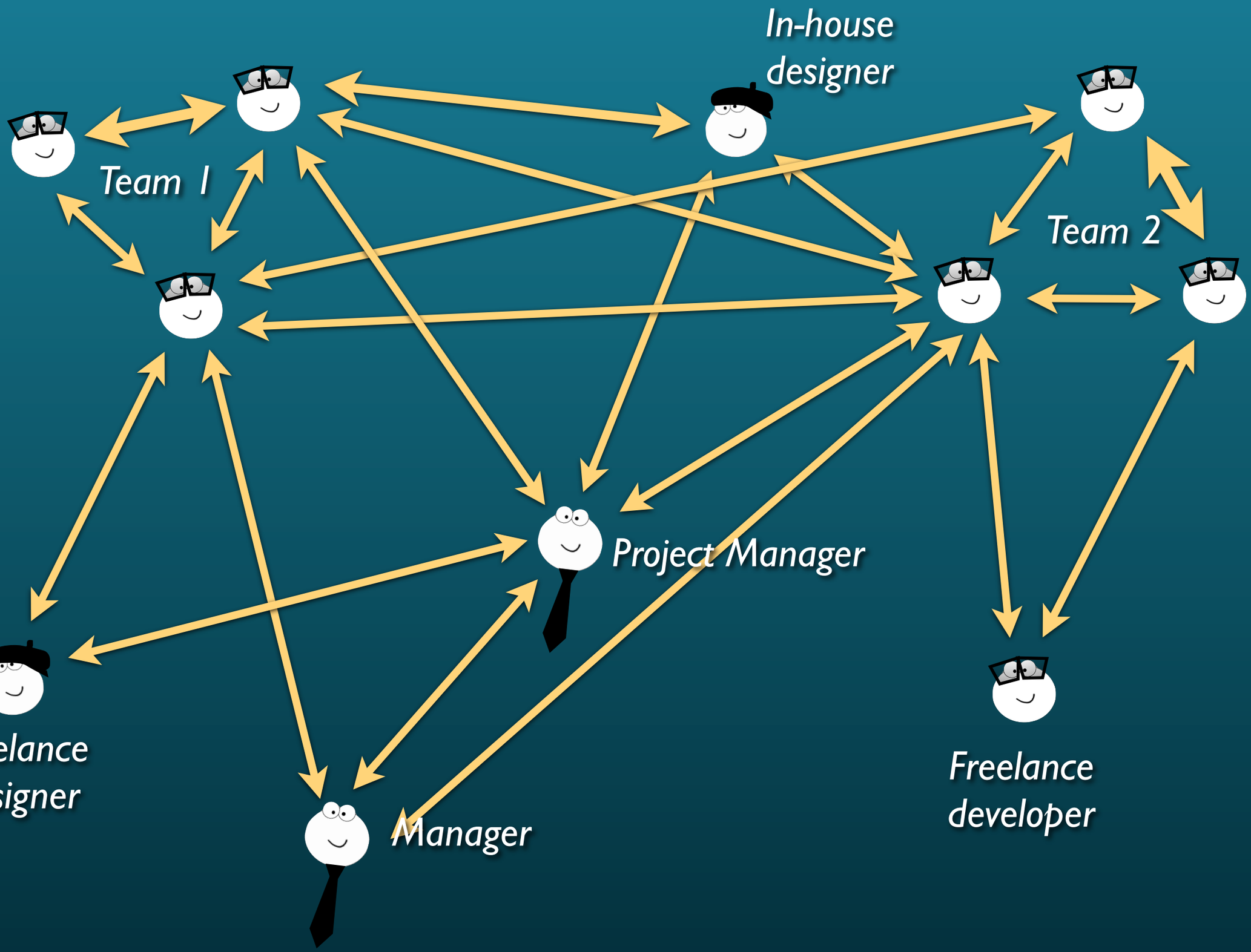

In-house
designer
Team 1
Team 2
Project Manager
Manager
Freelance
designer
Freelance
developer



What problems do you see in your company that are the result of a lack of knowledge flow?



What problems do you see in your company that are the result of a lack of knowledge flow?


In-house designer
Team 1
Team 2
Project Manager
Freelance designer
Manager
Freelance developer

Directed action

Removal of barriers

http://www.sxc.hu/photo/213894

Direct action through

initiatives

that break down into

projects

that break down into

tasks

"PREUSSEN" FOOTBALL TEAM, GERMANY

http://www.flickr.com/photos/library_of_congress/2163139101/

“Knowledge is power”

“Knowledge is power”

Missing awareness of knowledge

“Knowledge is power”

Missing awareness of knowledge

Lack of time

“Knowledge is power”

Missing awareness of knowledge

Lack of time

Missing reward systems

“Knowledge is power”

