Critical Chain to Accelerate Delivery: A System of Work Based on 'The Rules of Flow'

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Background – Why Innovate?

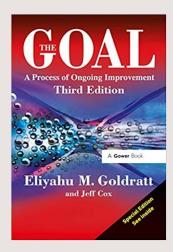
- Customers want faster delivery of capability
- Complex programmes have schedule challenges due to uncertainty
- In addition to product innovation, we need to innovate the way we work
- Impact on staff who can be overwhelmed by project demands and difficulties in prioritising

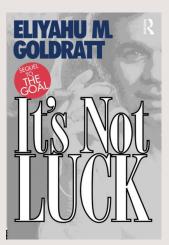


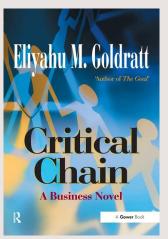


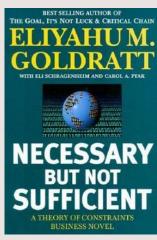
Increase in Flow and Capacity

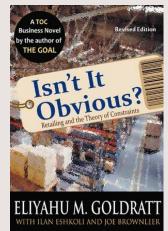
Business Wide

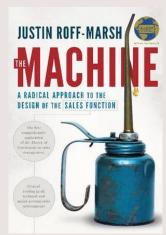


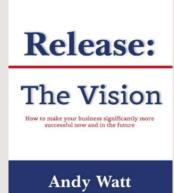












Production

Sales & Marketing

Projects

ERP Systems

Retail & Supply
Chain

Sales

Holistic

Lauren Wiles

Theory of Constraints

- Aims to continually achieve more of the goal of a system.
- Focuses on achieving breakthroughs in performance quickly in large complex environments, dominated by high uncertainty.
- Flow and capacity improvements in any business.







Generic Project Environments Cause & Effect









Behaviours

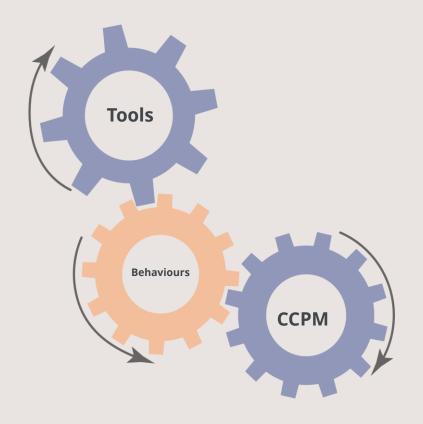
- 1. Estimates turn into commitments.
- 2. Gains are not transferred.
- 3. Travelling work.
- 4. Parkinson's Law.
- 5. Leaving tasks to the last minute (Student's Sydrome) usually means Murphy's Law kicks in.







CCPM Elements





Constraint Focus to Maximise Output



Buffers to Cope with Uncertainty and Remove Local Sub-Optima Behaviour



Low WIP to Reduce Multi-Tasking Costs



Full Kit & Handovers to Reduce Task Switching,
Delays and Rework



Release Gate to Reveal Non-Constraint
Capacity Opportunities



Managing Interruptions to Increase Capacity







Ten Rules of Flow

- 1. **REDUCE THE WORK IN PROGRESS** Reduce the number of live projects and tasks that are allowed to be worked on.
- 2. COMPLETE FULL KITS Only release tasks to resources when they have everything they require to complete the task. Focus on enabling 'Full Kit' well ahead of time.
- 3. RELEASE TO CAPACITY Release tasks in the correct sequence and priority to maintain the optimal level of Work In Progress.
- 4. REDUCE MULTI-TASKING Minimise interruptions for people to allow them to 'focus upon and finish' each task as quickly as possible.
- 5. SERVANT LEADERSHIP Ensure management and expert resources have the visibility, availability and are actively supporting daily recovery actions.

