

Effective Teams

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Questionnaire



A myth of software developer superhero



in·tel·li·gence *noun* \in-'te-lə-jən(t)s\

(1) : the ability to learn or understand or to deal with new or trying situations : reason; *also* : the skilled use of reason

(2) : the ability to apply knowledge to manipulate one's environment or to think abstractly as measured by objective criteria (as tests)

Source: <http://www.merriam-webster.com/dictionary/intelligence>



Experiment



7912



Fish eat candy



Mice are bigger than dogs



17th century cars were slow



Red lemons are sweeter



Java is interpreted language



Thank you



Intelligence versus Collective Intelligence



Questionnaire



There's no connection
between individual
intelligence and
collective intelligence

Source: Anita Woolley: Collective Intelligence in Human Groups



Collective intelligence
trumps
individual intelligence



Collective intelligence was much more predictive in terms of succeeding in complex tasks than average individual intelligence or maximal individual intelligence

Anita Woolley



Indicators of collective intelligence

Source: Anita Woolley: Collective Intelligence in Human Groups



Indicators of collective intelligence

Social perceptiveness

Source: Anita Woolley: Collective Intelligence in Human Groups



Indicators of collective intelligence

Social perceptiveness

Communication quality

Source: Anita Woolley: Collective Intelligence in Human Groups



Indicators of collective intelligence

Social perceptiveness

Communication quality

Moderate cognitive style diversity

Source: Anita Woolley: Collective Intelligence in Human Groups



Cognitive styles

Object visualizers (visual arts)

Spatial visualizers (engineering)

Verbalizers (humanities)

Source: O. Blazhenkova, M. Kozhevnikov: The New Object-Spatial-Verbal Cognitive Style Model



Indicators of collective intelligence

Social perceptiveness

Communication quality

Moderate cognitive style diversity

Source: Anita Woolley: Collective Intelligence in Human Groups



Questionnaire



The more women the
better collective
intelligence*

Source: Anita Woolley: Collective Intelligence in Human Groups



It's not about any
diversity;
it's about gender



Questionnaire



Bigger teams have better collective intelligence*

Source: Anita Woolley: Collective Intelligence in Human Groups



There's no difference in
productivity or quality
between teams of 5-9 and
10-12 people

Source: Larry Maccherone: Quantifying the impact of Lean, Kanban, and Agile practices