Missing awareness of knowledge

Lack of time

Missing reward systems

Missing knowledge management awareness

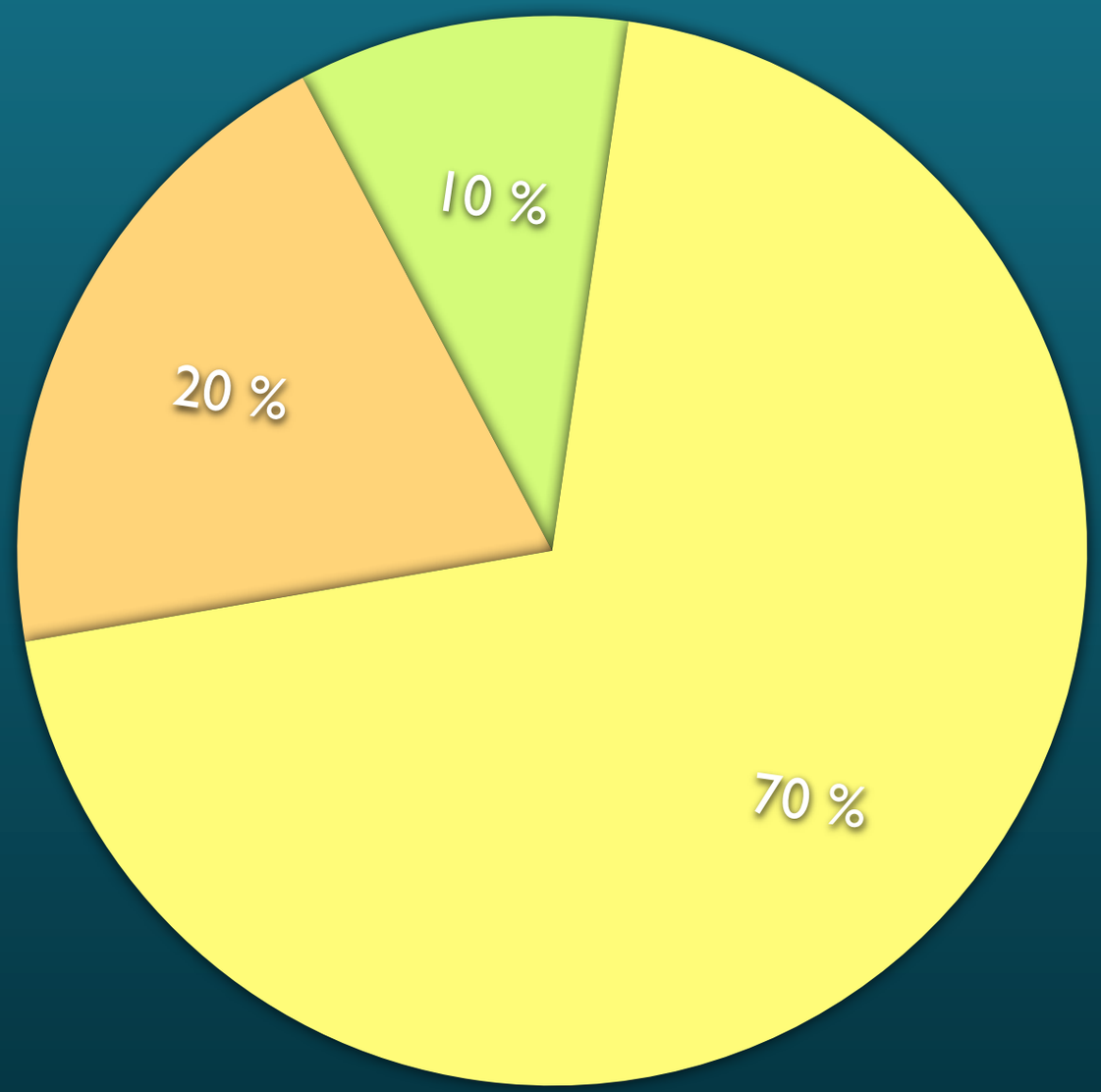
Lack of time

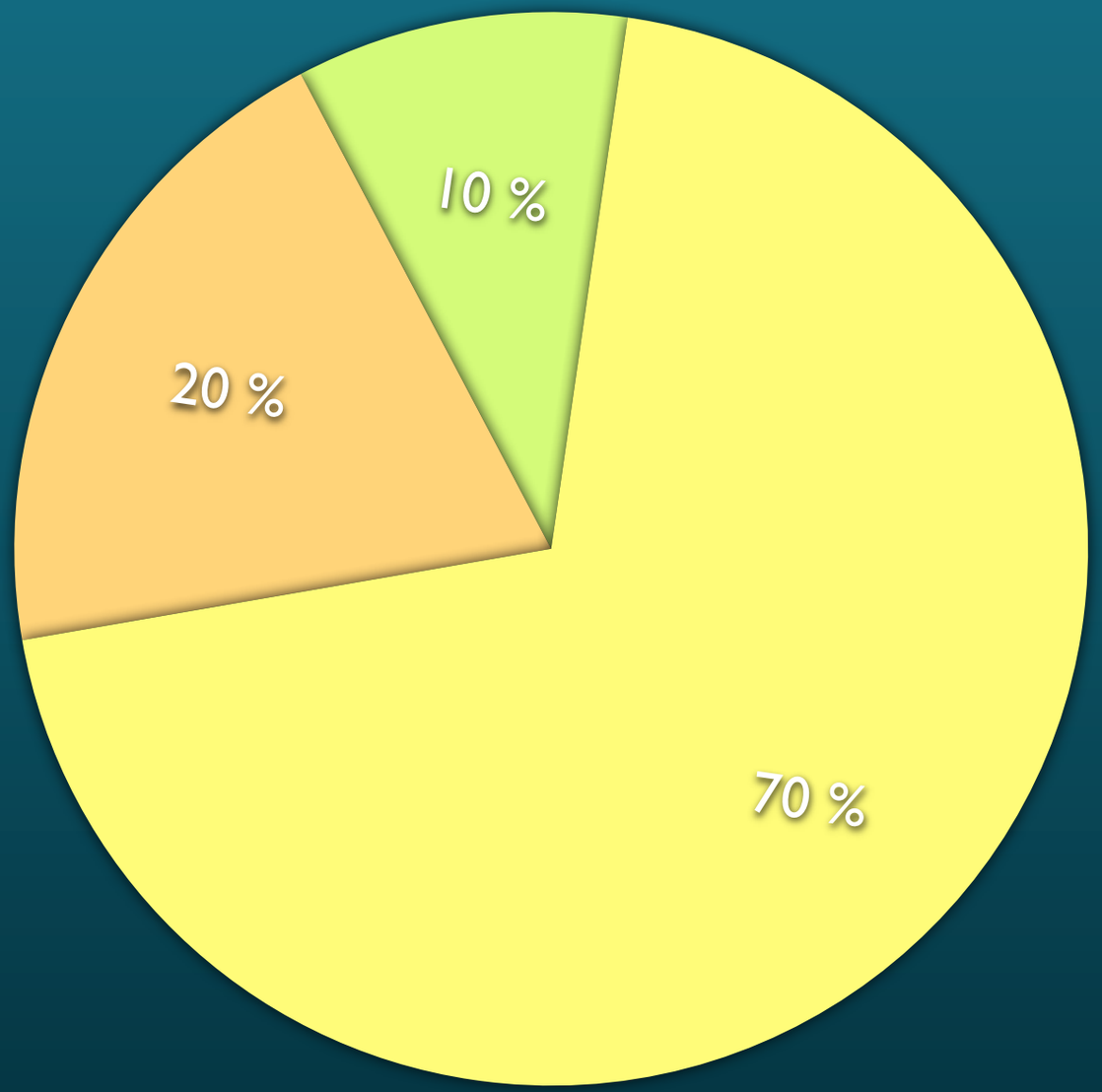
Missing knowledge management awareness

Missing awareness of knowledge

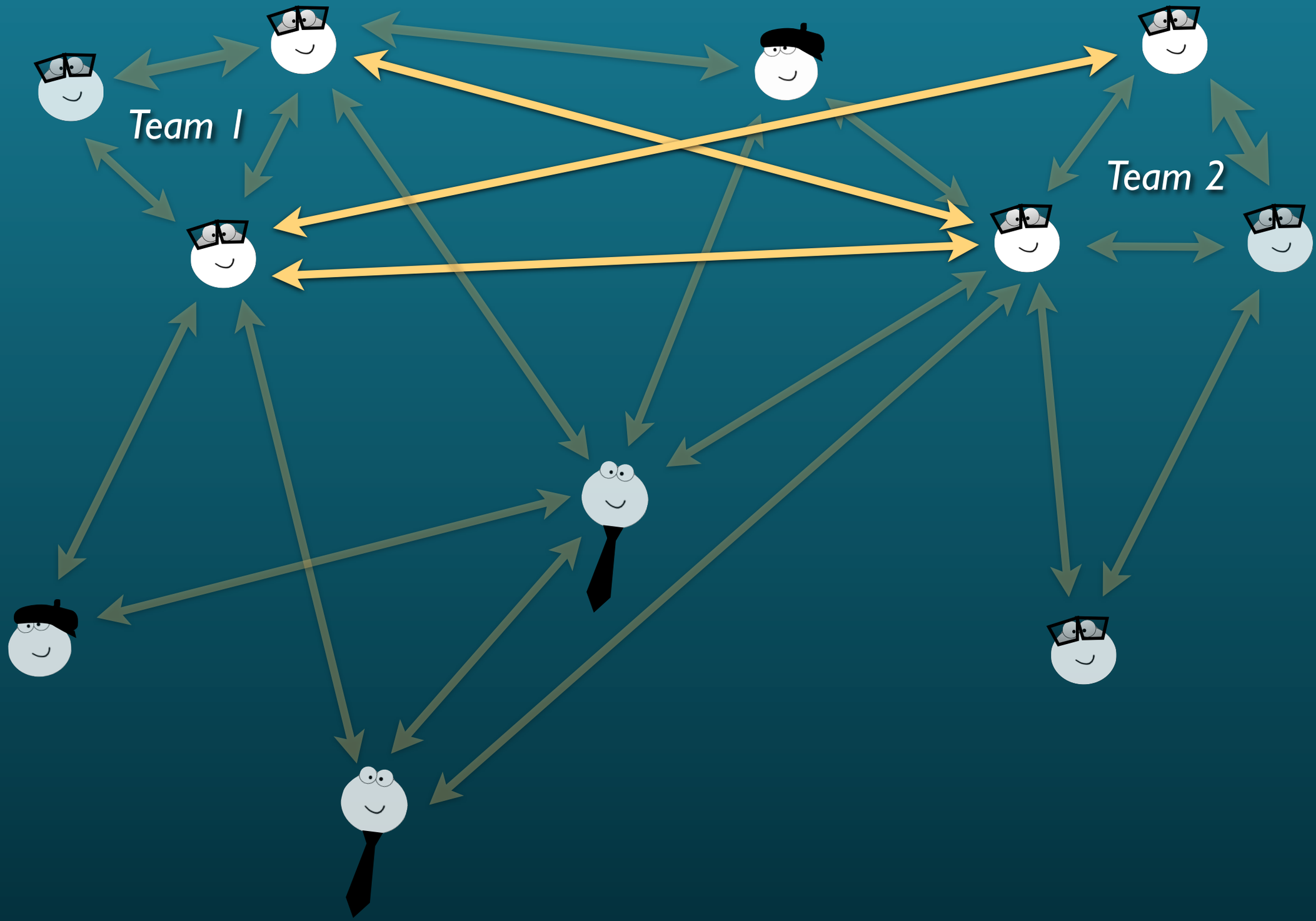
“Knowledge is power”

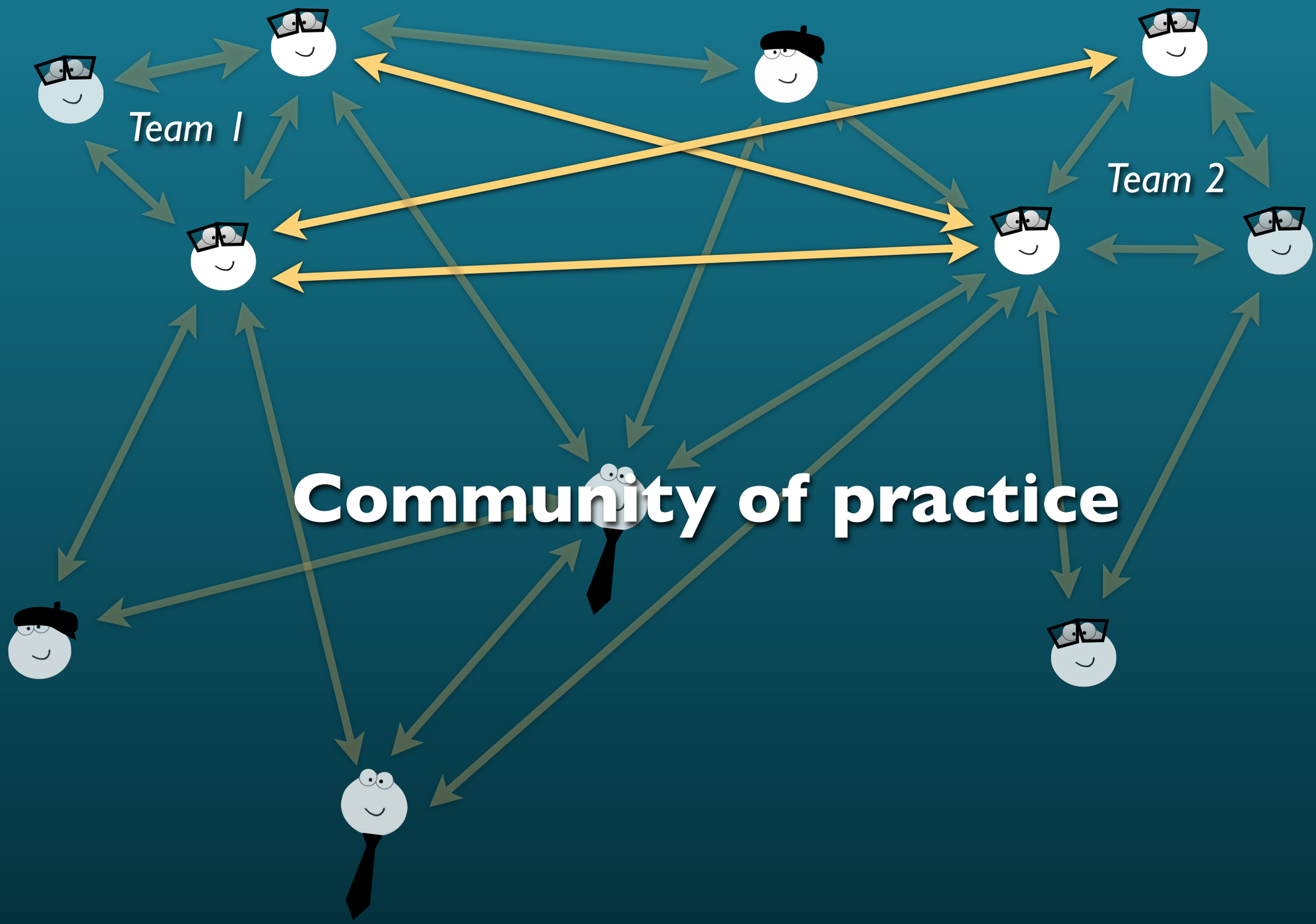
Missing reward systems


10 %
20 %
70 %

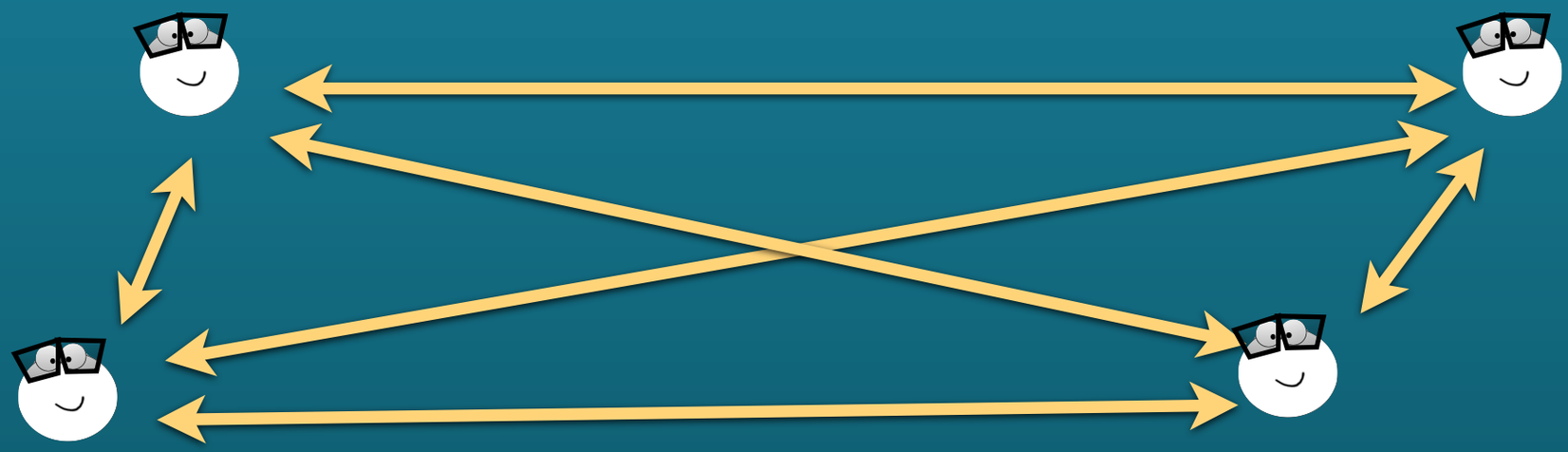


It’s 70% about people!


