

ILLUSTRATED
ESSENTIAL

KANBAN

CONDENSED
NOTEBOOK

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Kanban
University
PRESS

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LEGAL

ILLUSTRATED ESSENTIAL KANBAN CONDENSED

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Kanban
University
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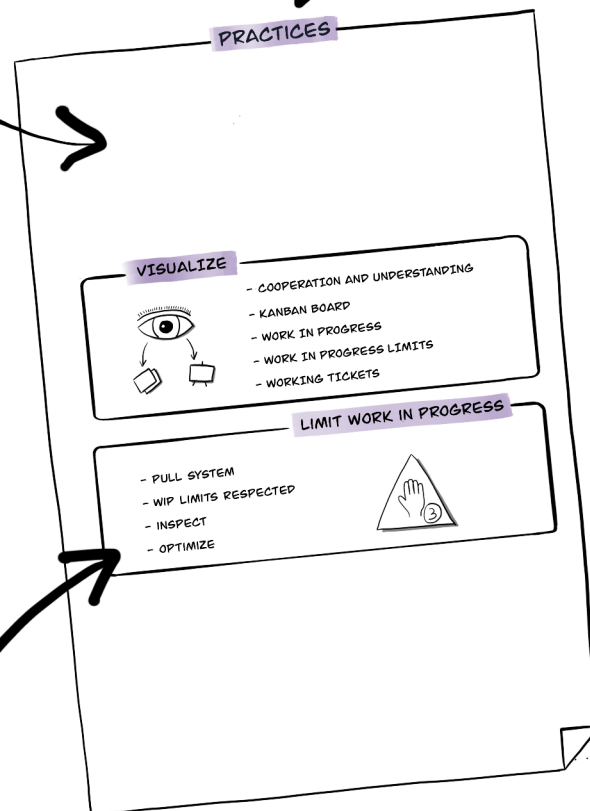
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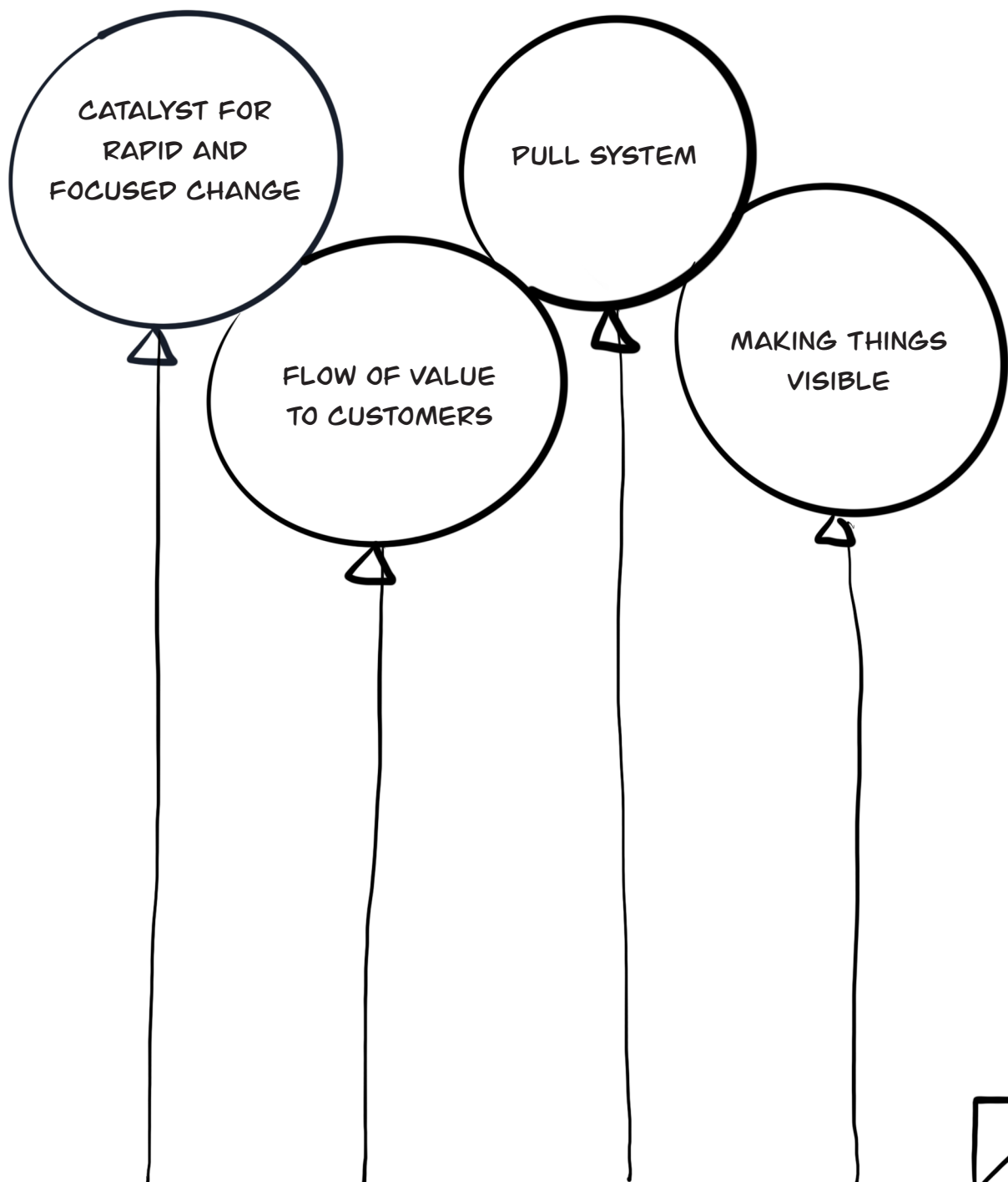


BASIC
INFORMATION

THIS IS YOUR PERSONAL NOTEBOOK
AN INSPIRATION PLACE FOR
GATHERING KANBAN KNOWLEDGE

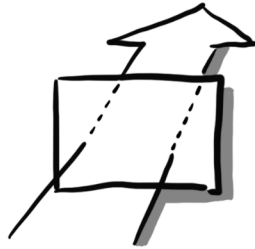
KANBAN

KANBAN IS A METHOD FOR DEFINING,
MANAGING, AND IMPROVING SERVICES
THAT DELIVER KNOWLEDGE WORK.