Awesome team is
not enough



Teamwork



Teamwork

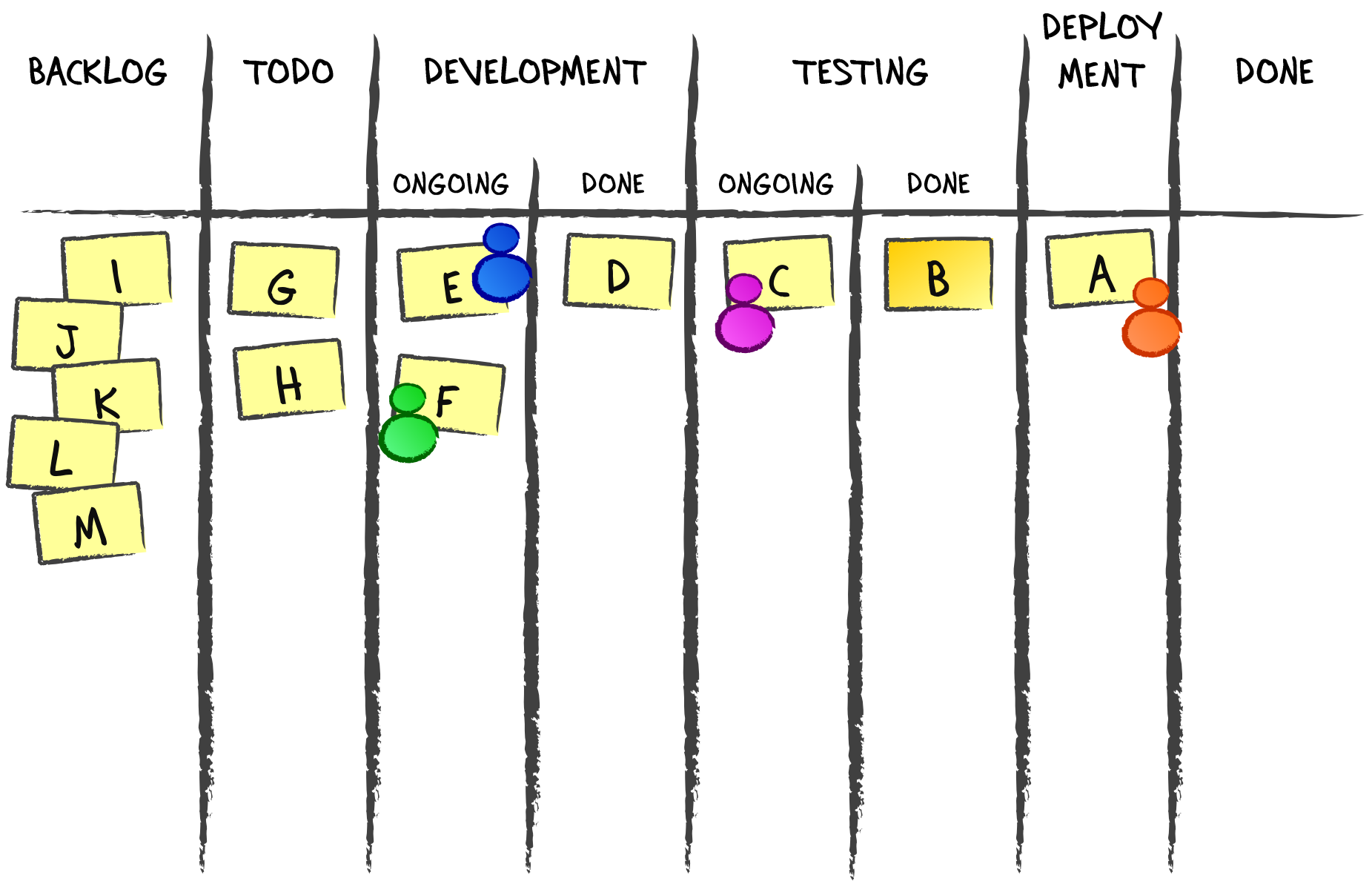


Questionnaire



Visualization





There always is a bottleneck



BACKLOG

TODO

DEVELOPMENT

TESTING

DEPLOYMENT

DONE

ONGOING



DONE

ONGOING


DONE

- O
- P
- Q
- R
- S
- T
- U


- M
- N

- K 
- L 

- D
- E
- F
- G
- H
- I
- J

- C 

- B

- A 



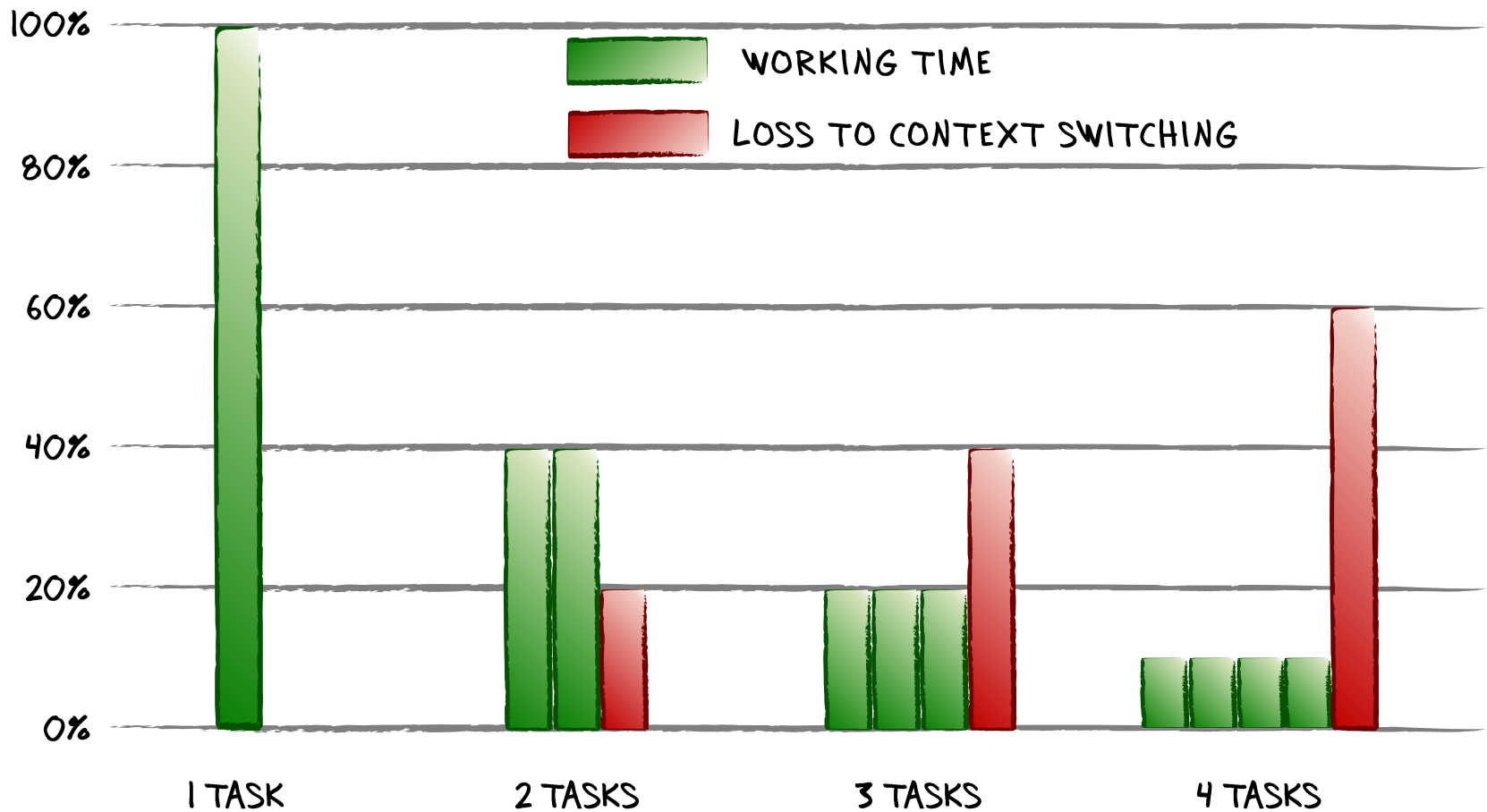
Visualization helps to
understand how the work
gets done



What's the problem with
work queuing up again?



Cost of multitasking



Source: Gerald Weinberg, Quality Software Management: Vol. 1 System Thinking



Zeigarnik Effect

Tendency to experience
intrusive thought about an
objective left incomplete

Source: S. Greist-Bousquet, N. Shiffman: The effect of task interruption and closure on perceived duration



*Cost of task switching is rooted in
interference from thoughts about the task
you are not doing*