Team 1
Team 2



Community of practice



Community of practice

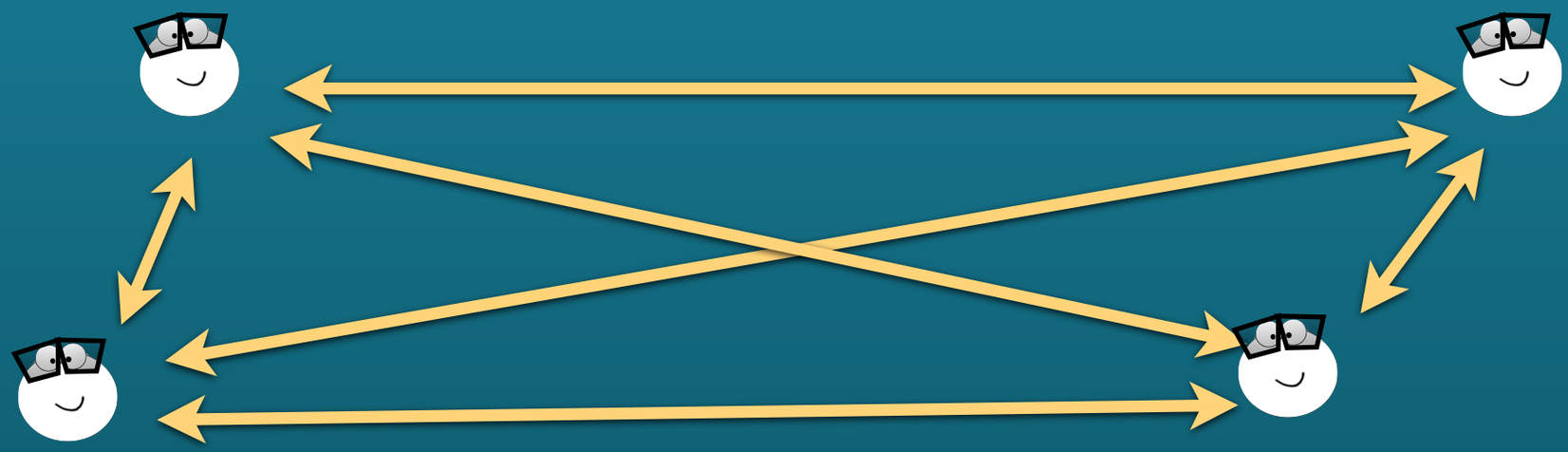
Focuses on a practice *or domain*

Organically *created – not mandated*

Agenda and projects defined by the community itself

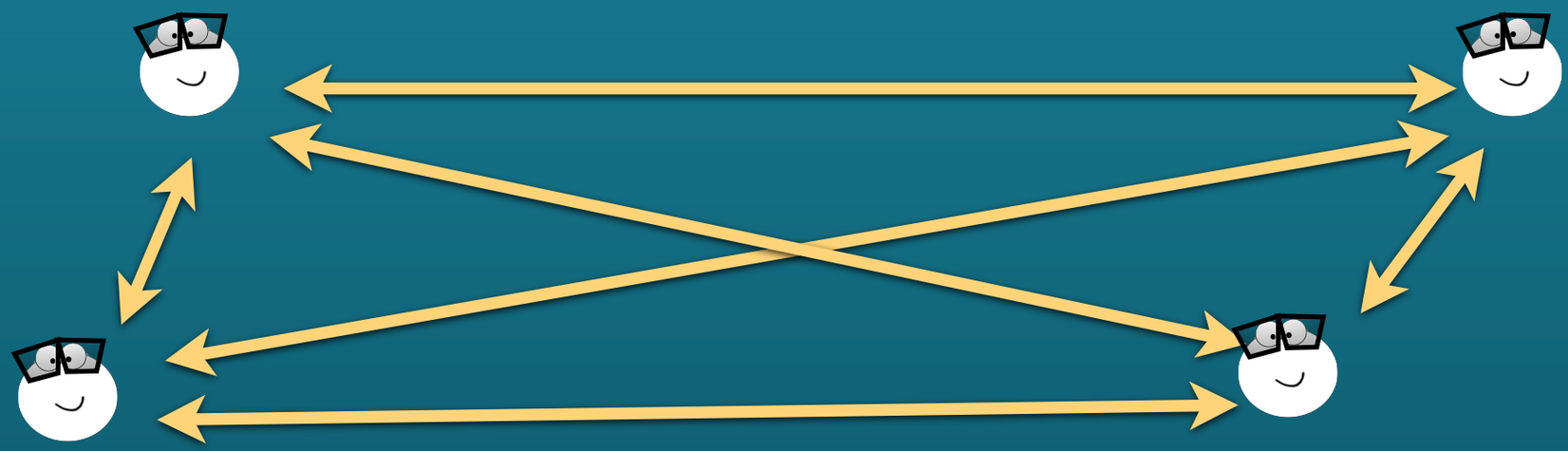
Membership *is defined by the knowledge of the members*

Can exist as long as the members believe they have something to ***contribute*** *to, or gain from it*



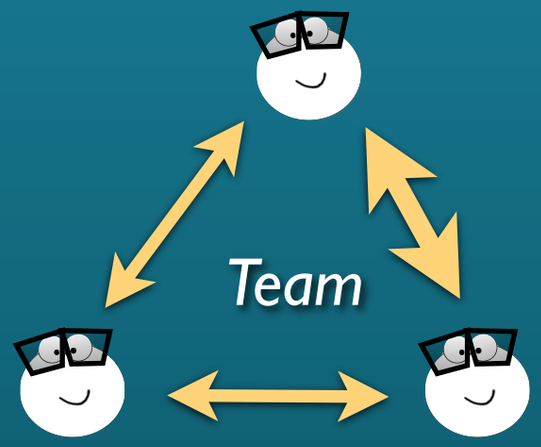
Community of practice

+ ***Decreasing the learning curve*** *of new employees*
+ ***Responding more rapidly to customer needs*** *and inquiries*
+ ***Reducing rework*** *and preventing "reinvention of the wheel"*
+ ***Spawning new ideas*** *for products and services*
+ ***Capture and share “best practices”***



Community of practice

+ ***Decreasing the learning curve*** *of new employees*
+ ***Responding more rapidly to customer needs*** *and inquiries*
+ ***Reducing rework*** *and preventing "reinvention of the wheel"*
+ ***Spawning new ideas*** *for products and services*
+ ***Capture and share "best practices"***



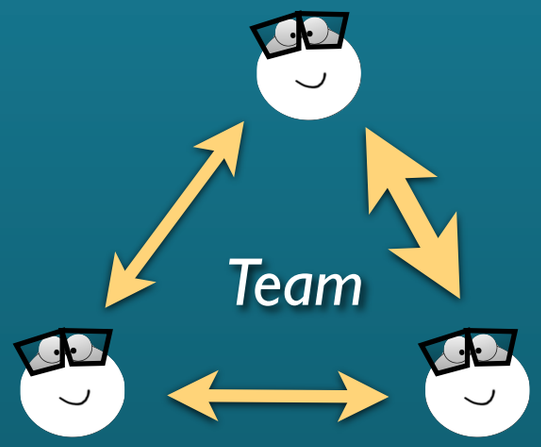
Standup

Regular meeting

Brief *– standing up keeps it short*

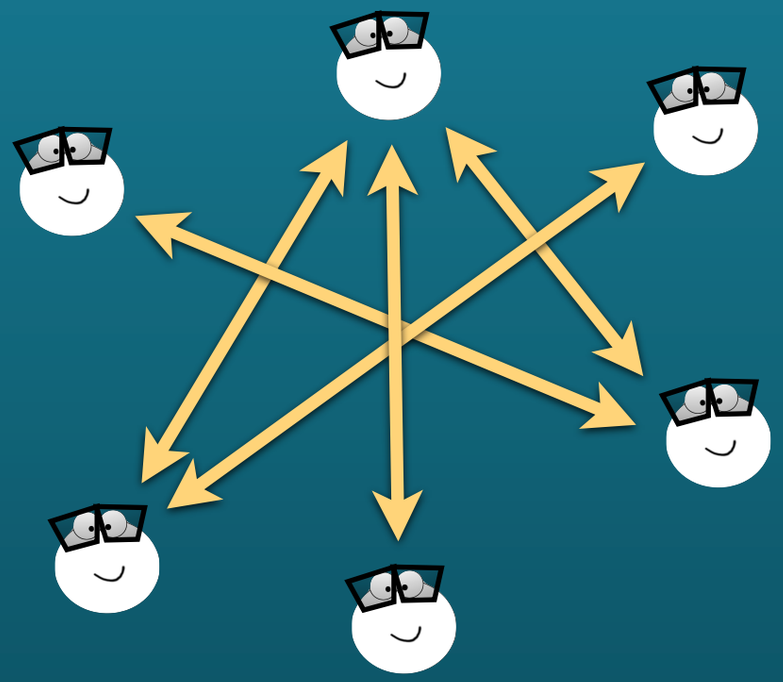
Focuses on keeping work flowing *– by asking what? next? problems/obstacles?*

Lead by the team's scrum master



Standup

+ ***Keeps entire team up to date*** *on project status*
+ ***Promotes closer working relationships*** *with its frequency*
+ ***Raises topics needed to be discussed*** *– increasing knowledge transfer*



Solution match-making

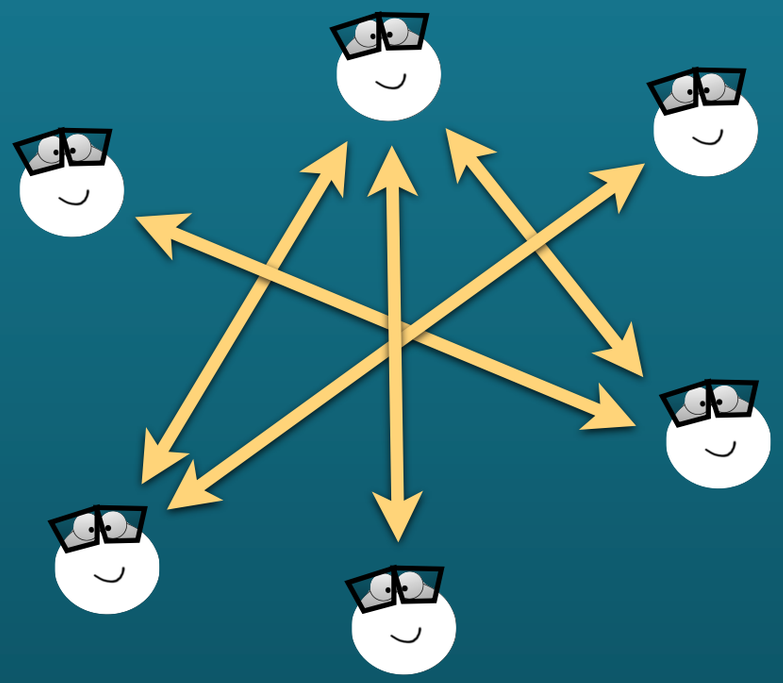
Includes everyone

Led and moderated by a facilitator

People attending briefly explain problems/bugs *and are then paired with those with solutions*

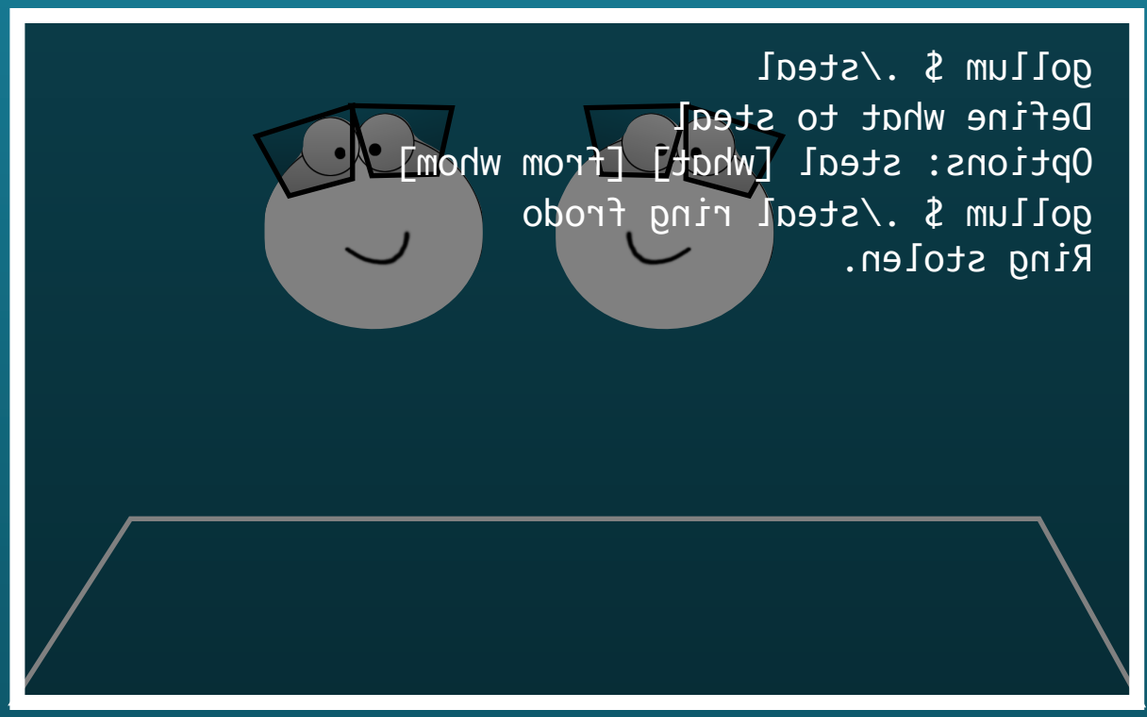
Short and effective *through moderation and time-boxing*

Happens regularly *– usually once per day*



Solution match-making

+ ***Helps people stuck with bugs*** *find someone who has solved a similar problem*
+ ***Prevents solutions being "re-invented"*** *for lack of knowing someone to ask*
+ ***Leads to increased cross-learning as matches made***
+ ***Raises topics needed to be discussed*** *– increasing knowledge transfer*

