GAME TOOLS AS A SERVICE

SUPPORTING THE CONTINUOUS DEVELOPMENT OF LIVE SERVICE PRODUCTS

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ZENIMAX ONLINE STUDIOS

LIVE SERVICE GAMING SUMMIT

ABOUT ME

- Started as a Software Engineer in a Healthcare IT startup

- Spent the last 8+ years focused on production pipelines and tooling for Live Service MMO game development in the AAA space

MY PARTNERS

Animators   Narrative Designers
Audio Designers   Producers
Concept Artists   Quality Assurance
Engineers   Release Managers
Game Designers   Technical Artists
Level Designers   UI/UX Designers
Marketing Team   Visual Artists

And more...

MY CUSTOMERS

Players

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TOPICS

- Building and Maintaining Live Service Pipelines

- Tooling and Asset Management

- Stakeholder Collaboration and Impact

- Adapting to Remote Work Challenges
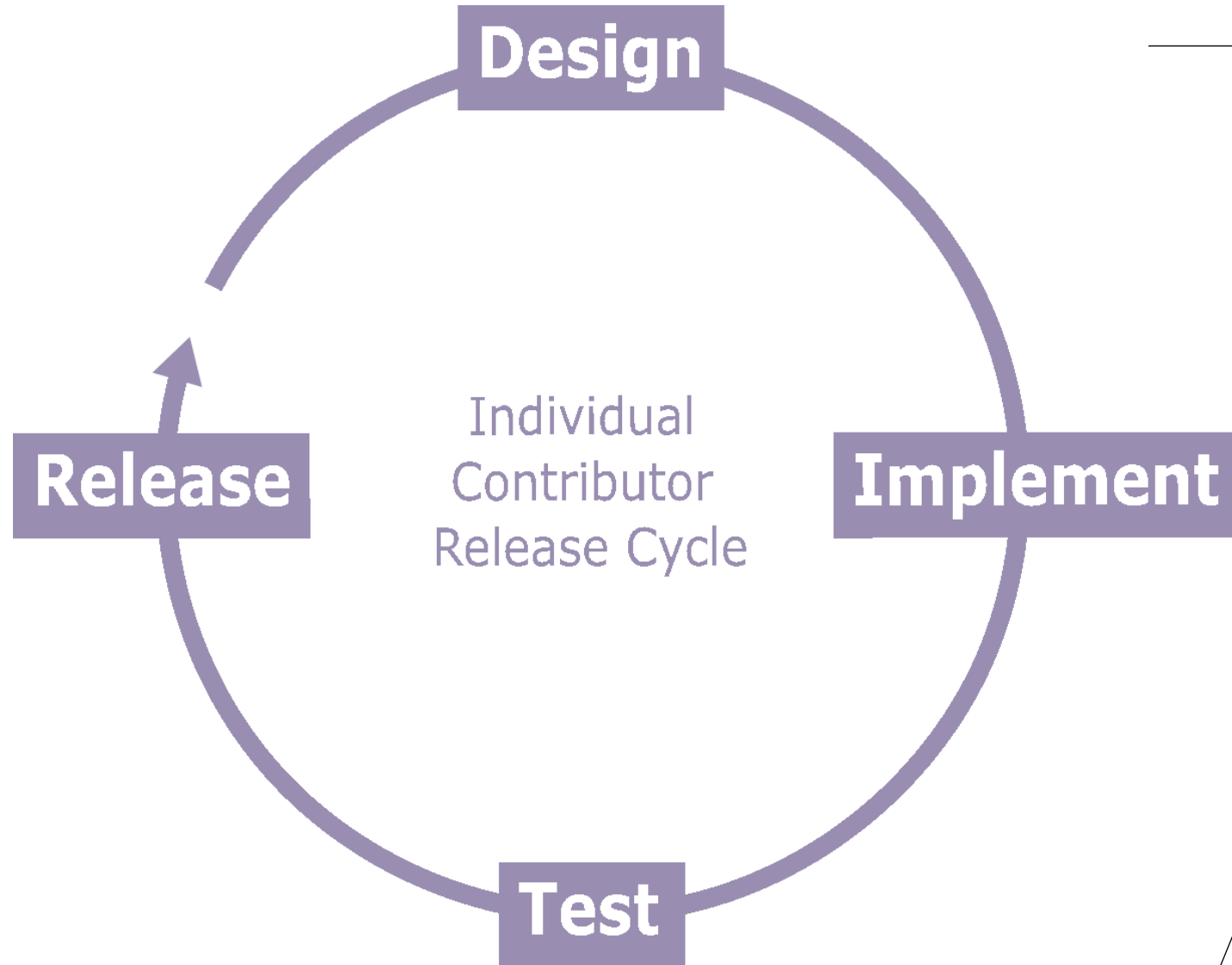
BUILDING AND MAINTAINING LIVE SERVICE PIPELINES