VALUES

TRANSPARENCY



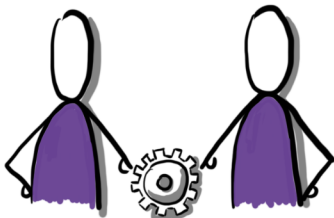
- ACCESS TO INFORMATION
- DIRECT COMMUNICATION
- SHARED UNDERSTANDING

BALANCE



- SYSTEM STABILITY
- FLOW IMPROVEMENTS
- DEMAND AND CAPABILITY

COLLABORATION

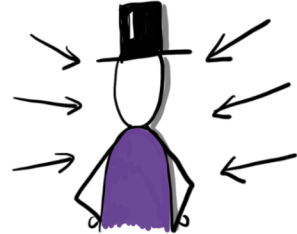


- TEAMWORK
- IMPROVE THE WAY PEOPLE WORK TOGETHER
- EVERY LEVEL OF THE ORGANIZATION

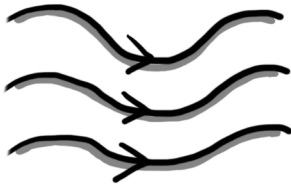
VALUES

CUSTOMER FOCUS

- GOAL OF THE SYSTEM
- VALUE DELIVERY
- FOCUS ON CUSTOMER NEEDS AND EXPECTATIONS



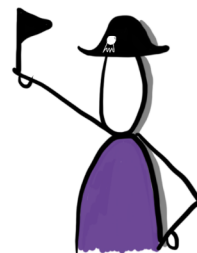
FLOW



- FLOW IS THE MOVEMENT OF WORK
- OBSERVATION
- CONTINUOUS IMPROVEMENT

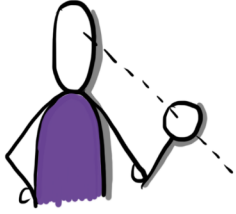
LEADERSHIP

- TAKE RESPONSIBILITY, BE ACCOUNTABLE
- AT ALL LEVELS
- LEAD BY EXAMPLE



VALUES

UNDERSTANDING



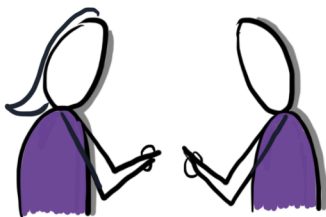
- SELF-KNOWLEDGE: INDIVIDUAL, TEAM, ORGANIZATION
- KNOWING COMMITMENT POINTS
- IMPROVEMENT

AGREEMENT

- COMMITMENT TO MOVE TOWARD GOALS
- CHANGE MANAGEMENT
- BENEFITS FROM DIVERSITY



RESPECT



- RECOGNITION OF CAPABILITY, CIRCUMSTANCES, CONTEXT
- TRUST & EMPOWERMENT
- AUTONOMY

AGENDAS

SUSTAINABILITY



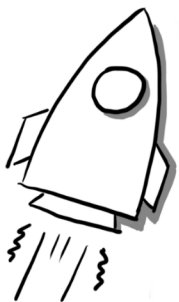
- LOOK INWARD
- STARTING POINT FOR CHANGE
- SUSTAINABLE PACE OF WORK
- PERFORMANCE IMPROVEMENTS
- BALANCE DEMAND WITH CAPABILITY

SERVICE-ORIENTATION

- LOOK OUTWARD
- CUSTOMER SATISFACTION
- FIT FOR PURPOSE
- PERFORMANCE
- VALUE DELIVERY



SURVIVABILITY



- LOOK FORWARD TO THE FUTURE
- EXPERIMENTING
- ADAPTATION TO CHANGING MARKET
- CONSTANT CHALLENGE
- SAFE TO FAIL ENVIRONMENT