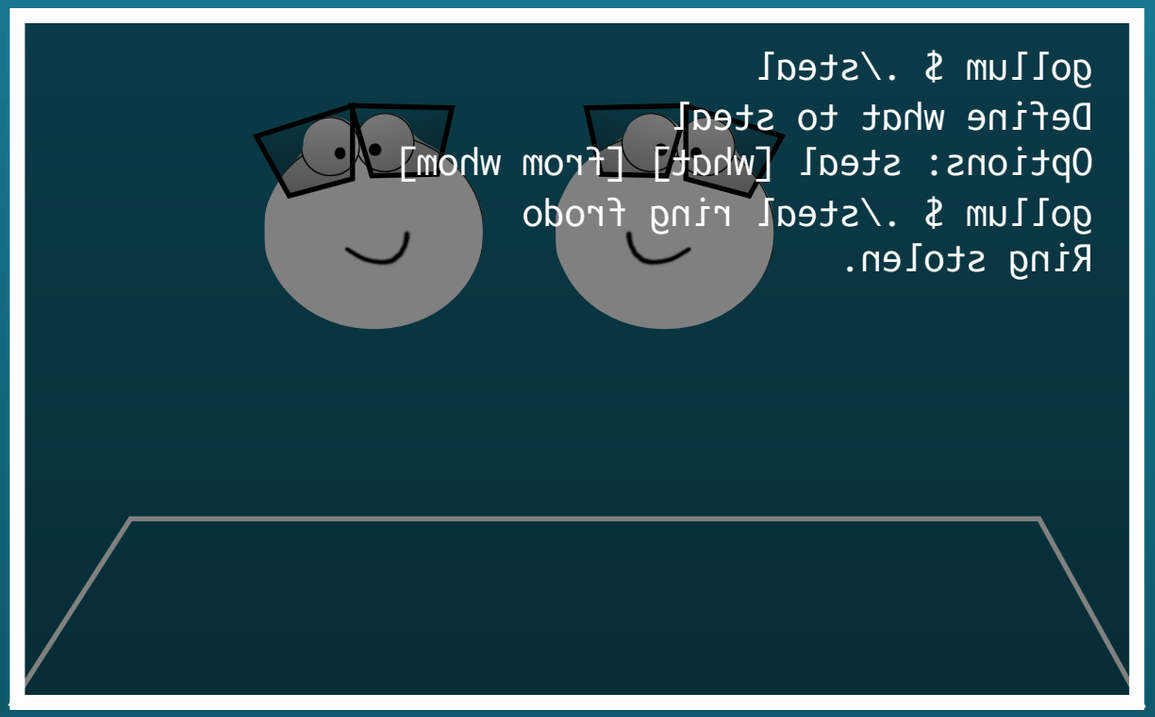


Pair programming

Requires little *– a wide desk, big screen and sufficient personal hygiene*

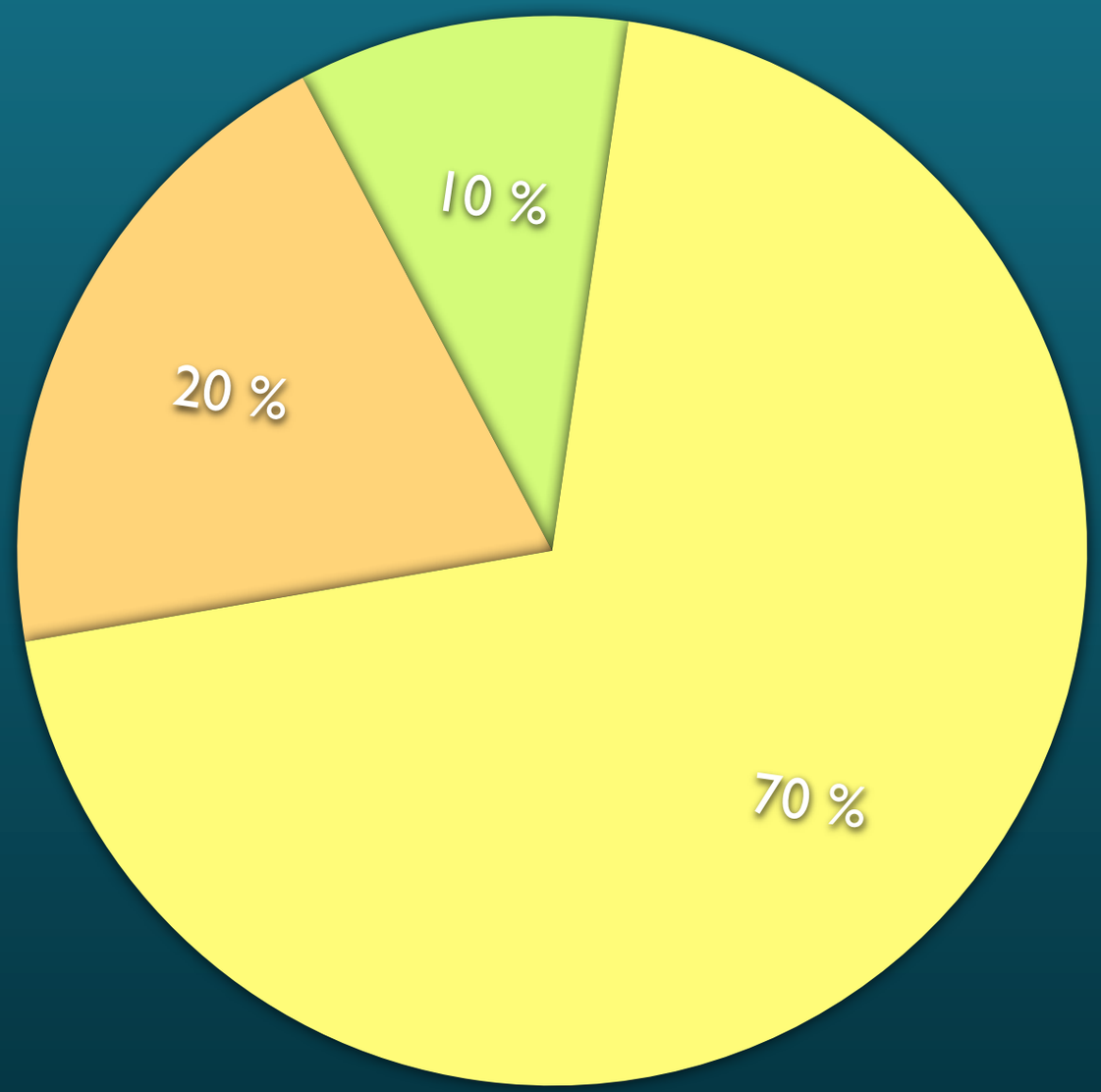
Can be done by developers *whenever they see the need*

One developer is the tactical "driver" *– the other the strategic "observer/navigator" – roles are switched frequently*

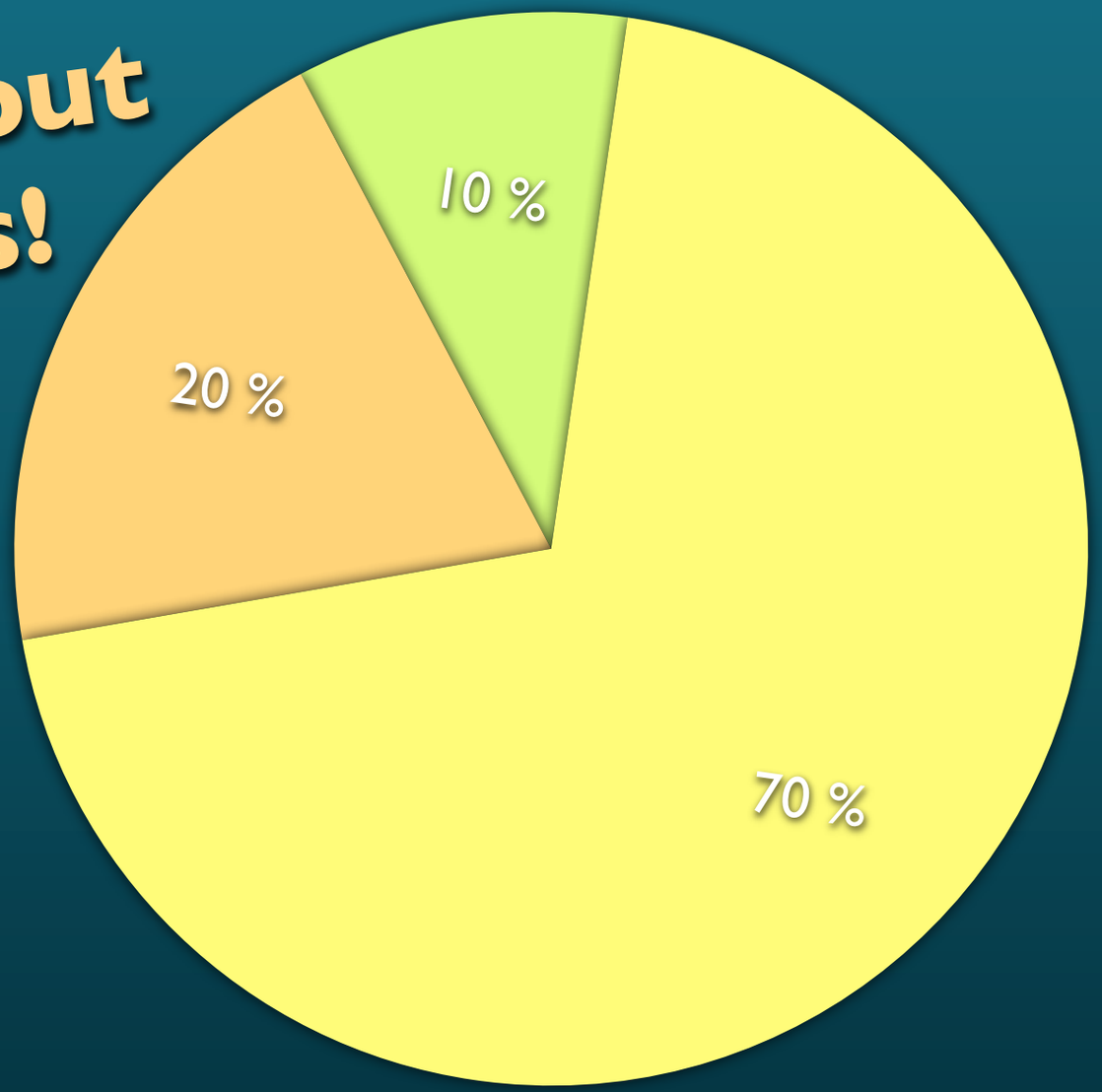


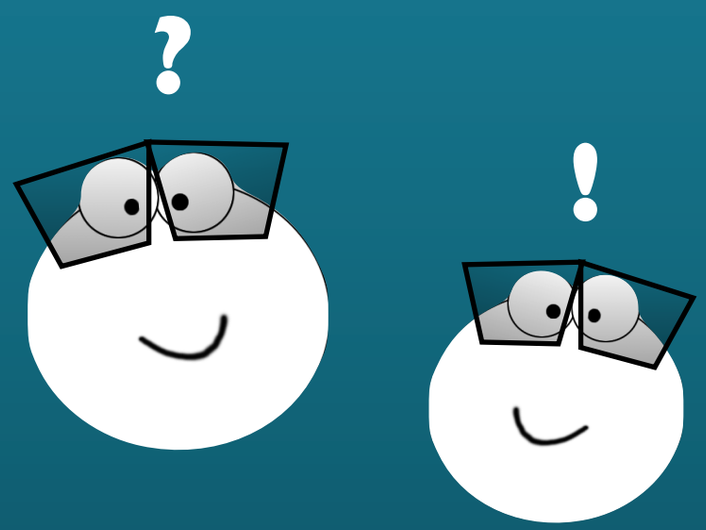
Pair programming

+ ***Helps new developers learn*** *from more experienced developers*
+ ***Improves conformity*** *in coding styles and solutions*
+ ***Applied "promiscuously" can be used to spread knowledge through the entire team***
+ ***Reduces defects/bugs*** *by 15 - 50%*


10 %
20 %
70 %

It's 20% about processes!