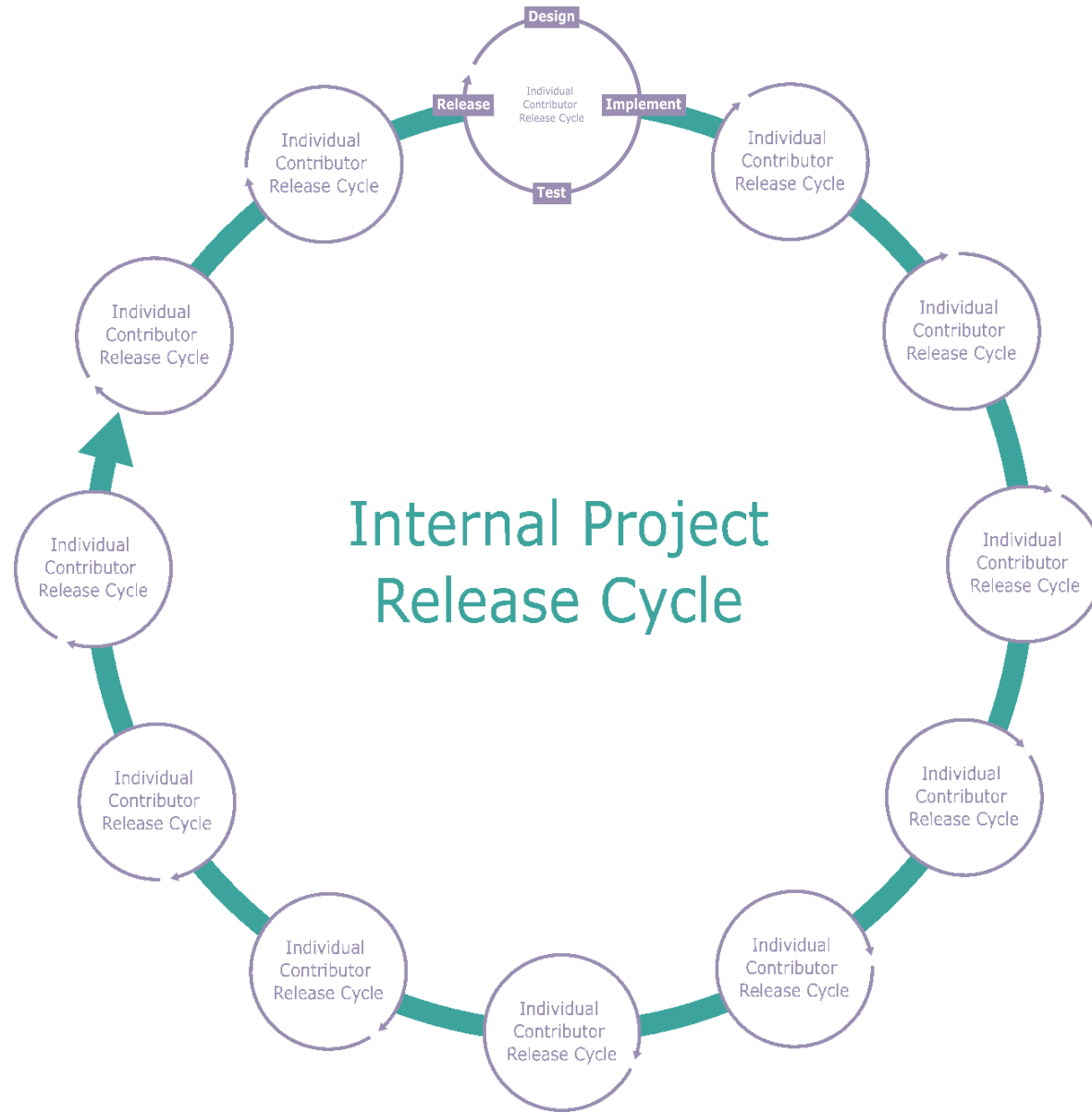## BUILDING AND MAINTAINING LIVE SERVICE PIPELINES

- How smoothly a single developer can push content through your pipelines has a direct correlation with how much content you will be able to release for a given time period

