

# TECHNOLOGY VALUE STREAM

ALEXIS MITCHELL  
CSD 380

# WHAT IS THE TECH VALUE STREAM?

---

## DEFINITION

“A set of practices that improve the way teams deliver high-quality customer experiences”  
(Atlassian, 2025)

## BENEFITS

- Increased predictability
- Higher customer satisfaction
- Improved productivity
- Reduced costs
- Better software
- Increased end-to-end visibility
- Boosted creation and morale



# WHY IS THE TECH VALUE STREAM IMPORTANT?

**ADDRESS THE FOLLOWING PROBLEMS:**

- Customer frustration with current offerings
- Slow delivery of bug fixes and new features or products
- Fewer resources due to layoffs and other cost-cutting measures
- Agile and/or digital transformations aren't delivering as effectively as wanted
- Organizational structure not designed for value creation

**IN SUMMARY: IMPROVES COMMUNICATION AND VALUE CONTENT  
BETWEEN CUSTOMER AND CREATORS**

# DEFINING LEAD TIME VS PROCESSING TIME

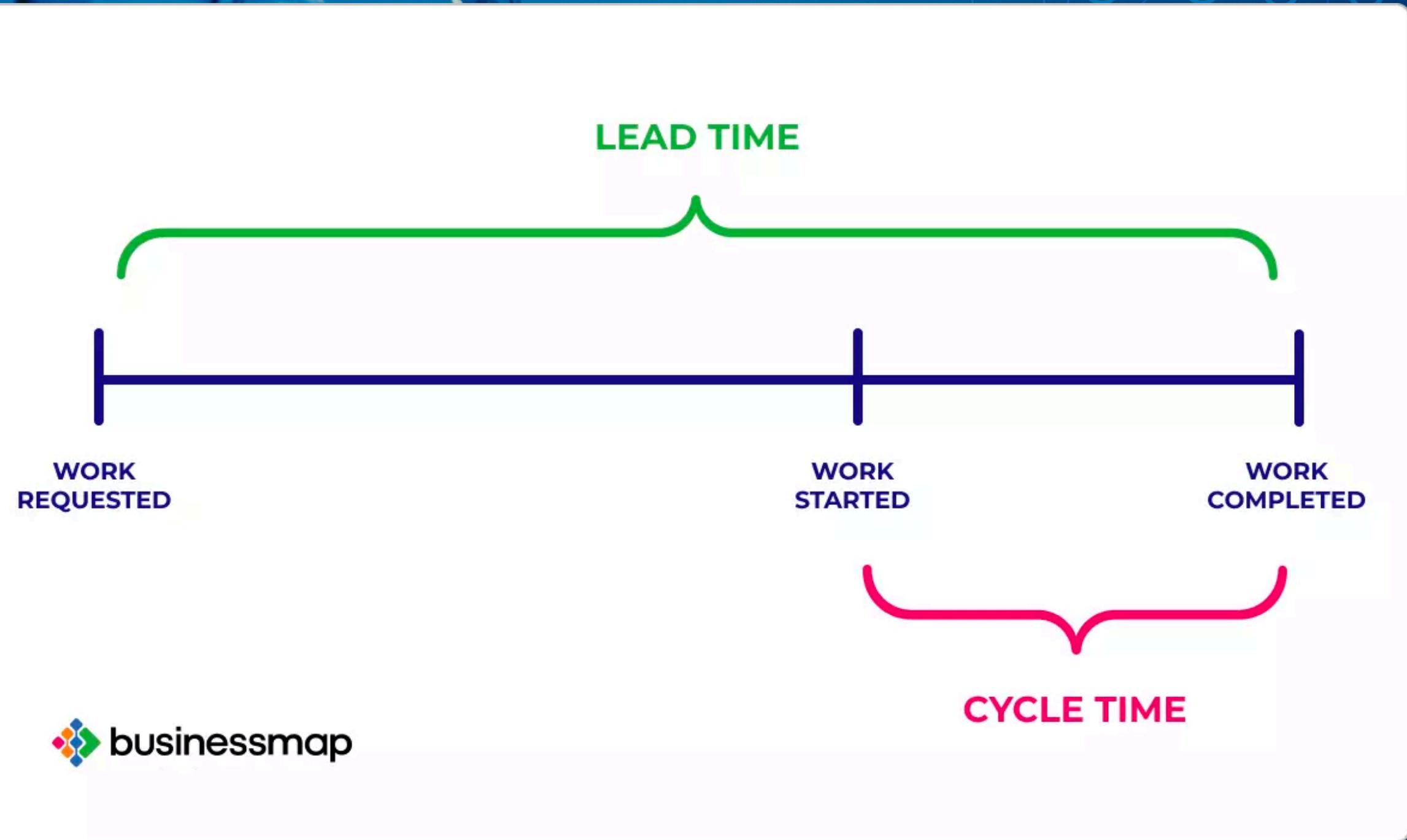
## Lead Time

- Used to measure performance in value streams
- Starts when the request is made and ends when fulfilled

## Process Time

- Starts only when have started work of customer request
- Omits the time that the work is waiting to be processed

# LEAD TIME VS PROCESS TIME GRAPHIC



# THE COMMON SCENARIO

## Deployment Lead Time Requiring Months

---

- Common in large, complex organizations
- Heroics are needed at almost every stage
- Fix of each problem - requires days of week of investigation

# OUR DEVOPS IDEAL

## Deployment Lead Times of Minutes

### DEVELOPER GETS FAST FEEDBACK

- can start code immediately and deploy faster

### PERSONAL CONTROL REPOSITORY

- Constant checking of small code changes

### SMALL TEAMS

- High degrees of autonomy
- Fails are small and contained

# REFERENCES

- Kim, G., Humble, J., Debois, P., Willis, J., Forsgren, N., & Allspaw, J. (2021). The devops handbook: How to create world-class agility, reliability, & Security in Technology Organizations. IT Revolution Press.
- Takakura, T. (2025). What is Value Stream Management (VSM) and why is it important?. What is Value Stream Management (VSM) and Why is it Important? Article | Agile. <https://www.atlassian.com/agile/value-stream-management>