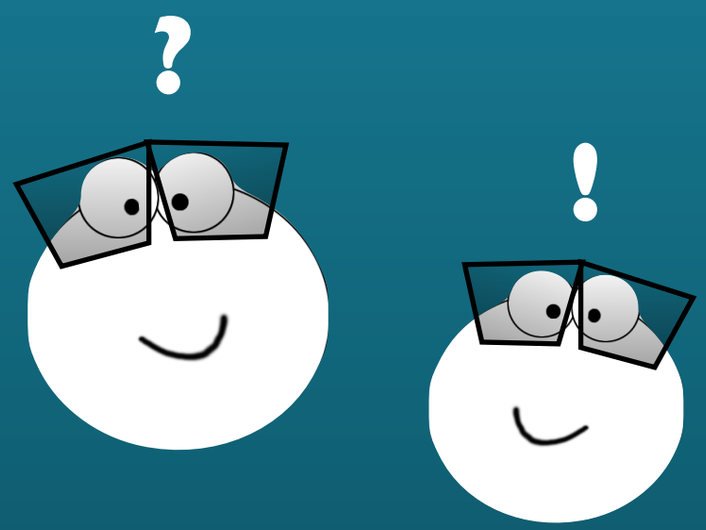
Training new staff

Newly hired are helped to come up to speed faster

Can be made very cheap and resource non-intense

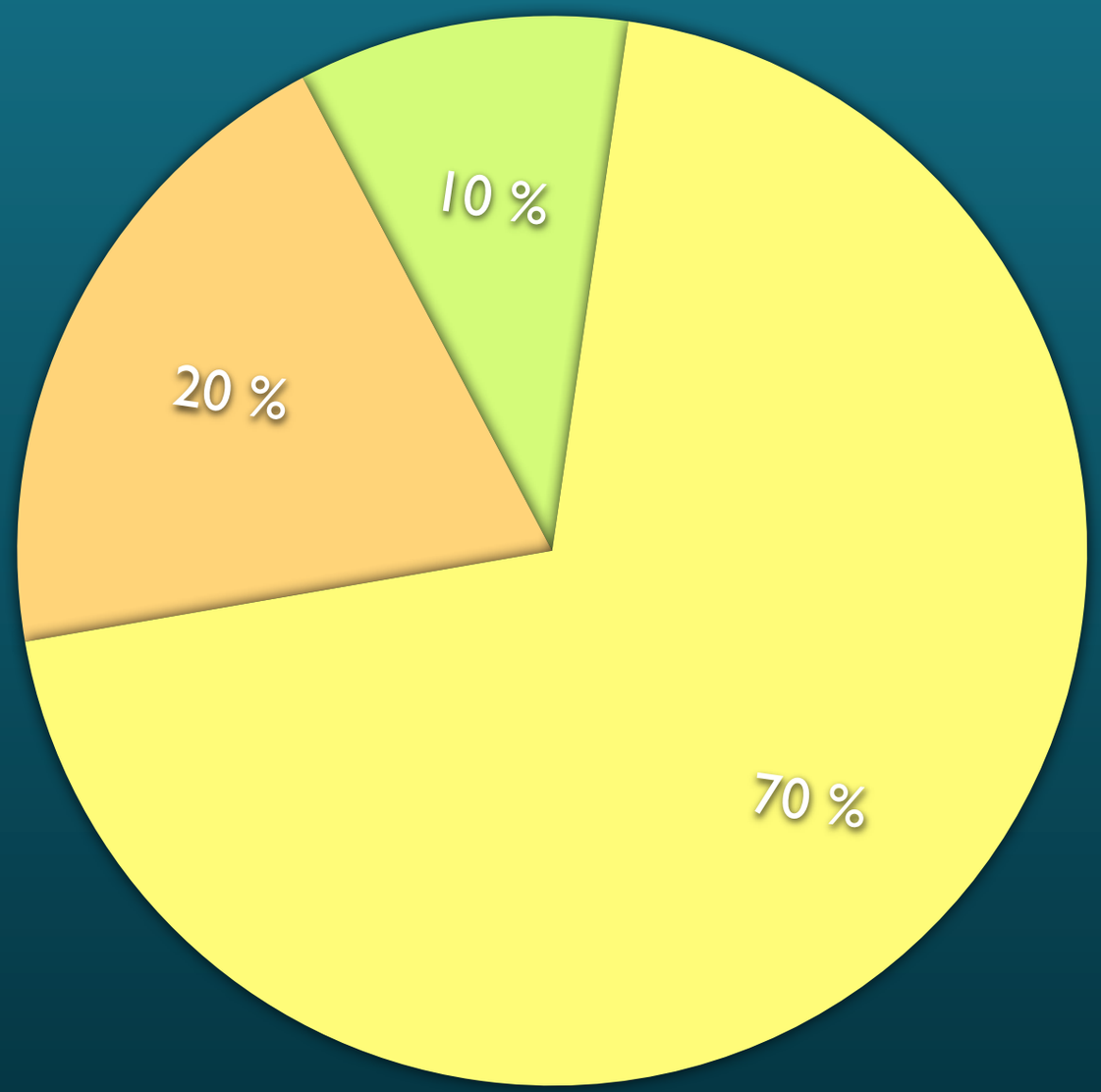
Requires a mentor role *and a CoP for development*

Has great effect *even at small scale*

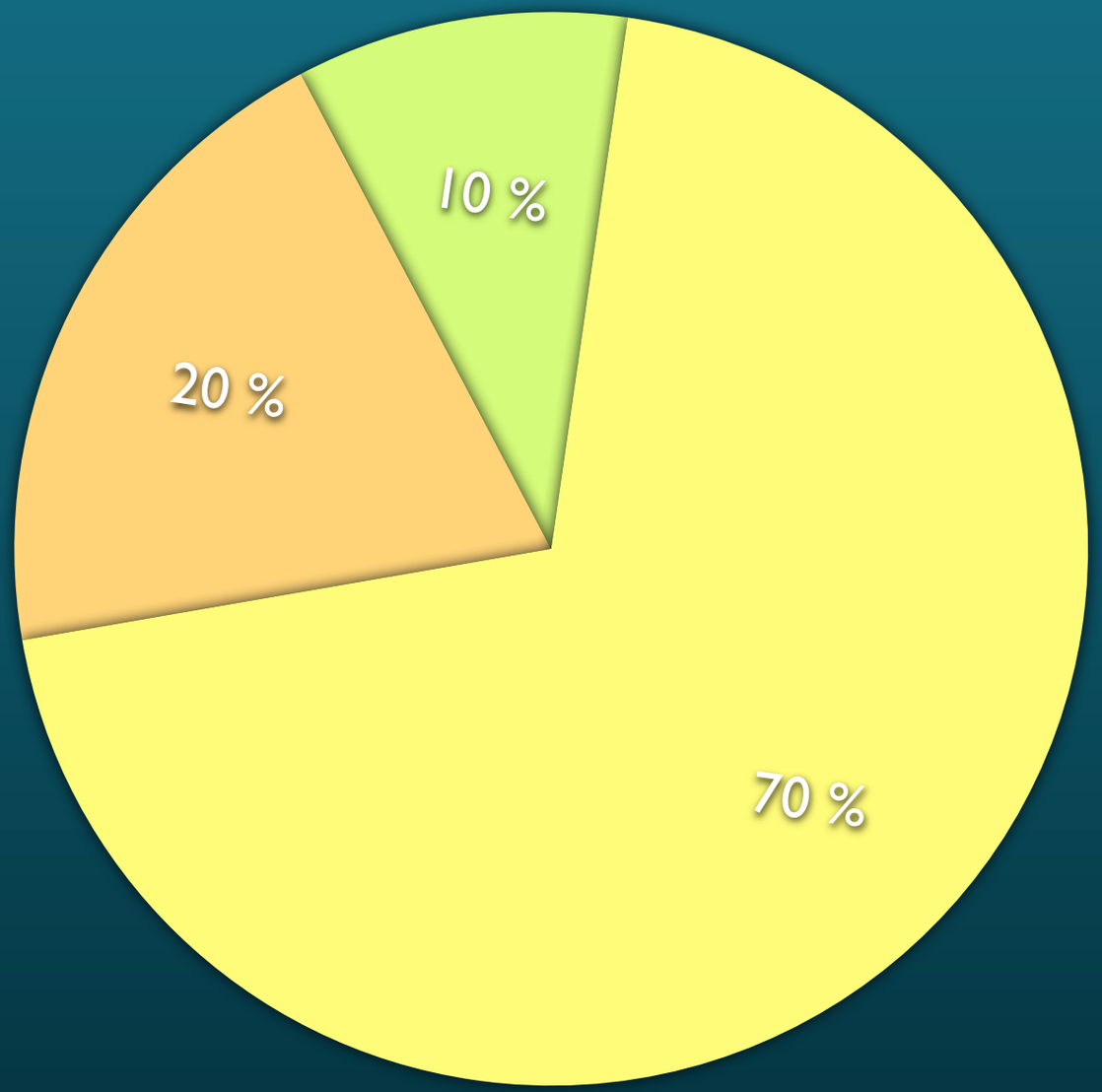


Training new staff

+ ***Even a simple checklist of "things to know" makes a difference***
+ ***Speeds up learning and new hires can start billing fast*** *– as soon as day two*
+ ***Offloads rest of team*** *from having to support the new hire*
+ ***Developers with teaching skills get recognition*** *for being "mentors"*


10 %
20 %
70 %

It's 10% about technology!



Wiki

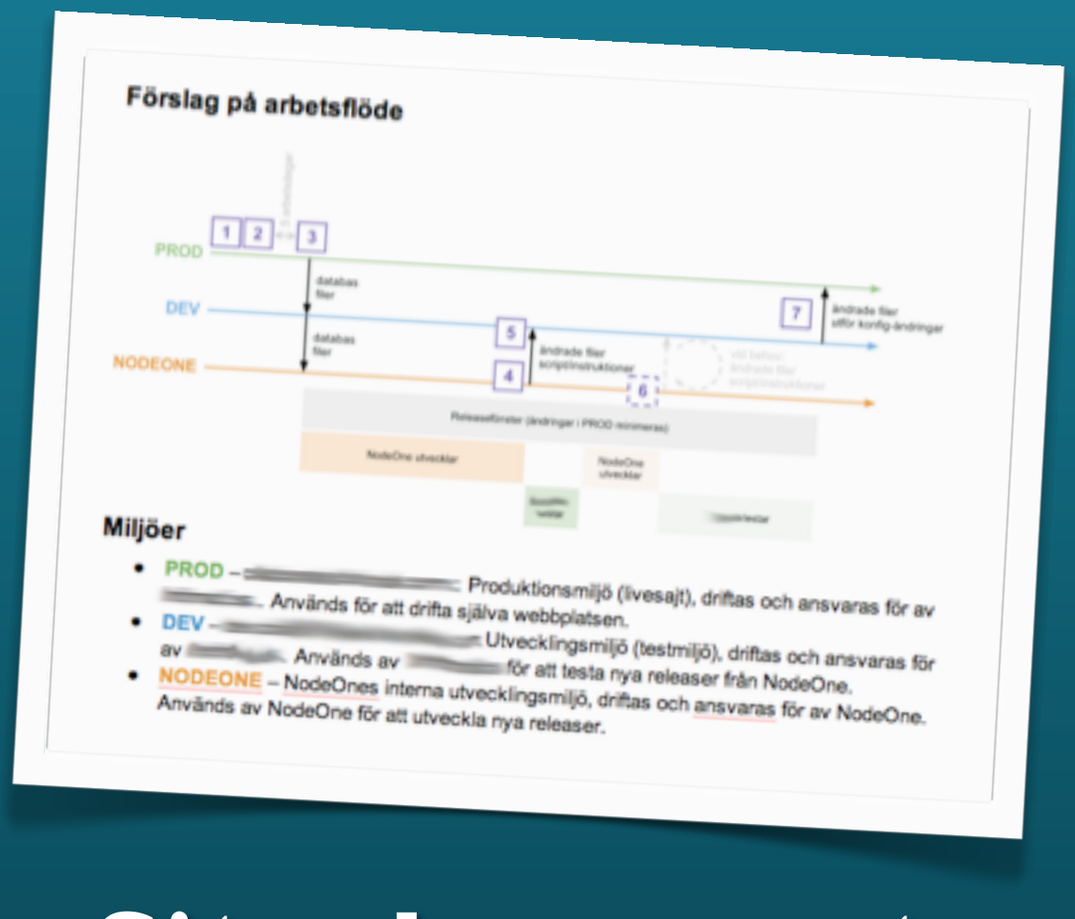
***Can be built on Drupal** in short time*

Good for storing information

Content needs to be kept up-to-date

Wiki

+ ***Good for storing instructions, scripts, snippets and notes***
+ ***Repository for things you need to keep track of*** *and which benefit more people than you*
+ ***Has low barrier of entry***