- The content release cycle quickly becomes a measure of the overall health of your project

- One size does not necessarily fit all for smooth content development across a large project team
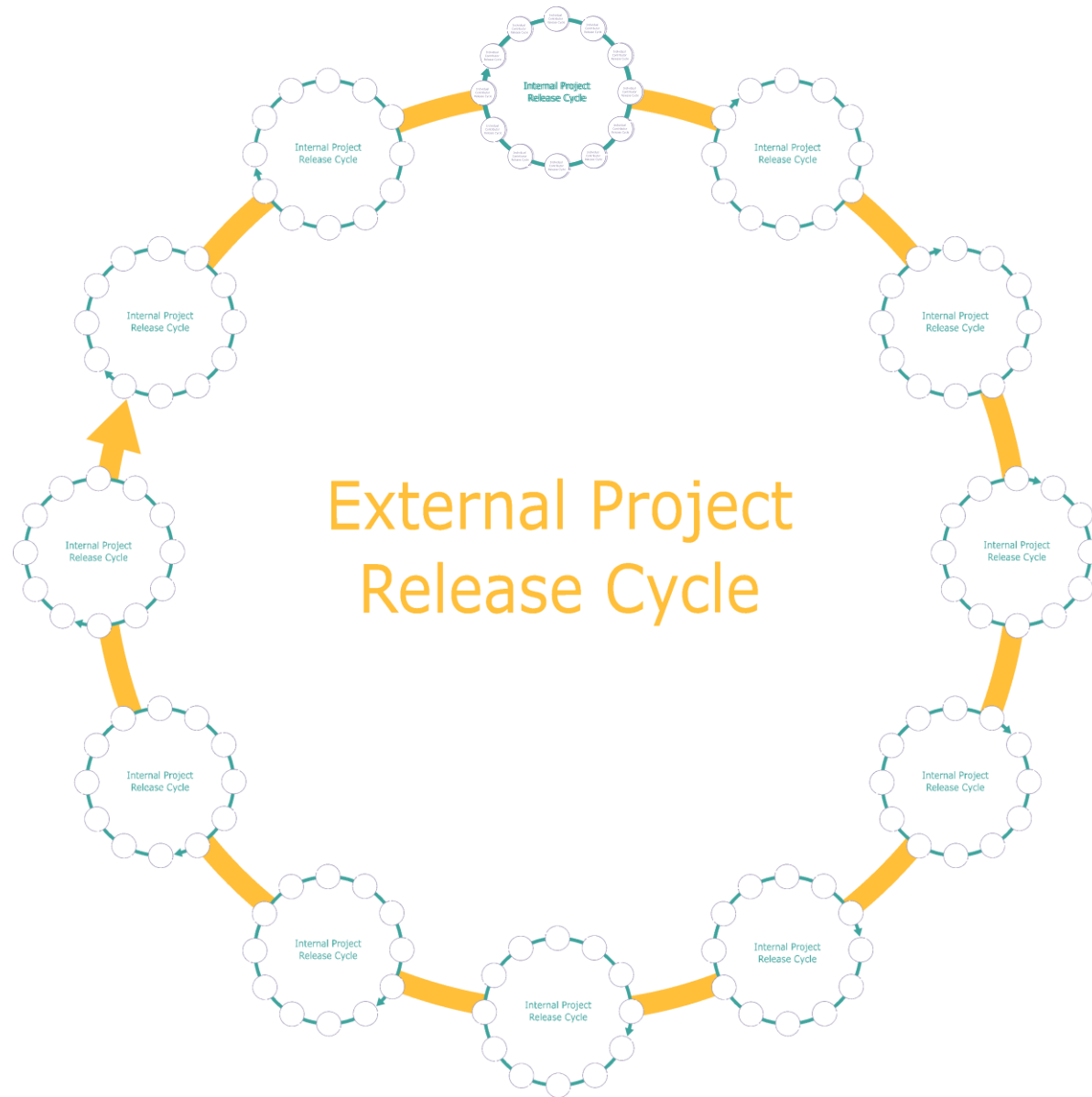
Design

Implement

Test

Release

Individual
Contributor
Release Cycle

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Internal Project Release Cycle

Design · Implement · Test · Release — Individual Contributor Release Cycle

External Project
Release Cycle

Internal Project Release Cycle

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TOOLING AND ASSET MANAGEMENT

TOOLING AND ASSET MANAGEMENT

- Decisions made early on will significantly impact the future of your tooling and development processes

- People are not systems and are usually happier if they get to do their actual job

WHAT IS AN ASSET?