PRINCIPLES



CHANGE MANAGEMENT

1

START WITH WHAT YOU DO NOW

- RESPECT EXISTING ROLES
- UNDERSTAND THE PROCESS

2

AGREE TO PURSUE IMPROVEMENT THROUGH EVOLUTIONARY CHANGE

3

ENCOURAGE ACTS OF LEADERSHIP AT EVERY LEVEL

PRINCIPLES



SERVICE DELIVERY

ORGANIZATION IS AN ECOSYSTEM OF INTERDEPENDENT SERVICES

1

UNDERSTAND AND FOCUS ON CUSTOMER NEEDS AND EXPECTATIONS

2

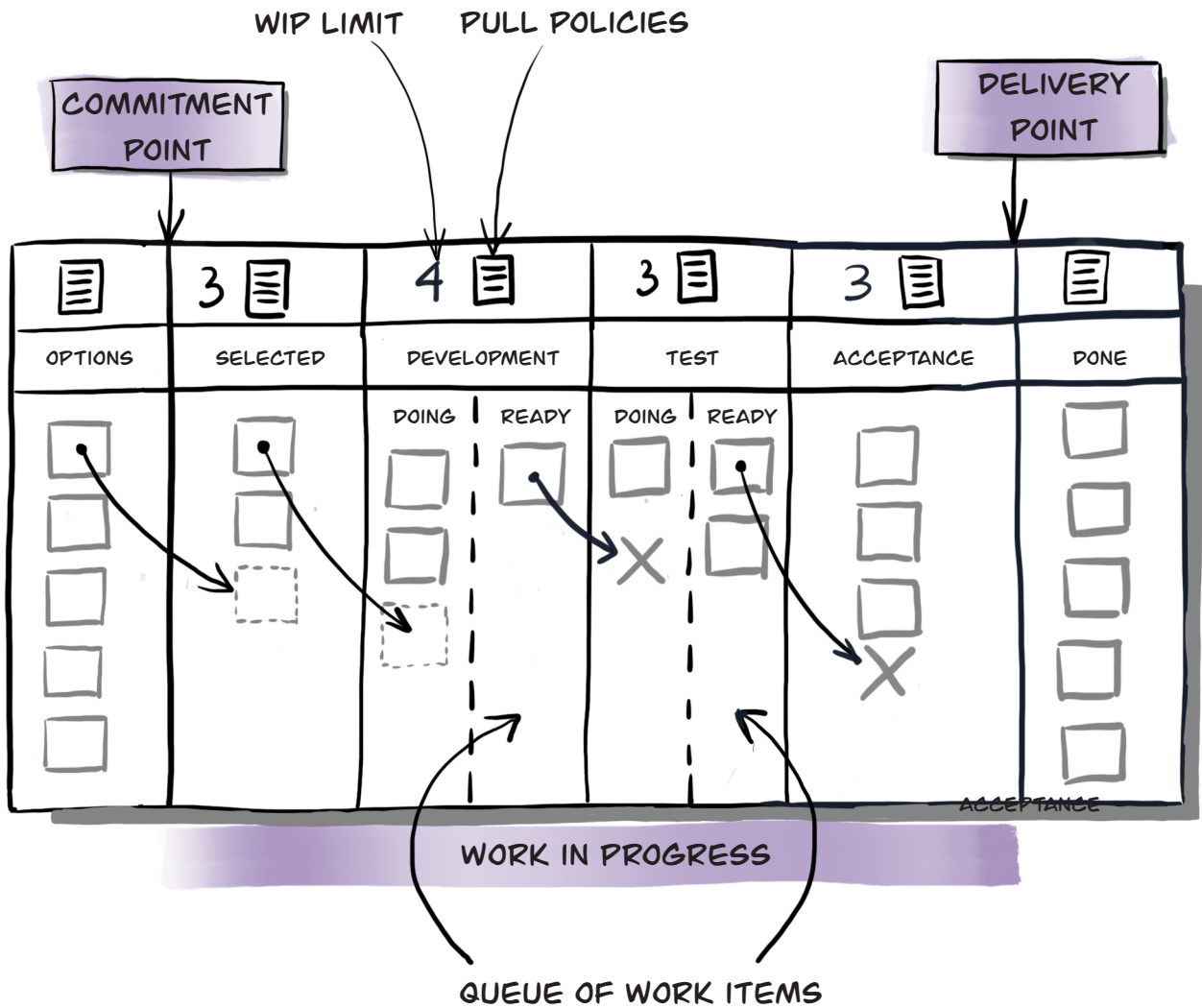
MANAGE THE WORK, LET PEOPLE SELF-ORGANIZE AROUND IT

3

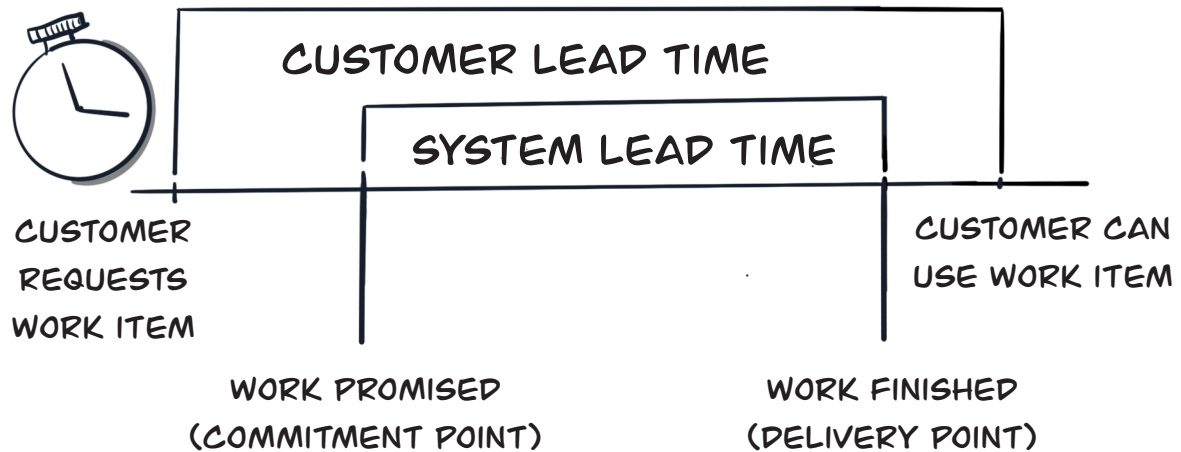
EVOLVE POLICIES TO IMPROVE CUSTOMER AND BUSINESS OUTCOMES

FLOW SYSTEM

PULL SYSTEM
THE NEW WORK ITEM IS PULLED
INTO SYSTEM WHEN WIP LIMIT
ALLOWS

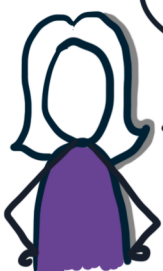


FLOW SYSTEM



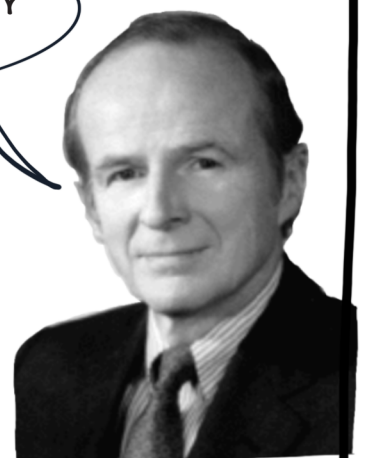
LITTLE'S LAW

$$\text{AV. THROUGHPUT} = \frac{\text{AV. WORK IN PROGRESS}}{\text{AV. SYSTEM LEAD TIME}}$$



VALID FOR
PREDICTABLE
SYSTEMS