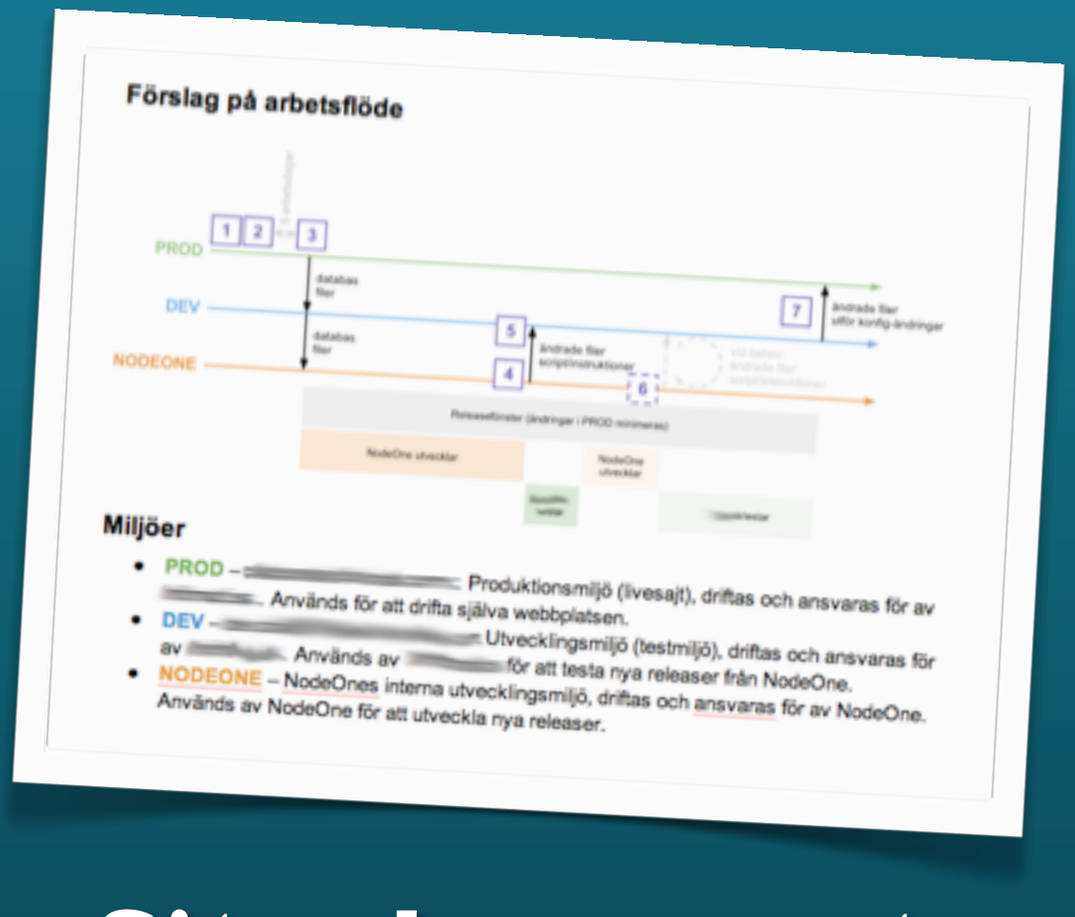

Förslag på arbetsflöde
PROD
DEV
NODEONE
1
2
3
4
5
6
7
databas filer
databas filer
ändrade filer skriptinstruktioner
ändrade filer utför konfig-ändringar
Miljöer
PROD – Produktionsmiljö (livesajt), driftas och ansvaras för av . Används för att drifta själva webbplatsen.
DEV – Utvecklingsmiljö (testmiljö), driftas och ansvaras för av . Används av för att testa nya releaser från NodeOne.
NODEONE – NodeOnes interna utvecklingsmiljö, driftas och ansvaras för av NodeOne. Används av NodeOne för att utveckla nya releaser.

Site documents

List everything technical *that's needed to know to work on a project*

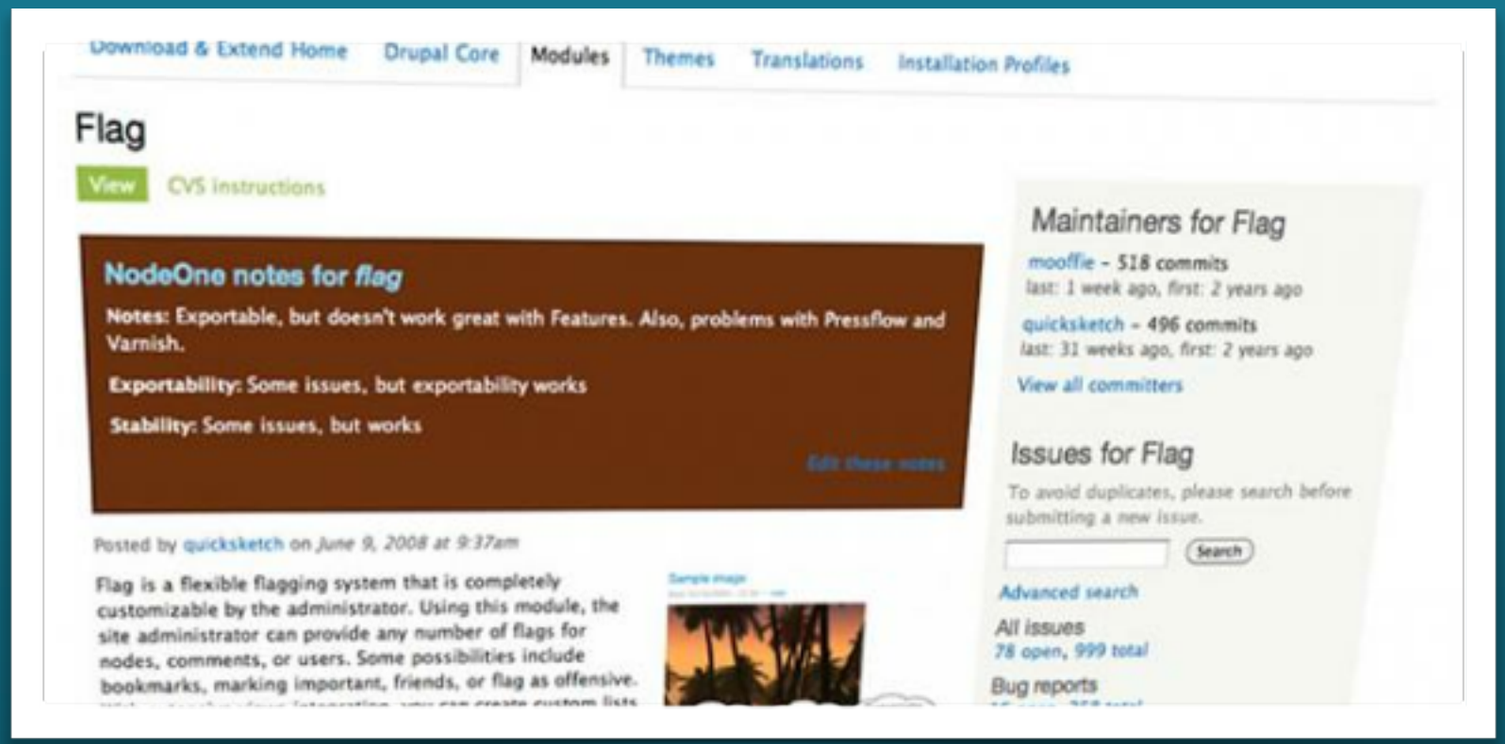
Managed and owned by the developers

Should be easy to access and stored with the site, for example in its code repository



Site documents

+ ***Accessible and concise*** *– follows a standardized format*
+ ***Helps developers taking over*** *maintenance of a website*
+ ***Reduces depence on keeping notes in email and risk of having conflicting information***

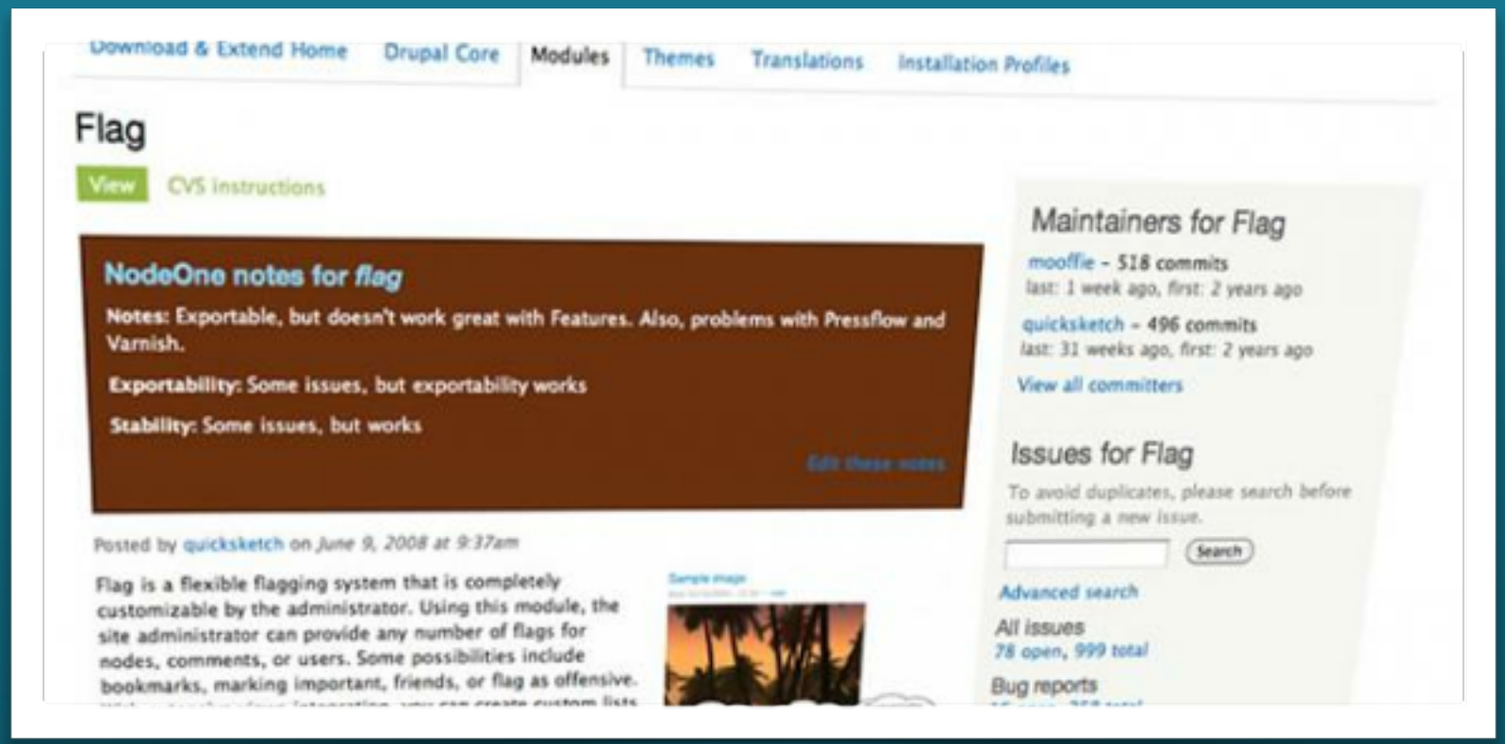


Browser notes

Shows notes and remarks on drupal.org projects in the browser

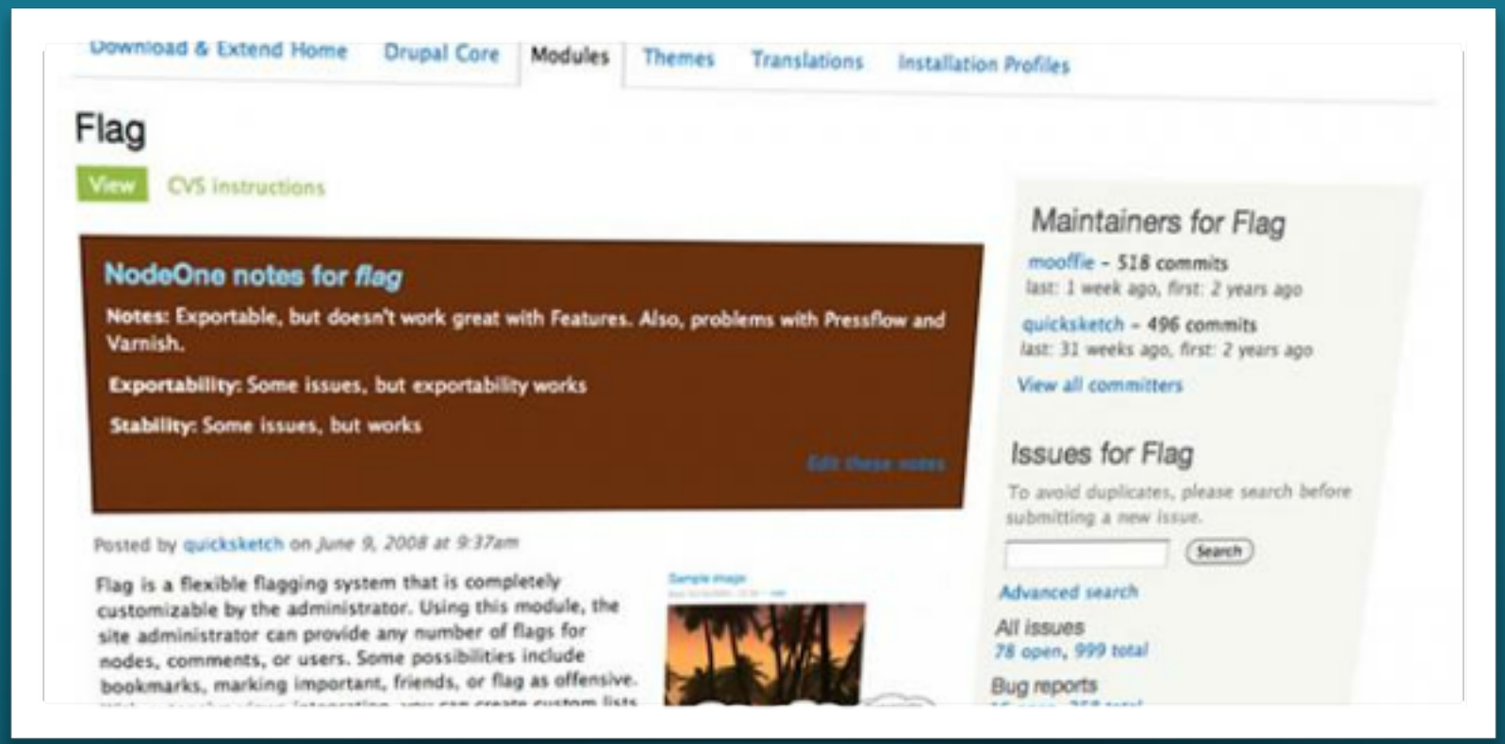
Installed in the browser as a user script *and uses our wiki as note repository*