- **Everything** produced in the game development process that provides value to the product

- Live Service Needs for Assets:

  - Identify
  - Version
  - Merge/Diff
  - Move/Transfer

  - Discover
  - Review/Approve
  - Release/Track
  - Regenerate

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TOOLING AND ASSET MANAGEMENT

Decisions made early on will significantly impact the future of our tooling and development processes

Hey, can we ... ?

- Regenerate an asset built 5 years ago for an anniversary event?

- Pull together concept art from the initial release for an art book?

- Find some screenshots from a few years ago for a marketing push?

- Share our asset workflows with outsourcers?

- Rebuild a version of the game from a few years ago?

- Provide our Business Intelligence team with in-depth metadata on our content?

- Integrate with a companion app?

And much more...

TOOLING AND ASSET MANAGEMENT

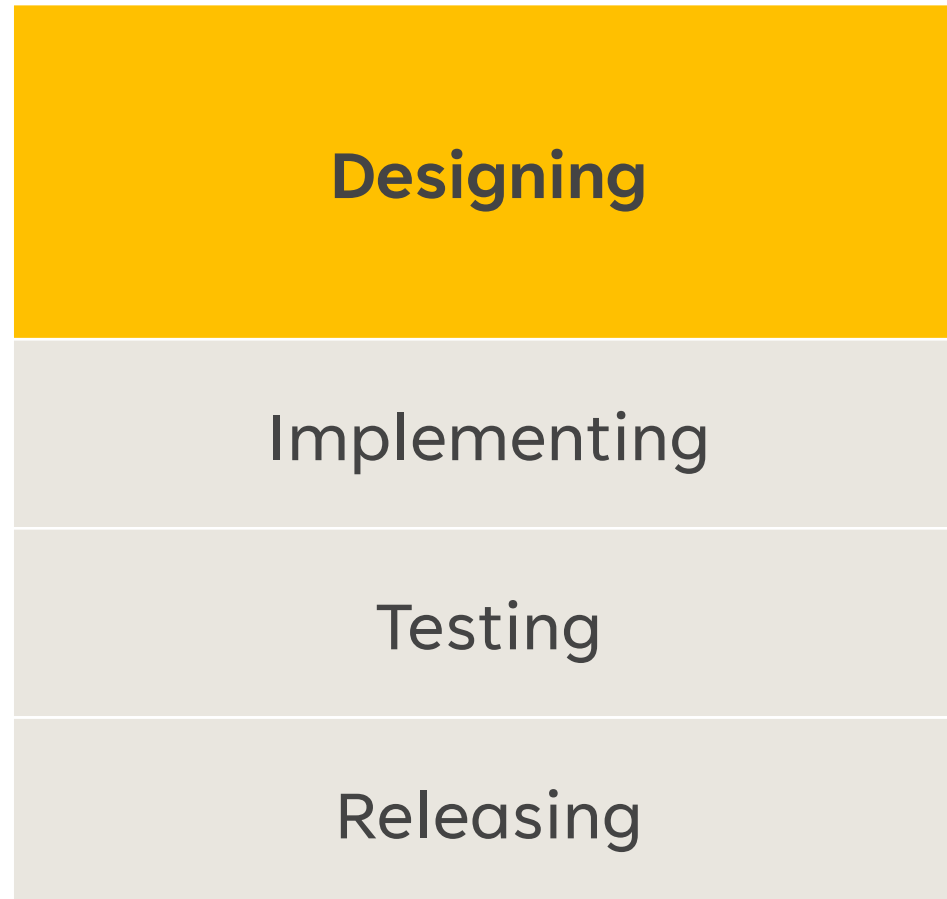People are not systems and are usually happier if they get to do their actual job