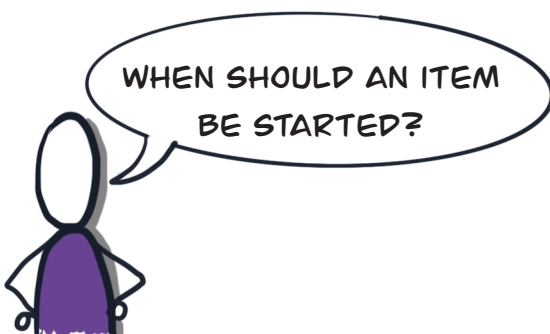
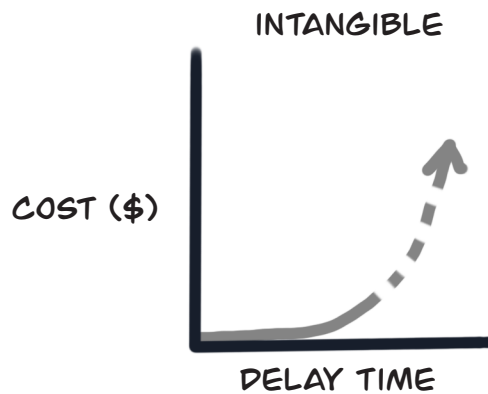
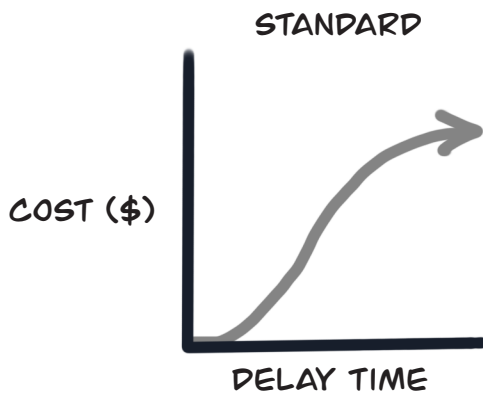
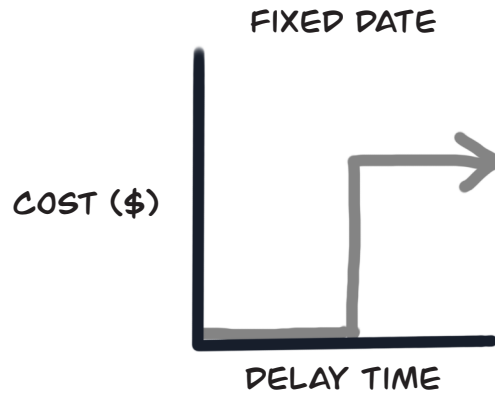
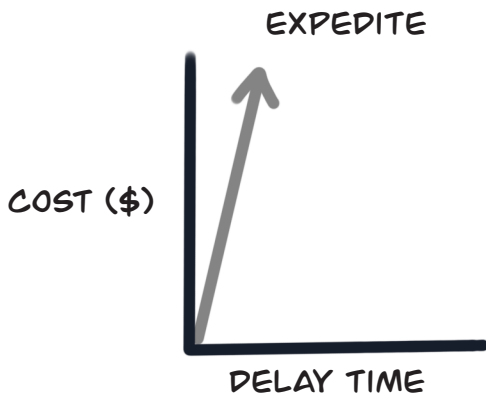
QUEUEING THEORY
ROCKS!



JOHN LITTLE (1928)

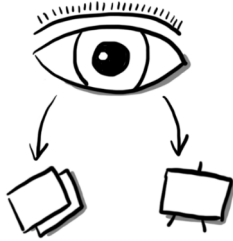
FLOW SYSTEM

CLASS OF SERVICES MAPPED TO COST OF DELAY



PRACTICES

VISUALIZE



- SHOW WORK & ITS FLOW
- VISUALIZE RISKS
- KANBAN BOARD
- WORK IN PROGRESS LIMITS

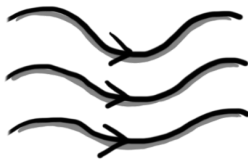
LIMIT WORK IN PROGRESS

- PULL SYSTEM
- RESPECTED
- INSPECT + ADAPT
- FOCUS



PRACTICES

MANAGE FLOW



- MAXIMIZE VALUE DELIVERED
- SYSTEM PREDICTABILITY
- SERVICE LEVEL AGREEMENT
- CLASSES OF SERVICES
- COST OF DELAY

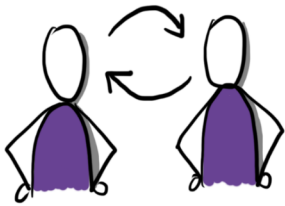
EXPLICIT POLICIES

- DEFINE THE FLOW
- DEFINE THE WHOLE PROCESS
- EVOLUTION
- RESPECT THE RULES
- TRANSPARENCY
- CONSTRAINS & CONTROL DECISIONS