Everyone can edit and contribute notes *– it's easy and painless*



Browser notes

+ ***Makes information available contextually*** *– no extra step needed to find it*
+ ***It's always there*** *- you don't have to think about it*
+ ***Encourages contribution and updating of notes to keep them up-to date***



Browser notes

Read more and download:

http://bit.ly/KP3ESH

issue tracker

g.d.o

git

projects

wikis

camps

Drupal

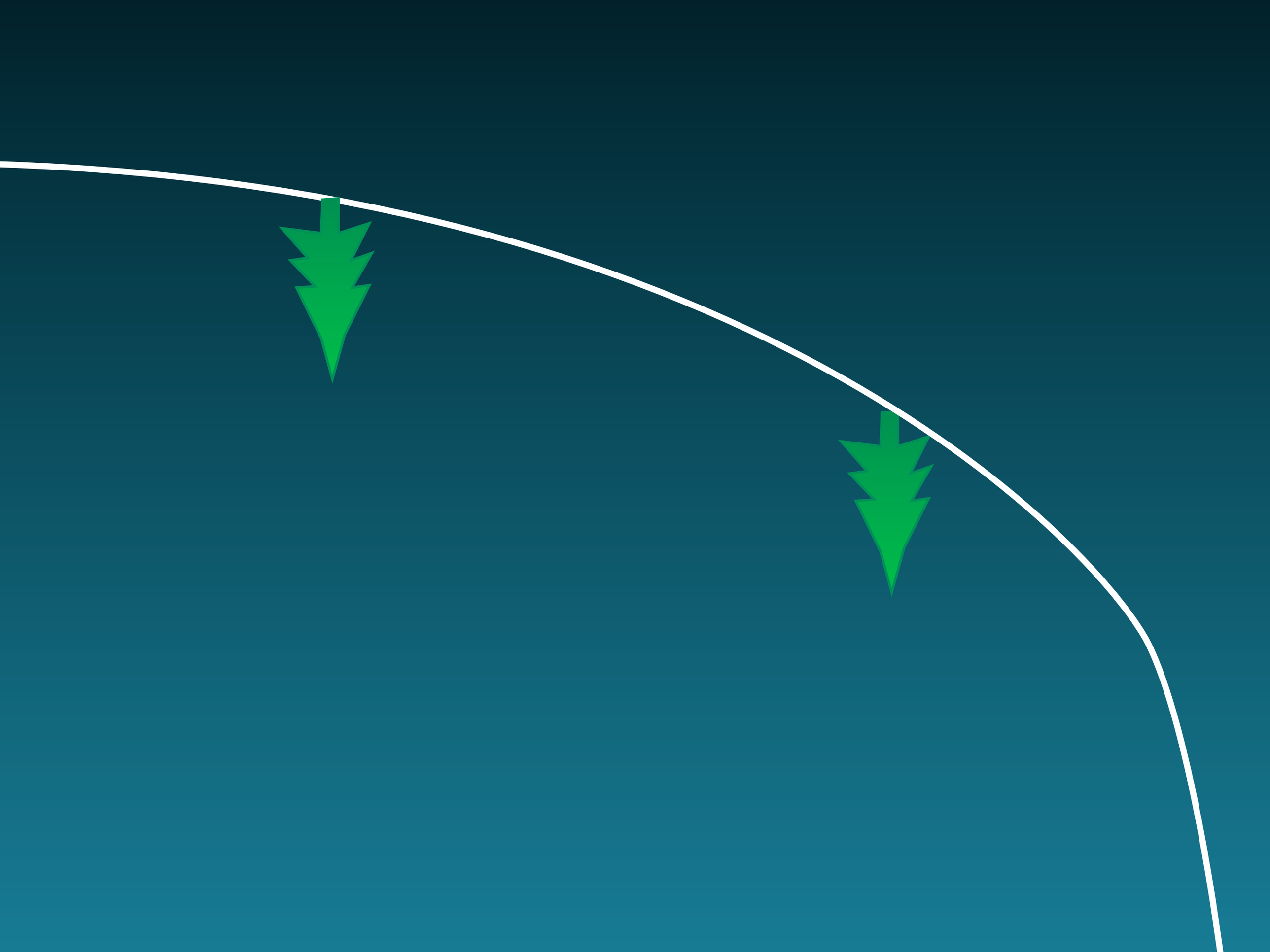
conferences

maintainers

forums

bof's

irc



Regular events

http://www.flickr.com/photos/heyrocker/5337481700

http://www.flickr.com/photos/isapisa/5630300229

Stories and references

Transparency

Communicate the value of contributions

http://www.sxc.hu/photo/189893

Progress and milestones matter

“Walk the talk”

http://www.sxc.hu/photo/1188091

The money case for KM

Capital Intellectual ~~Property~~

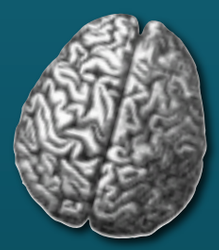
"It's all about the the brains!"

Your intellectual capital goes home at 5

http://www.flickr.com/photos/isapisa/5630296705

Assets

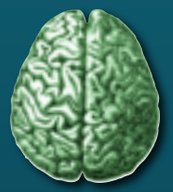
Staff



Know-
ledge

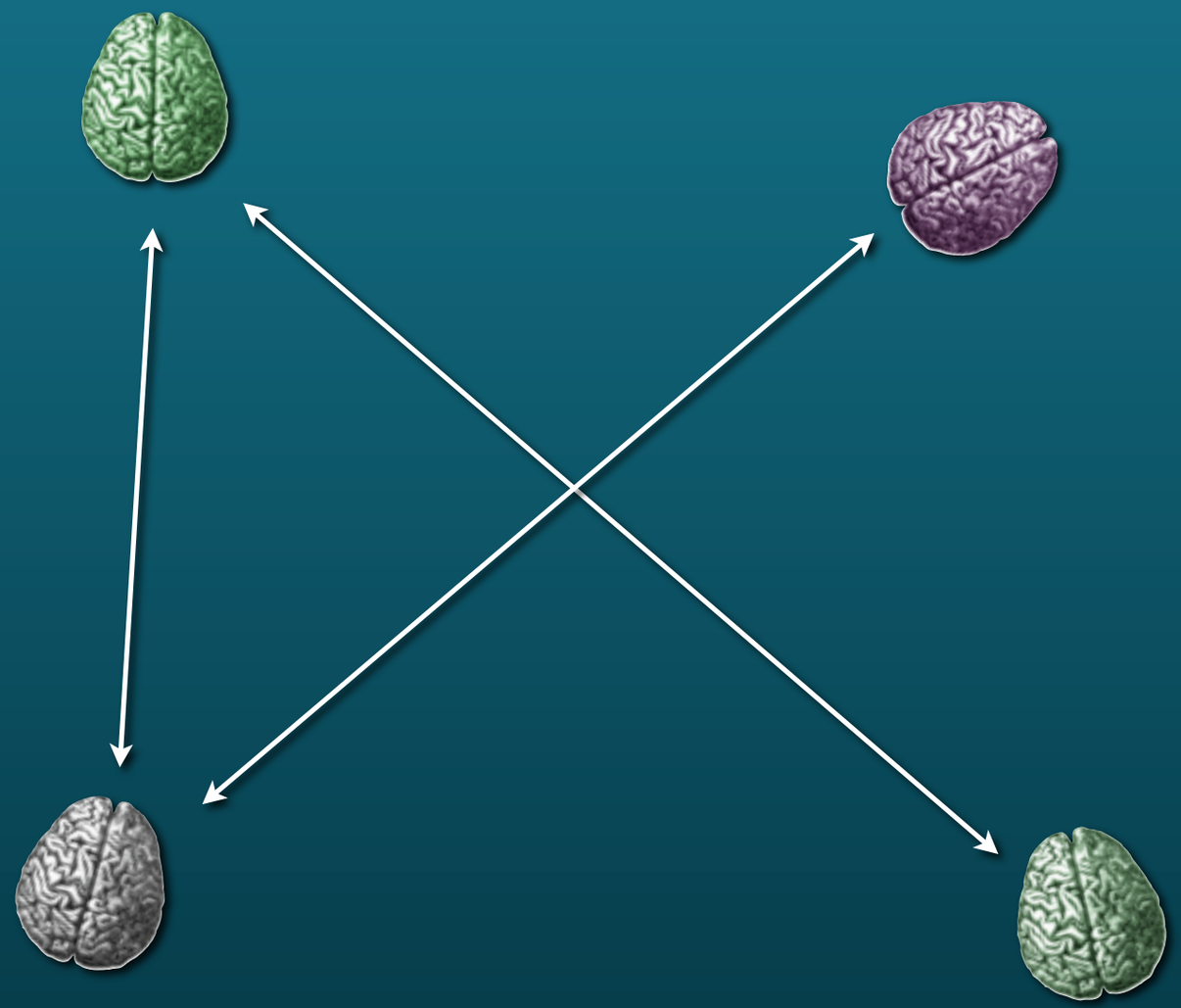
Brand

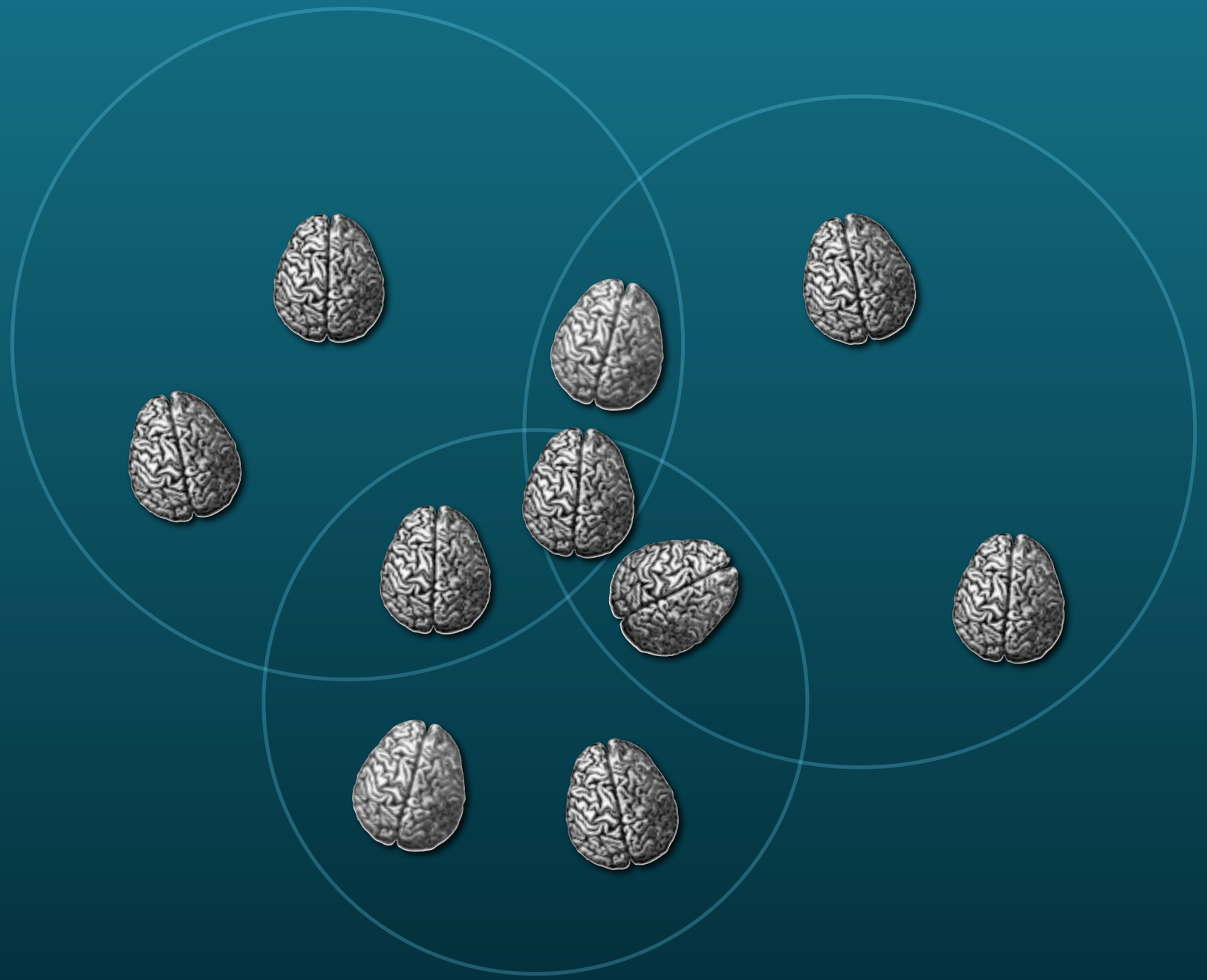
Customers



Tacit ***Explicit*** ***Embedded***

http://www.flickr.com/photos/37996595735@N01/40102158/





Economist Intelligence Study Foresight 2020

"Five key trends to determine competitiveness in the coming decade"