Eyal Ophir



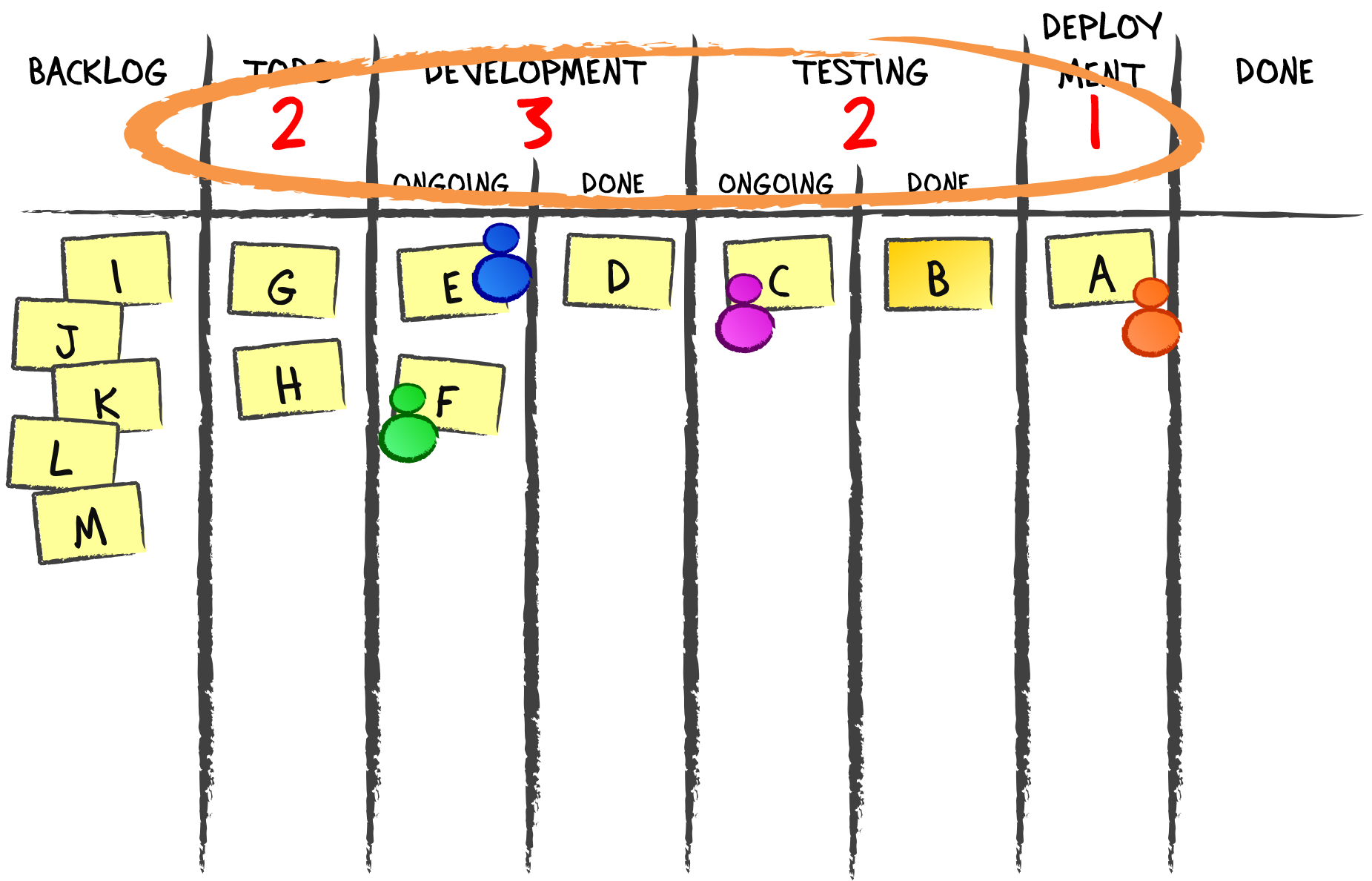
Multitasking cripples quality

Source: E. Ophir, C. Nass, A. Wagner: Cognitive control in media multitaskers



Work in Progress limits





WIP limits result in
slack time



Role of slack time



Helping others



Do you remember
your last answers?



WIP limits help to

Avoid multitasking

Help others to finish faster

Remove even more WIP from
the system



Questionnaire



Slack time incentivizes
system improvements



Into the trenches and
dealing with
whatever is there



Fun? Not really...



Questionnaire



*There is nothing so useless as doing
efficiently that which should not be done
at all*

Peter Drucker



Product management
is our job too



The client isn't
always right



Efficient != Effective



*Processing the waste more effectively is
cheaper, neater, faster waste*

Stephen Parry



Things to remember



Collective intelligence
trumps
individual intelligence



Not technical skills
Not individual intelligence



Social perceptiveness
Evenness of communication
Moderate diversity of
cognitive styles



Short version: More women!



Effective work often means
doing stuff that we wouldn't
normally do



Visualization help to
understand work and spot
problems



WIP limits help to improve
short term and long term



Short version: Less WIP!



Thank you

I wish you more women (in teams)
and less work (in progress)

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