Designing
Implementing
Testing
Releasing

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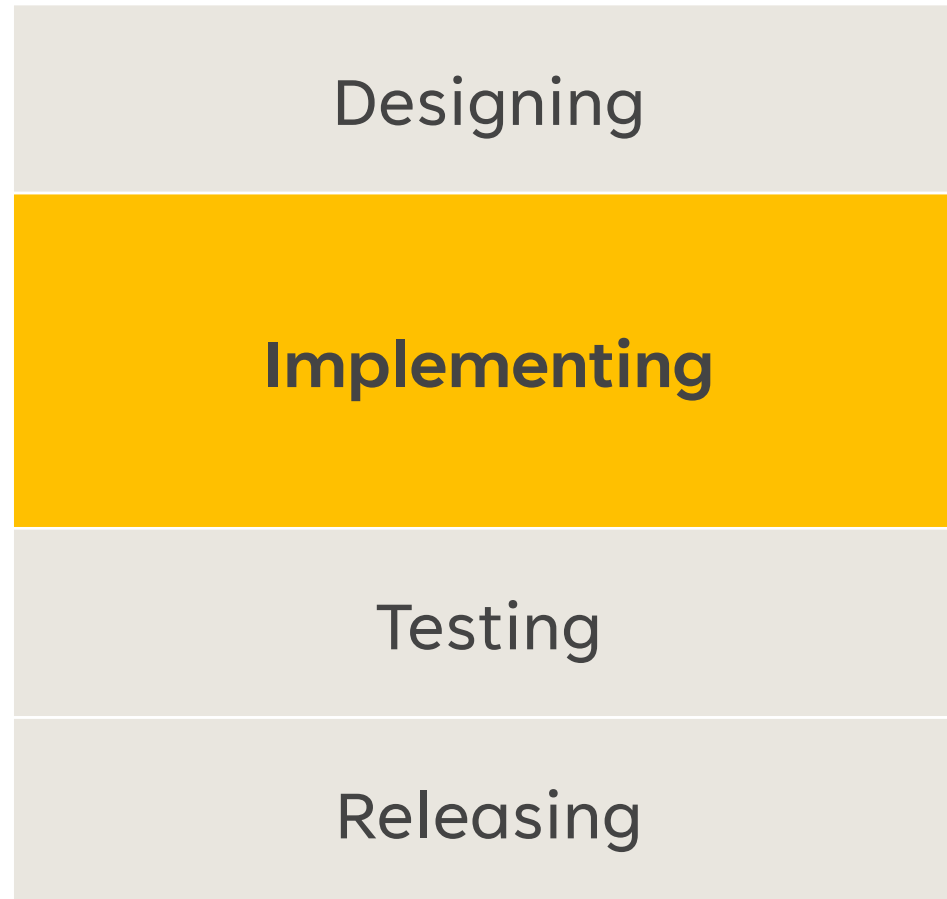
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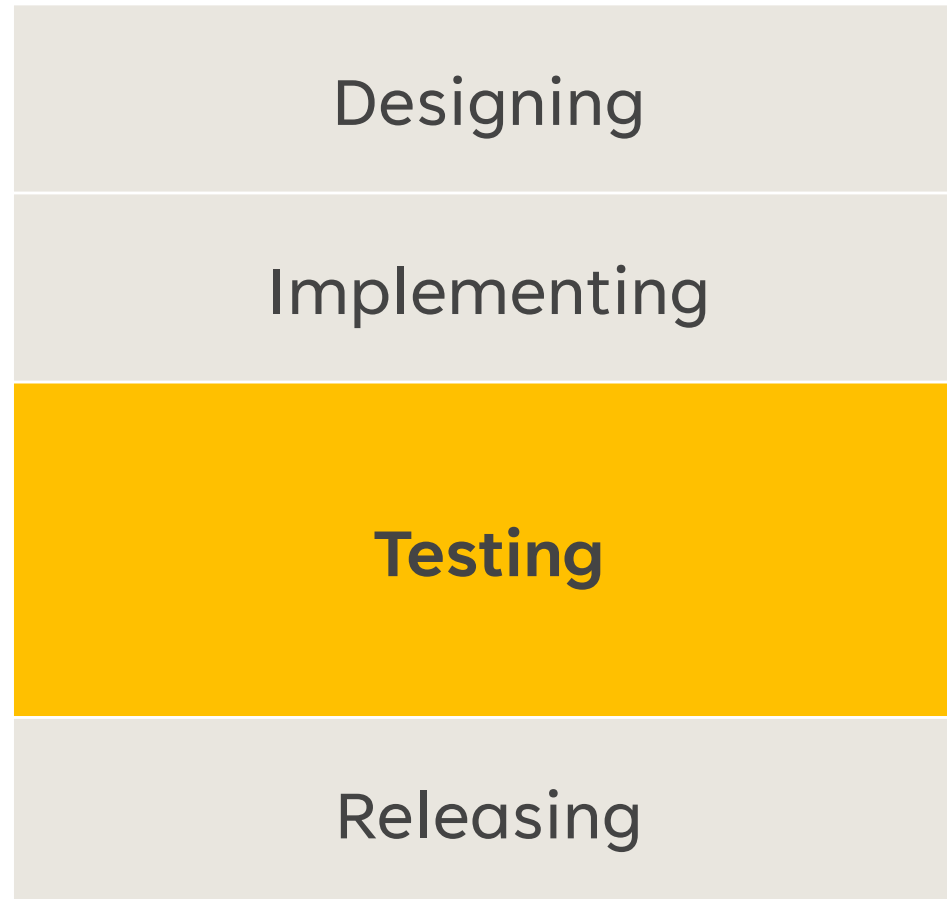People