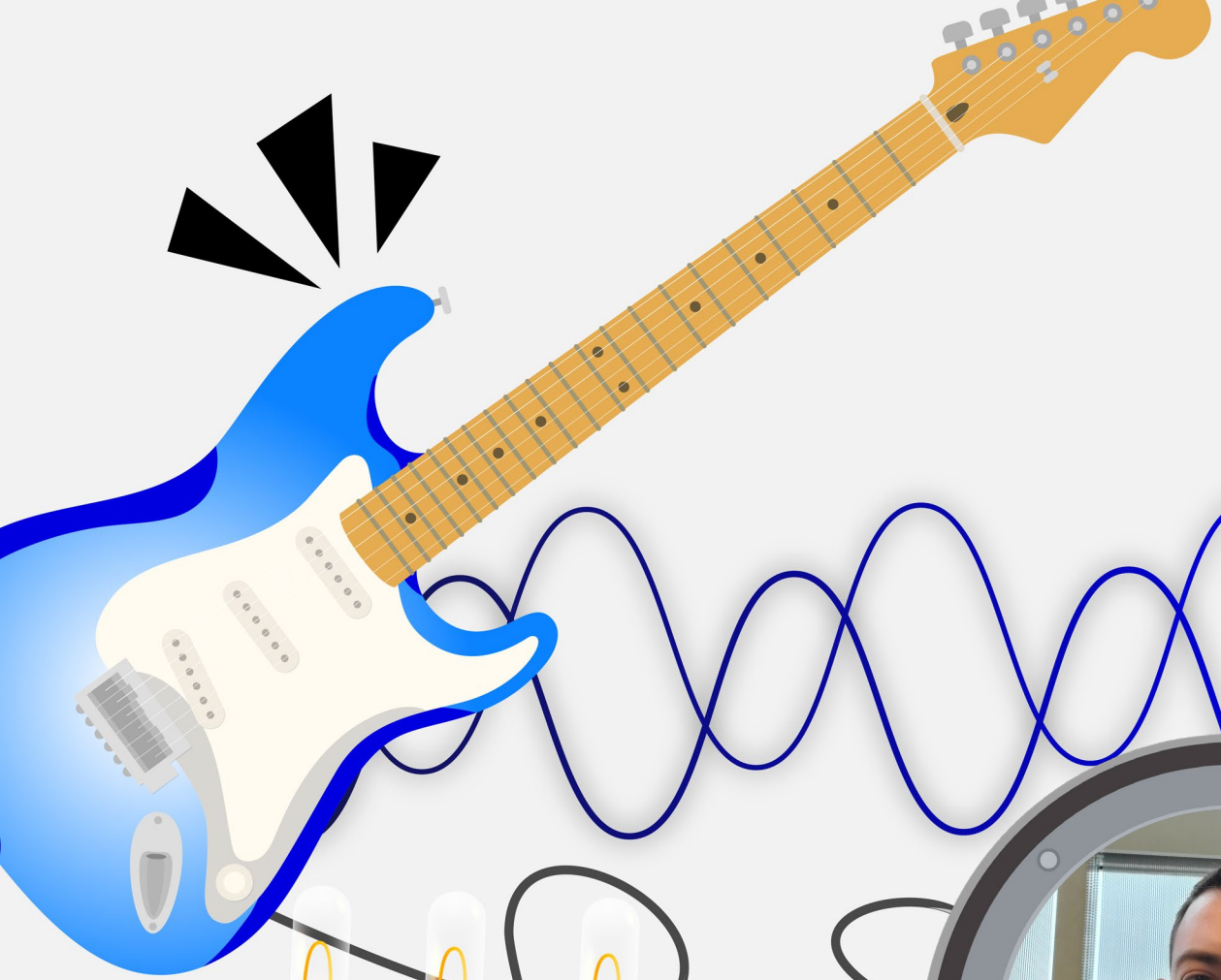
PNSQC

OCTOBER 9-11 2023

AMP IT UP:

