Feature or Project Delivery Pace Assumption Canvas

Ramp-up / Starting Pace
The pace as the team is forming and learning. Often understrength in skills.

Stride Pace = Sustainable completion pace as a team
The sustainable pace delivered as a team. Often limited by flow through a system constraint. Determine where the constraint will be and estimate low and high completion rate through that step.

Ramp-down / Delivery Pace
The pace as the team is in the final delivery phase into production environment.

Start with FIRST 20% of the original work completed at ½ pace and adjust

Start with LAST 20% of the original work completed at ½ pace and adjust

Backlog

Work Completed

Things that DECREASE ramp-up
- Existing team
- Similar recent work types
- Pairing and sharing skills

Things that INCREASE ramp-up
- New team (> 1/3 people new)
- New type of work
- New innovation or technology

1. Where is the likely system constraint limiting flow?

2. How many people do we have who can work at the constraint (1)?

3. How many items per week/sprint can each person deliver?
Lowest guess: Highest guess:

6. How long will ramp-up take?
0% 10% 20% 30% 40%
(default)

4. Low pace = [2] x [3 low]

5. High pace = [2] x [3 high]

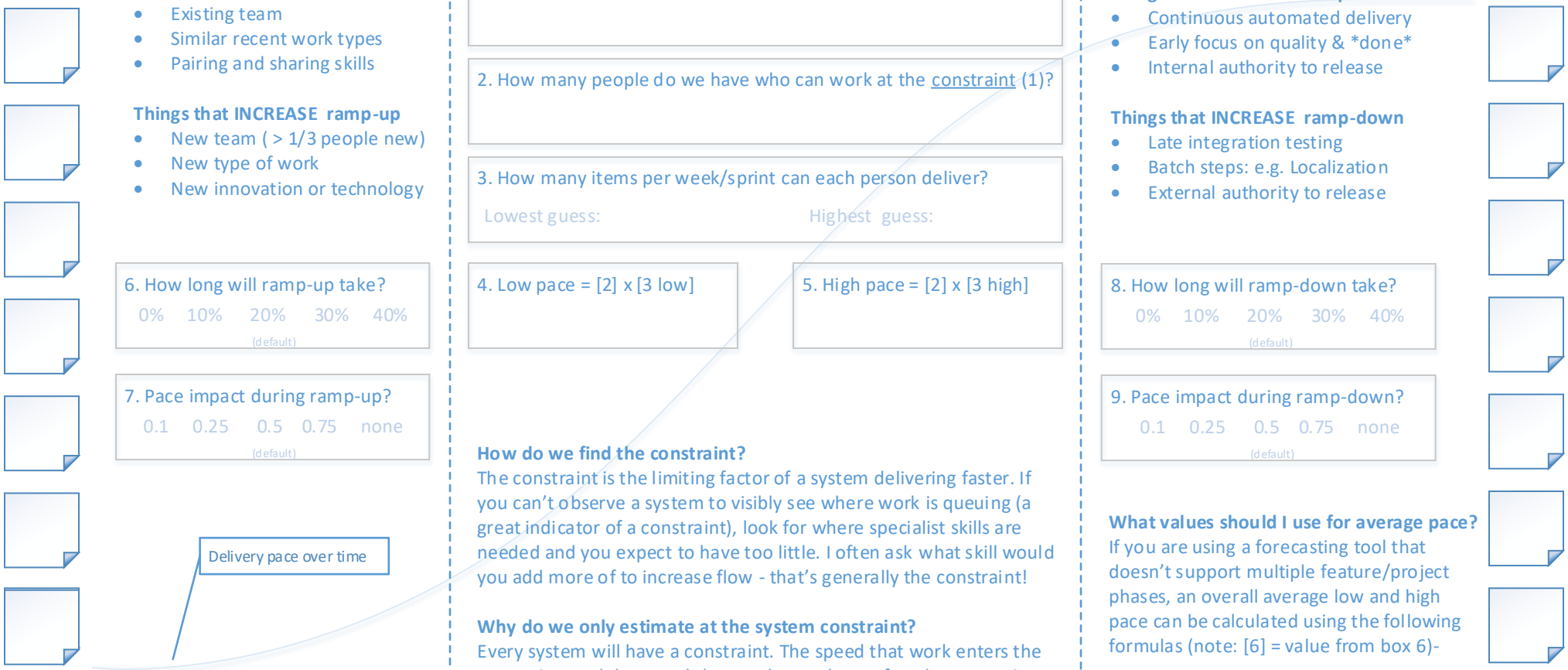
8. How long will ramp-down take?
0% 10% 20% 30% 40%
(default)

7. Pace impact during ramp-up?
0.1 0.25 0.5 0.75 none
(default)

9. Pace impact during ramp-down?
0.1 0.25 0.5 0.75 none
(default)

Things that DECREASE ramp-down
- Continuous automated delivery
- Early focus on quality & *done*
- Internal authority to release

Things that INCREASE ramp-down
- Late integration testing
- Batch steps: e.g. Localization
- External authority to release



How do we find the constraint?
The constraint is the limiting factor of a system delivering faster. If you can't observe a system to visibly see where work is queuing (a great indicator of a constraint), look for where specialist skills are needed and you expect to have too little. I often ask what skill would you add more of to increase flow - that's generally the constraint!

Why do we only estimate at the system constraint?
Every system will have a constraint. The speed that work enters the constraint, and the speed that work completes after the constraint doesn't impact total system pace – system pace is the same as the pace at the constraint.

What if there are multiple possible system constraints?
It can be hard to predict where the limiting system constraint will be. If this is the case, brainstorm and estimate the top 3, then average the low estimates for an average Low Pace. Do the same for the High Pace estimate.

What values should I use for average pace?
If you are using a forecasting tool that doesn't support multiple feature/project phases, an overall average low and high pace can be calculated using the following formulas (note: [6] = value from box 6)-

X = Ramp up period = [6]/100
Y = Ramp down period = [8]/100
Z = Stride period = 1 – (X + Y)
Up avg = X x ([7] x [4])
Stride avg = Z x [4]
Down avg = Y x ([9] x [4])

Low Average = Up avg + Stride avg + Down avg
(Repeat for the high, replace [4] with [5])

What about using actual data?
Use actual throughput or velocity data as soon as possible to confirm these assumptions. Remember, the early samples will be the in ramp-up phase, and be slower than the expected stride pace by the factor estimated in box [7] above. Adjust using the formula -
Stride pace = (1 / input [7]) x Measured Pace

For more probabilistic forecasting resources: FocusedObjective.com Email: troy.magennis@focusedobjective.com