PRACTICES

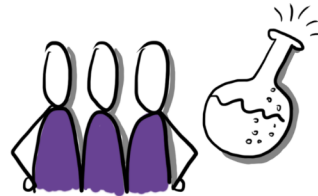
FEEDBACK LOOPS



- ENABLE EVOLUTIONARY CHANGE
- INFORMATION EXCHANGE
- OBSERVE + CHANGE
- INSPECT + ADAPT
- 7 CADENCES

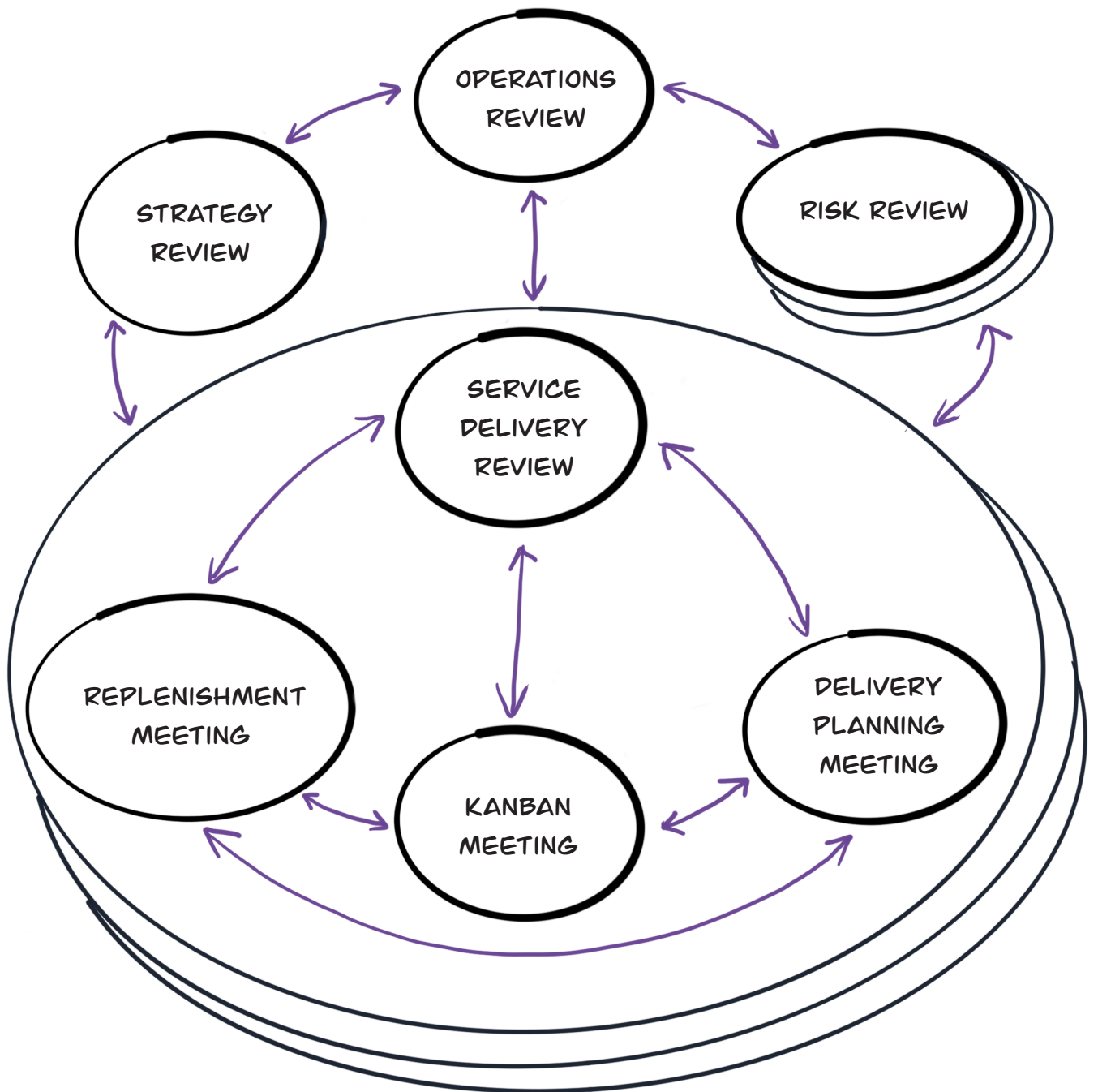
IMPROVE COLLABORATIVELY EVOLVE EXPERIMENTALLY

- EMPIRICAL OBSERVATIONS
- DATA-DRIVEN EXPERIMENTS
- USE MODELS
- DEVELOP HYPOTHESES
- INTRODUCE CHANGE
- OBSERVE & MEASURE THE RESULTS



CADENCES

FEEDBACK LOOPS



CADENCES

STRATEGY REVIEW

- USUALLY QUARTERLY
- FIT FOR PURPOSE
- ADAPT TO FITNESS LANDSCAPE

OPERATIONS REVIEW

- USUALLY MONTHLY
- MAXIMIZE THE DELIVERY OF VALUE
- BALANCE SERVICES
- DEPENDENCIES MANAGEMENT

RISK REVIEW

- USUALLY MONTHLY
- RISK IDENTIFICATION
- RISK MITIGATION
- BLOCKER CLUSTERING

SERVICE DELIVERY REVIEW

- USUALLY BI-WEEKLY
- EXAMINE AND IMPROVE THE SERVICE
- SLA/E REVIEW

CADENCES

REPLENISHMENT

MEETING

- USUALLY WEEKLY
- REVIEW OPTIONS
- PULL WORK ITEMS

THE KANBAN

MEETING

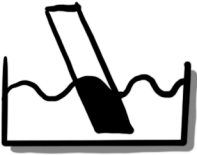
- USUALLY DAILY
- COORDINATION
- UNBLOCKING
- SELF-ORGANIZATION
- FLOW MANAGEMENT