TRANSFORMING QUALITY



SPEAKER

Evan Masters

Reducing Ambiguity in Requirements Through Multi-Modal Communication

About Evan

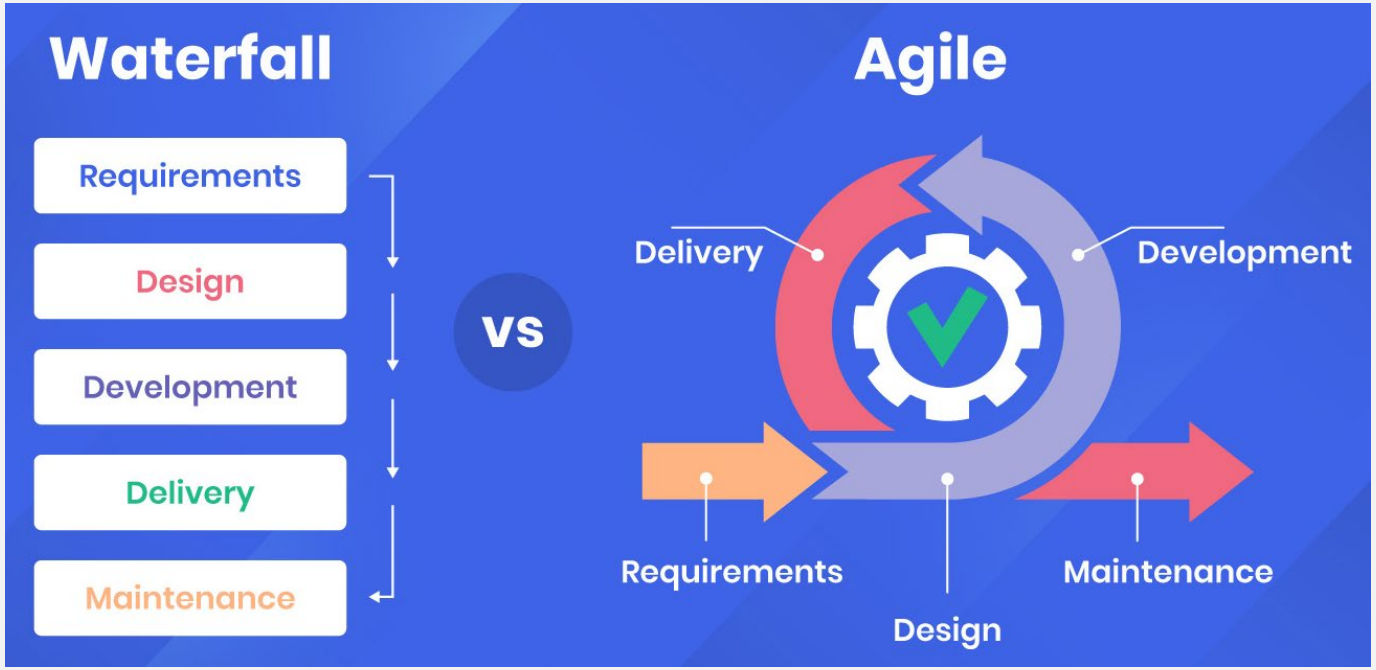
- Based in Spokane, WA
- Been in SQA with Critical Logic since 2010
- Began as SQA Analyst, specializing in MBT
- Customer Success Manager & Product Owner
- BS Physics, MBA, CSM, SAFe certified
- Adjunct professor of Business Ethics

Agenda

- I will talk
- We will talk

Overview of the current landscape of software development

- Two ends of the development methodology spectrum:



- Most organizations fall somewhere along the spectrum

Challenges in effectively conveying requirements to development

- Organizational structure (e.g., silos)
- Lack of full understanding
- Not experienced conveying at the right level