are not systems and are usually happier if they get to do their actual job
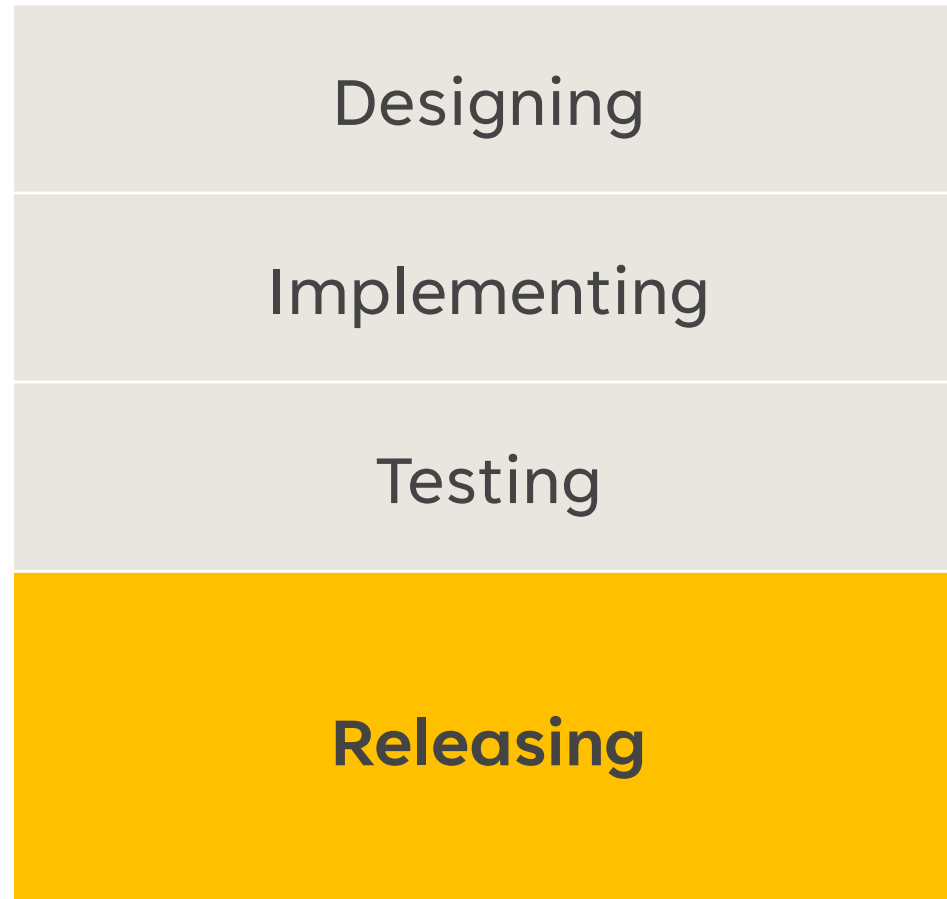
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STAKEHOLDER COLLABORATION AND IMPACT