DELIVERY PLANNING

MEETING

- USUALLY WEEKLY
- MONITOR & PLAN DELIVERIES

THE KANBAN LITMUS TEST



	YES	NO
1. HAS MANAGEMENT BEHAVIOUR CHANGED TO ENABLE KANBAN?	<input type="checkbox"/>	<input type="checkbox"/>
2. HAS THE CUSTOMER INTERFACE CHANGED IN LINE WITH KANBAN?	<input type="checkbox"/>	<input type="checkbox"/>
3. HAS THE CUSTOMER CONTRACT CHANGED INFORMED BY KANBAN?	<input type="checkbox"/>	<input type="checkbox"/>
4. HAS YOUR SERVICE DELIVERY BUSINESS MODEL CHANGED TO EXPLOIT KANBAN?	<input type="checkbox"/>	<input type="checkbox"/>

SYSTEM THINKING APPROACH TO INTRODUCING KANBAN

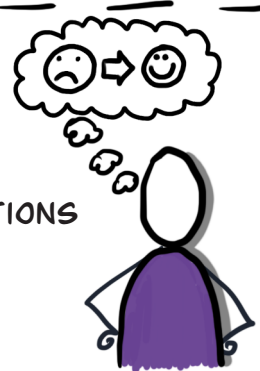


IDENTIFY SERVICES

HOW DO WE OPERATE NOW?
WHAT SERVICES DO WE HAVE?

FIT FOR PURPOSE

WHO IS OUR CUSTOMER?
CUSTOMER'S NEEDS & EXPECTATIONS
CUSTOMER FITNESS CRITERIA



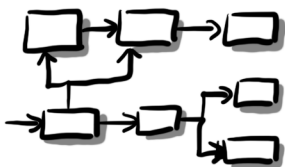
SOURCES OF DISSATISFACTION

INTERNAL
EXTERNAL



CUSTOMER EXPECTATIONS
SOURCES
NATURE
WORK THAT ENTERS THE SYSTEM

PREDICTABILITY
DEMAND VS CAPABILITY
DATA TRENDS
WORK THAT LEAVES THE SYSTEM



WORKFLOW FOR EACH TYPE OF DEMAND
ORGANIZE WORK, NOT PEOPLE
FLOW STATES REFLECT LEARNING ACTIVITIES
INSIDE-OUT

SYSTEM THINKING APPROACH TO INTRODUCING KANBAN

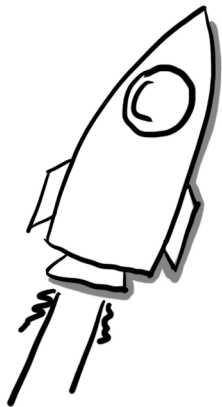


DISCOVER CLASSES OF SERVICE

CLASSIFY DIFFERENT WORK ITEMS
POLICIES FOR EACH CLASS
COST OF DELAY
DEFINE SYSTEM LEVEL AGREEMENTS

DESIGN KANBAN SYSTEM

BOARD & CARDS
CADENCES
POLICIES
WIP LIMITS



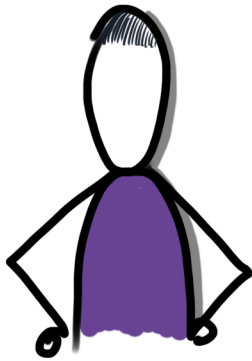
SOCIALIZE THE SYSTEM & BOARD

NEGOTIATE IMPLEMENTATION
USE & IMPROVE

ROLES

START WITH WHAT YOU DO NOW ...