Consequences of ambiguous requirements

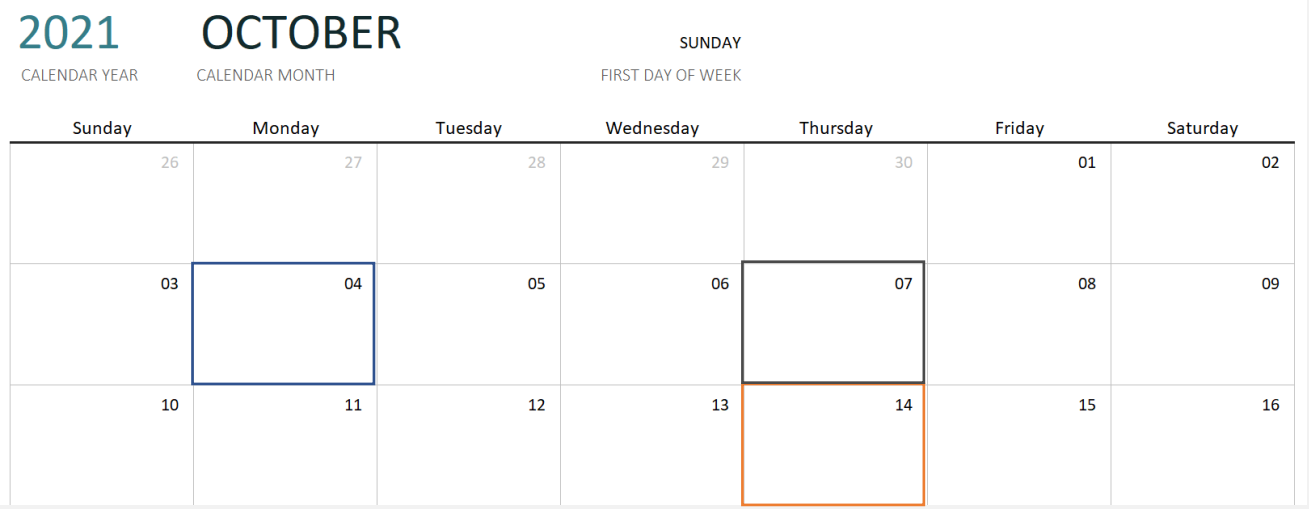
- Feedback loops – lots of them!
- Rework
- Opportunity costs
- Missed deadlines
- Technical debt
- Erosion of trust and consequences

Multi-Modal communication as an approach to rqmt communication

- What is multi-modal communication?
  - Using more than one ‘mode’ of communicating
- Most requirements are conveyed via text and text alone
  - Specs, User Stories, unstructured descriptions of an idea
- Multi-Modal Communication is used to:
  - Common Understanding of Requirements (CURe)
  - Reduce/eliminate ambiguity
  - Make requirements more accessible

Ensure clarity, reduce ambiguity, and create a common understanding of the requirements

- My favorite example: Next Thursday
  - What I said (and meant!) vs what my boss interpreted