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- Understanding the roles of stakeholders in content development pipelines and their influence on the final product

- Important to maintain human connections and relationships within and across our studios

STAKEHOLDER COLLABORATION AND IMPACT

- Product Management
- Live Production
- Live Services Production & Operations
- Accounts, Store, and Web
- Release Management Production & Operations

And more...

ADAPTING TO REMOTE WORK CHALLENGES

ADAPTING TO REMOTE WORK CHALLENGES

- A clear vision enables autonomous development teams to do their best work together

- (again) Aligning developers in different time zones for continuous progress and development across the (almost) 24 hour development cycle

- Investing in robust support systems and thorough validation processes to catch issues early
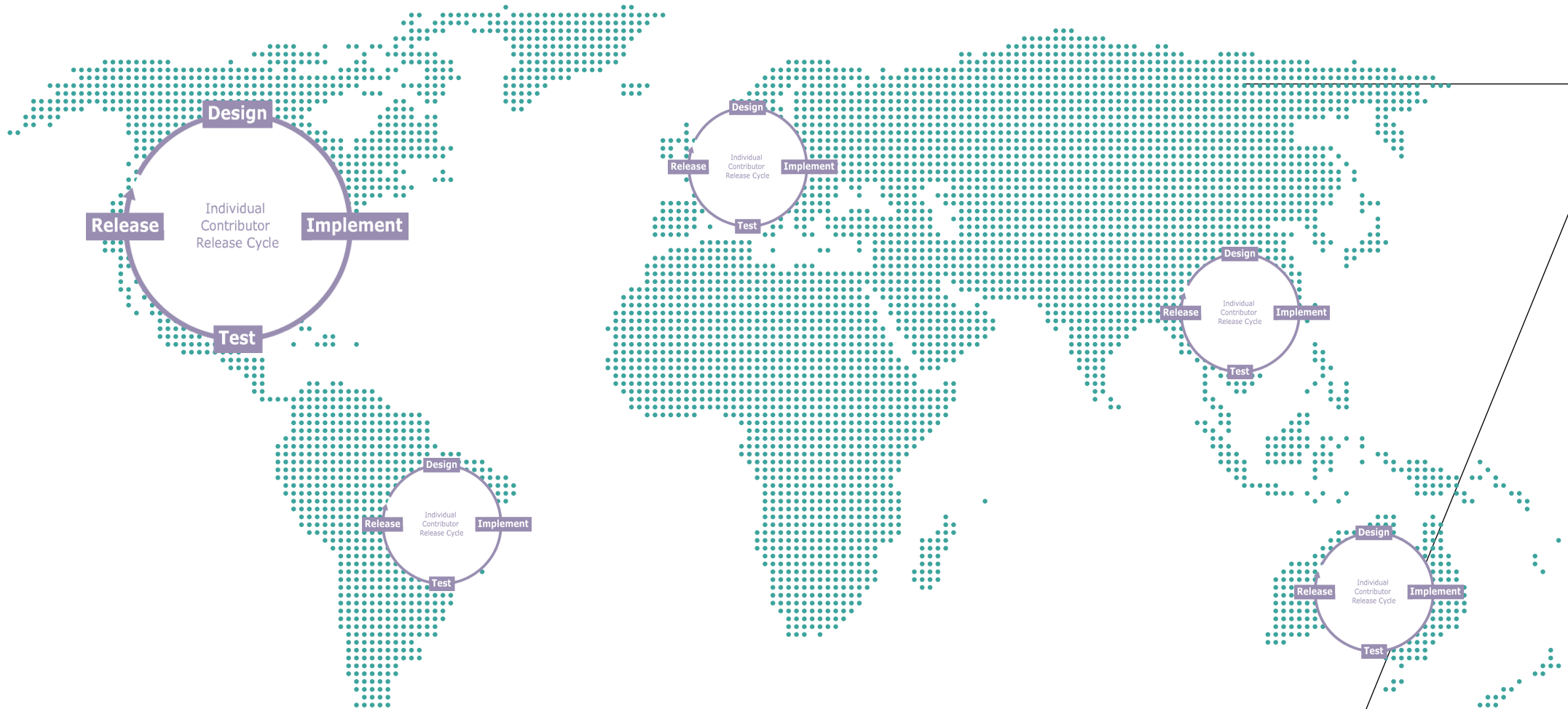
- Aligning developers cross different time zones
- Focusing on handoffs

THINGS I WISH I LEARNED FASTER

- Developing content for a live service game is a marathon

- Importance of mentorship and spreading knowledge – keeping team members around

- Premature optimization can lead to missed opportunities and inflexibility

- Focus on making decisions, failing quickly, and keeping the momentum going

SPECIAL THANKS TO

- Chelsea Oxendine Davila

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QUESTIONS?

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