BUT COVER THESE



SERVICE REQUEST MANAGER

RESPONSIBLE FOR

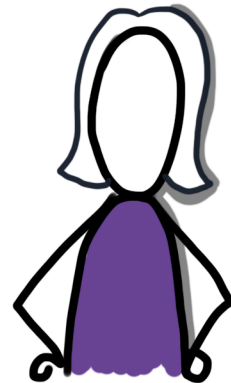
ACCOUNTABLE FOR



SERVICE DELIVERY MANAGER

RESPONSIBLE FOR

ACCOUNTABLE FOR



METRICS

LEAD TIME

THROUGHPUT

FLOW EFFICIENCY

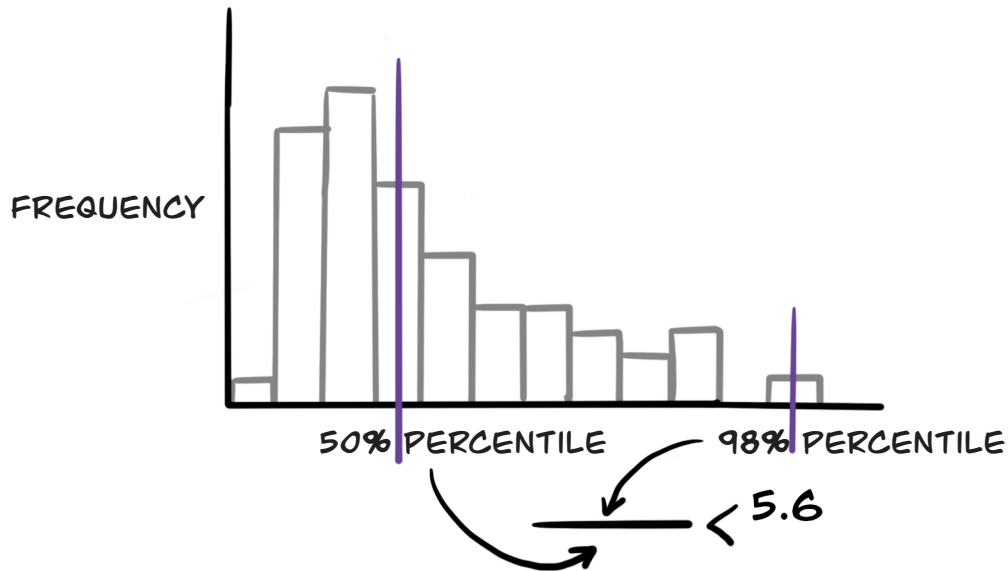
WORK IN PROGRESS

AGE OF WIP

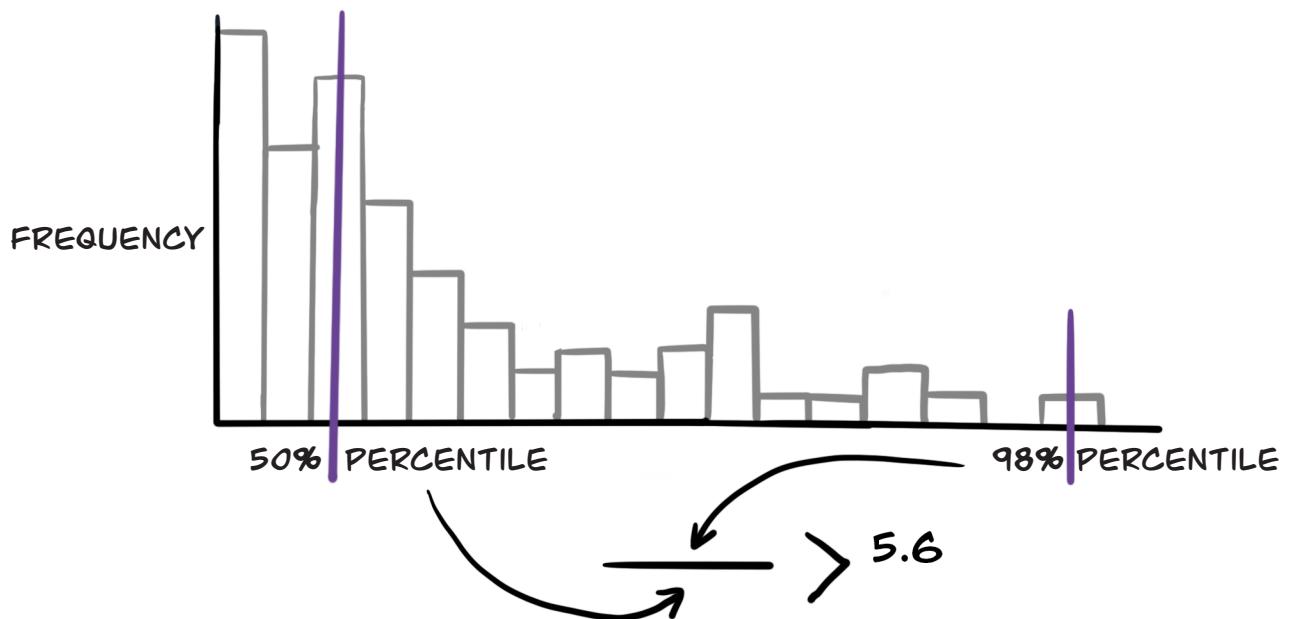
METRICS

LEAD TIME HISTOGRAM

THIN-TAILED DISTRIBUTION

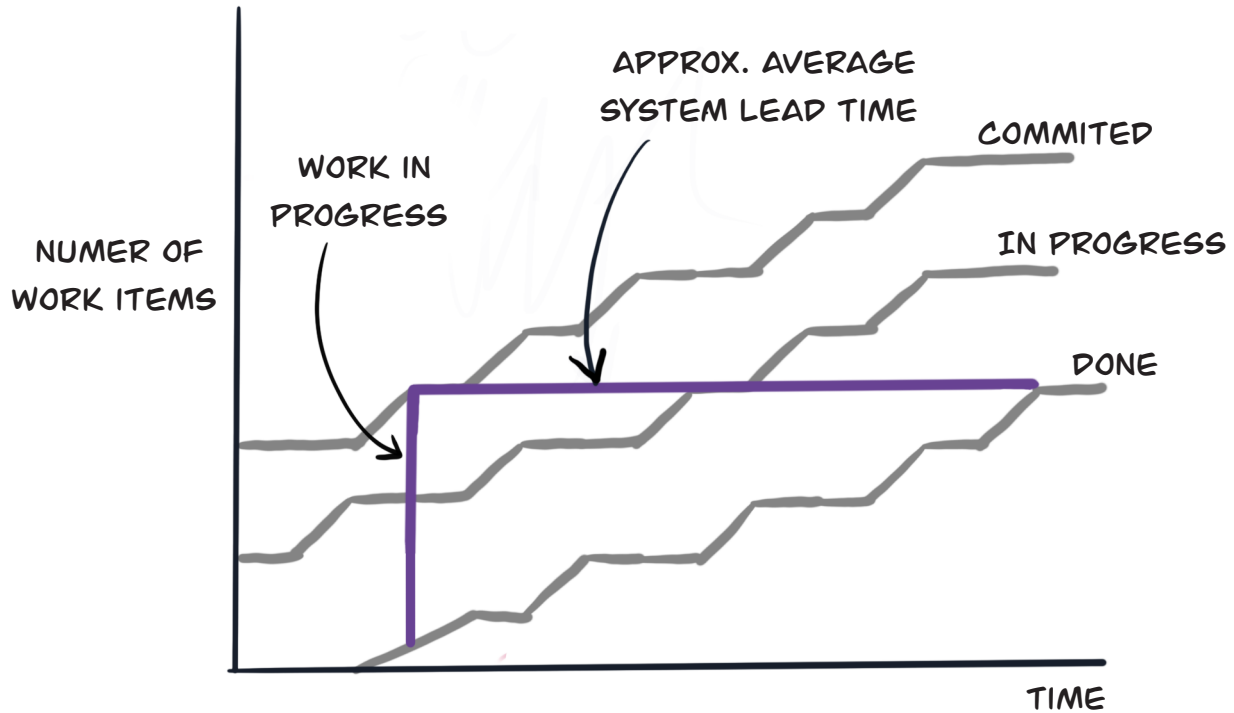


FAT-TAILED DISTRIBUTION