Knowledge management

Globalization

Demographics

Atomization

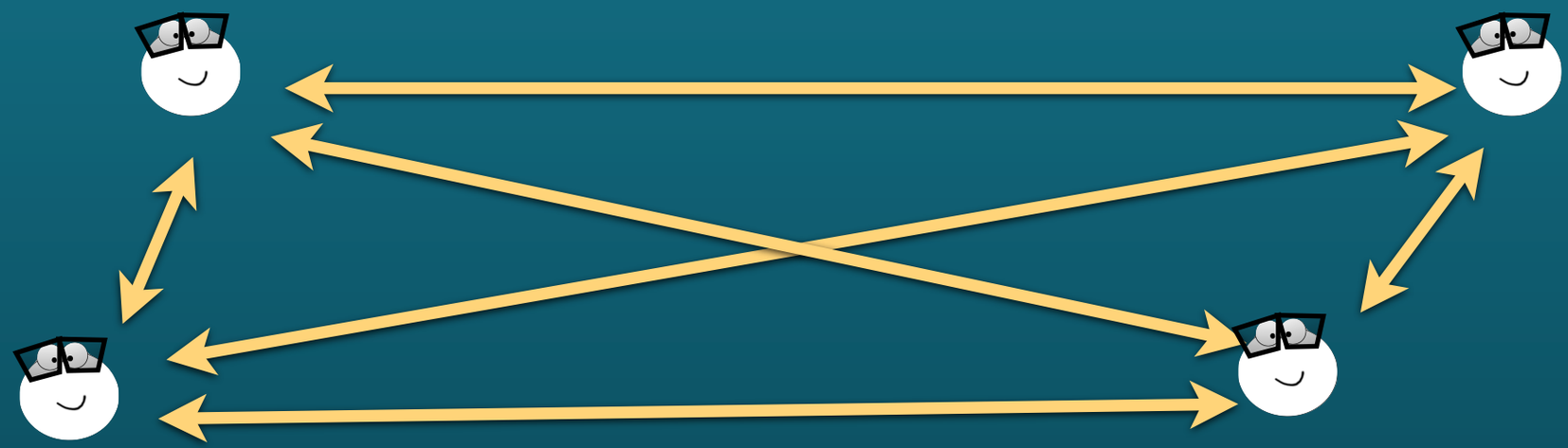
Personalization

www.eiu.com/site_info.asp?info_name=eiu_Cisco_Foresight_2020&rf=0

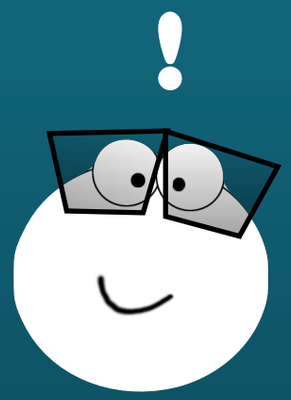
Getting started

- ✓ Constant pain
- ✓ Can be fixed with few resources
- ✓ Can be fixed easily
- ✓ Will show results quickly

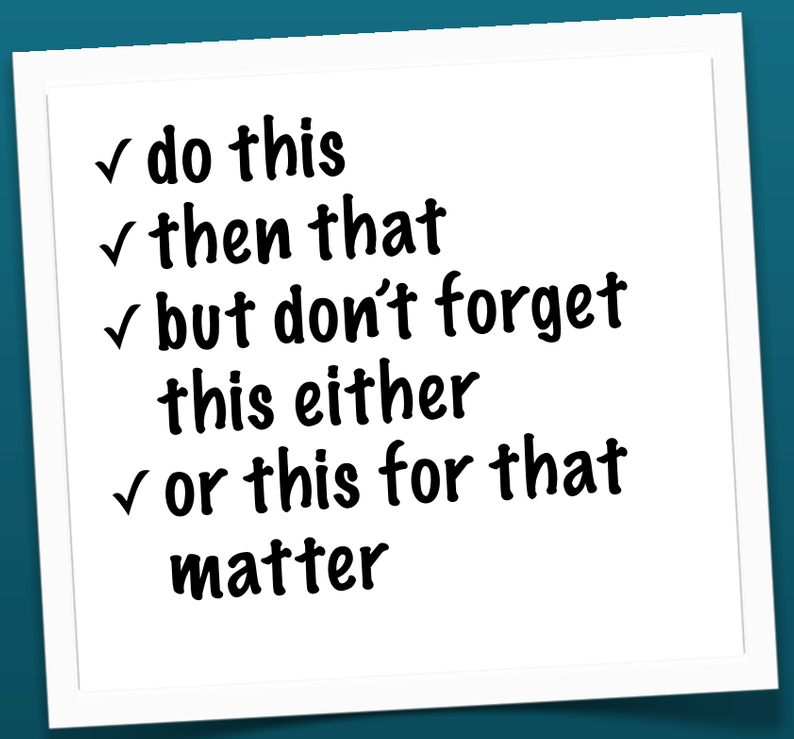
Knowledge is strategically important



Community of Practice



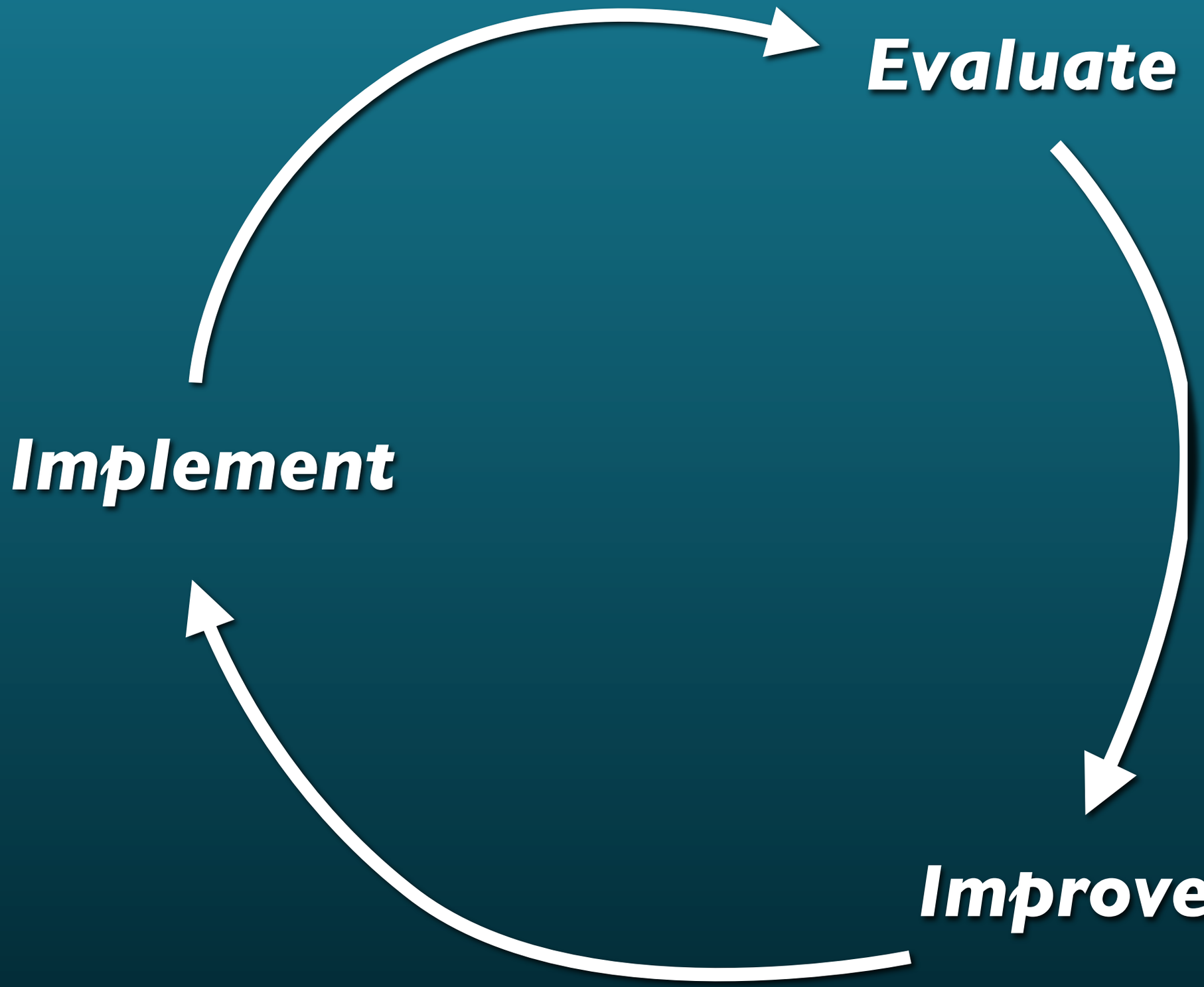
New routine

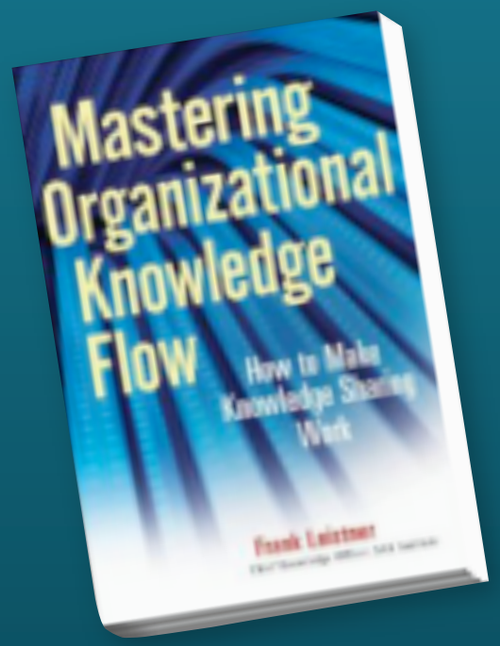

✓ do this
✓ then that
✓ but don't forget this either
✓ or this for that matter

Checklist

Tool

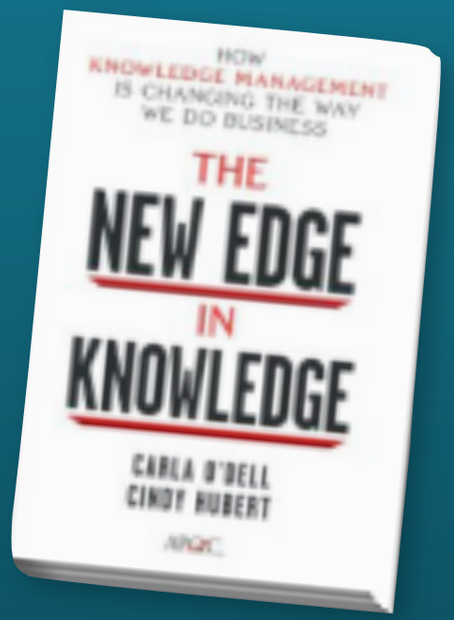
http://www.flickr.com/photos/21025851@N00/2168414155/


Evaluate
Implement
Improve



Mastering Organizational Knowledge Flow

Frank Leistner



The New Edge in Knowledge

Carla O'dell, Cindy Hubert

Summary

- ✓ Understand the problems you have as a result of a lack of flow of knowledge
- ✓ People, not tech, are key to making knowledge flow
- ✓ Embed knowledge in your culture and processes and don't rely on a few knowledgeable superstars
- ✓ Knowledge is your most valuable asset
- ✓ Fix the most painful problems first, start simple, evaluate and improve as you learn
- ✓ Being transparent about the value and use of knowledge motivates people to contribute

Thank you for listening!

We're hiring! UX'ers, developers, product owners and more! Talk to me.

email jakob@nodeone.se

twitter http://www.twitter.com/realsolipsist

drupal.org account http://drupal.org/user/37564