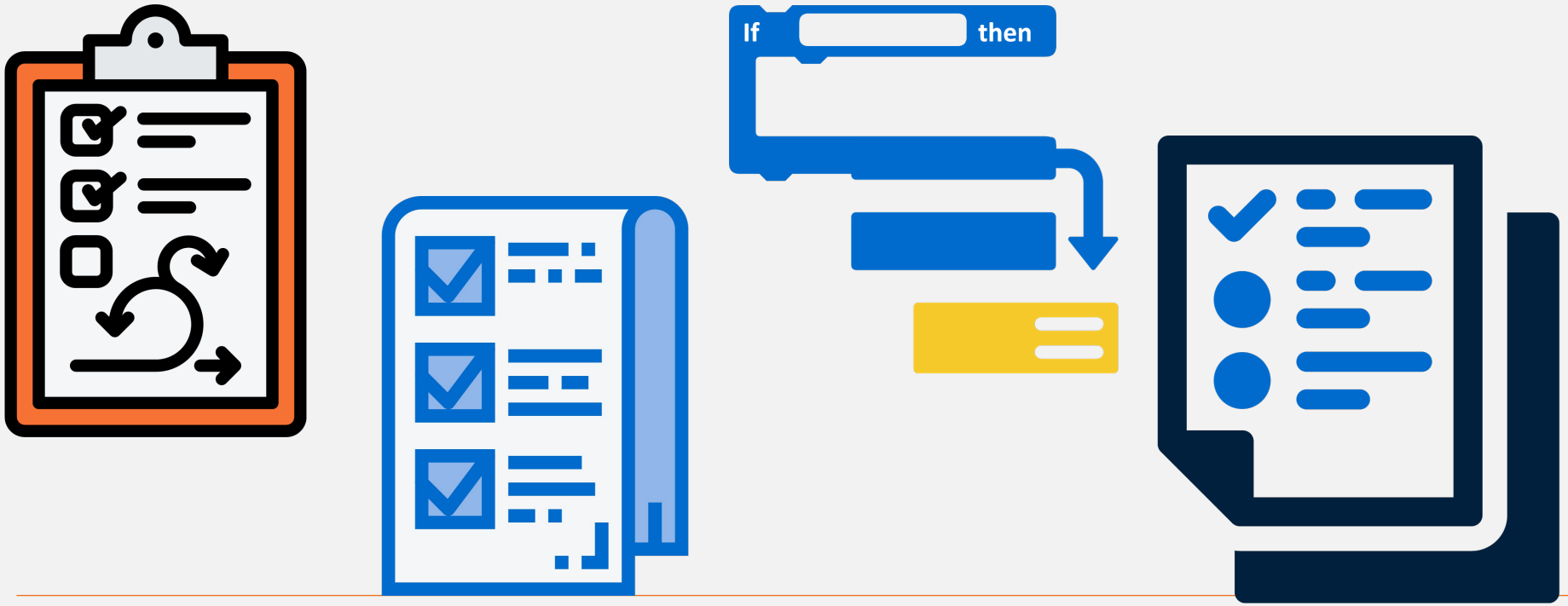


2021	OCTOBER		SUNDAY			
CALENDAR YEAR	CALENDAR MONTH		FIRST DAY OF WEEK			
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	01	02
03	04	05	06	07	08	09
10	11	12	13	14	15	16

Thursday, October 14th, 2021

Ensure clarity, reduce ambiguity, and create a common understanding of the requirements

- Increase accessibility of requirements
  - Broader audience
  - Different consumption styles



Success: Some Case Studies

- Department of Defense Contractor
- Finance sector
- Start up working with Dept of Veteran’s Affairs

Multi-Modal vs. Traditional Methods

- Some specs rely heavily on written documentation
- Ambiguities – such as the word ‘biweekly’

biweekly 1 of 2 adjective

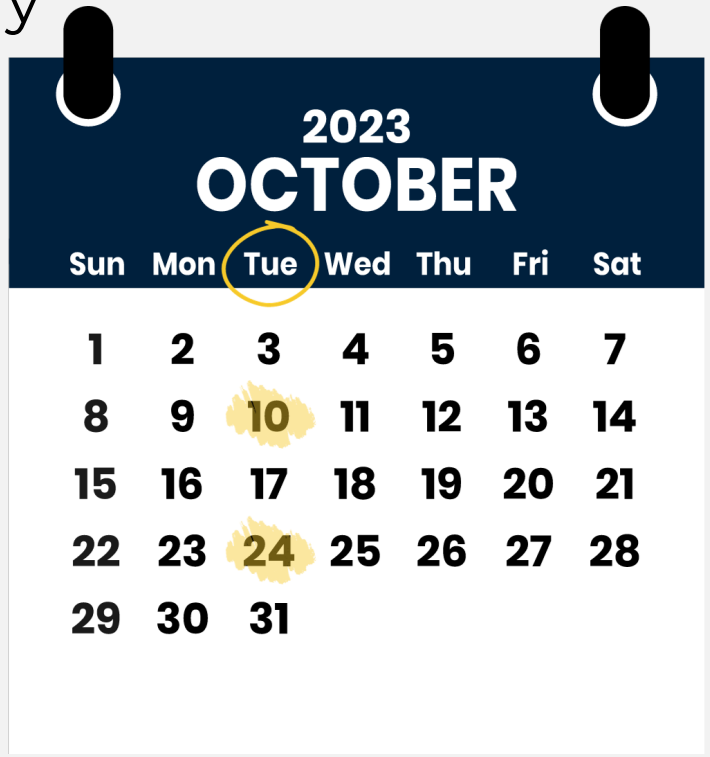
bi·week·ly (ˌ)bī-ˈwē-klē

Synonyms of *biweekly* >

1 : occurring every two weeks

2 : occurring twice a week

biweekly adverb



Resetting the standard of communication

- Ensuring that all stakeholders have a common understanding of the requirements (CURe)
- Facilitating communication between stakeholders with different language skills or learning styles
- Making the requirements more accessible to stakeholders with disabilities
- Improving the efficiency and effectiveness of the requirement development and communication process

Accuracy, Speed, and High-Quality

- If a picture is worth 1,000 words, how many are a video worth?
- Mockups and prototypes!
- Less rework and nipping tech debt in the bud

Best Practices and Guidance

- Identify the stakeholders
- Understand the needs of stakeholders
- Choose the right communication methods
- Use multiple communication methods
- Be flexible and reactive
- Get feedback
- Continuously improve

Conclusions

- Don’t let PROCESS get in the way of quality
- Take the time to take a step back (often!)
- You’re all on the same team
- What are YOUR experiences?

PNSQC
OCTOBER 9-11 2023
AMP IT UP:
TRANSFORMING QUALITY
THANK YOU
SPEAKER Evan Masters
Reducing Ambiguity in Requirements
Through Multi-Modal Communication
PNSQC.ORG