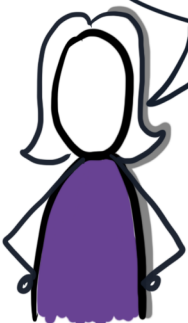


METRICS

CUMULATIVE FLOW DIAGRAM

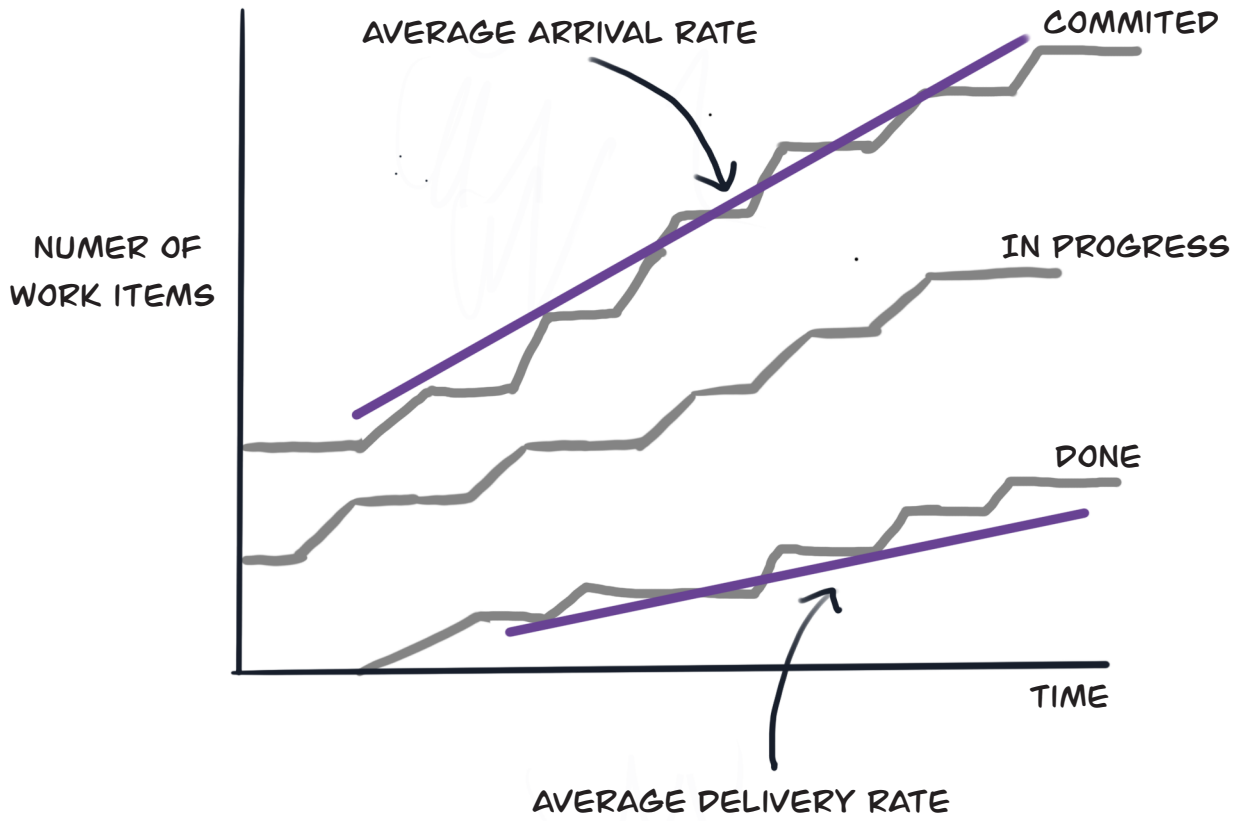


CUMULATIVE NUMBER OF ARRIVALS
AND DEPARTURES IN A PROCESS

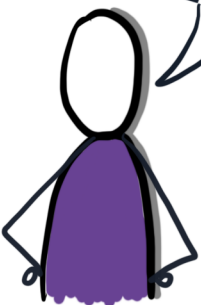


METRICS

CUMULATIVE FLOW DIAGRAM



CUMULATIVE NUMBER OF ARRIVALS
AND DEPARTURES IN A PROCESS



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BASED ON ESSENTIAL KANBAN CONDENSED BY



DAVID J ANDERSON



ANDY CARMICHAEL

MY NOTES

MY NOTES

MY NOTES

MY NOTES

MY NOTES