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Ten Rules of Flow

- 6. CLEAR DEFINITION OF DONE Ensure the project scope is clearly documented and communicated, with all the tasks in the plan having a clearly defined criteria for handover and Completion ('Done').
- 7. PLAN FOR UNCERTAINTY The rolling wave plan has logically linked tasks of the right size. Position visible buffers to protect it from the uncertainty and changes to it in execution.
- **8. FOCUS ON THE CONSTRAINT/INTEGRATION POINT** Stagger the projects in the portfolio to synchronise resources and ensure they are not overloaded.
- 9. THE PAST IS THE PAST, FOCUS ON REMAINING DURATION Report the remaining duration of all (open) project tasks every day. Identify where and when to actively manage with fast recovery actions.
- 10. MEASURES DRIVE BEHAVIOURS Replace local operating measures that do not support the behaviours wanted with different measures aligned to deliver the project on time.

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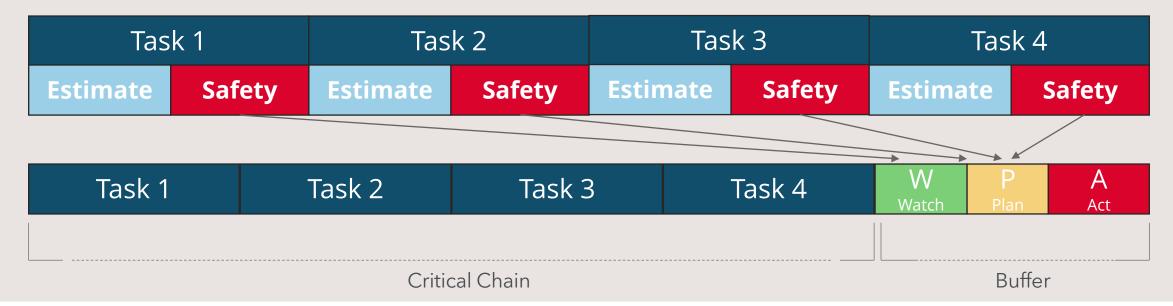




Protect Plans

Individual safety is wasted in execution.

Aggregating safety and making it visible better protects us from uncertainty in execution and makes individual task durations shorter.



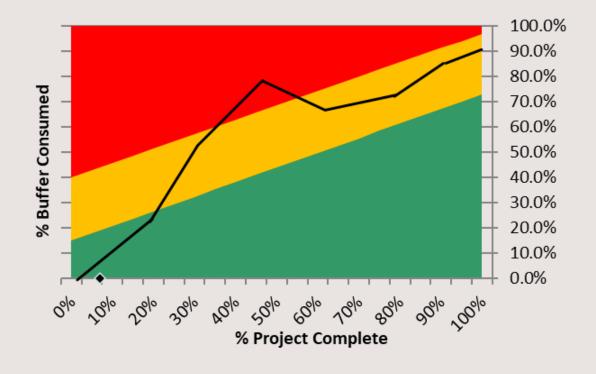




Managing Execution

- Everyday measure rate of project completion against consumption of project contingency (Buffer)
 - Buffer being used faster than rate of project completion – Recovery actions MUST be identified and carried out.
 - Buffer being used slower than rate of project completion – No action necessary.

Fever Chart









Challenging Existing Approaches

- a. Estimating old way, new way.
- b. Rolling wave planning vs. detailed long-term planning.
- c. Re-planning.
- d. Back to basics.
 - i. PERT.
 - ii. Full kit and definition of done back to basics.
- e. Measurement.
- f. Reporting:
 - i. Drumbeat daily, not weekly or monthly.
 - ii. Focus on remaining duration, not backward-looking percentage complete.
 - iii. Task management recovery actions.







How to Implement?

Case for Change & Vision

- Develop the case for change & diagnostic.
- Make/Buy strategy for Training & Expertise (partner with experts).
- Customer & supplier engagement strategy.
- Identify pilot area and scope work content.
- Agree IT strategy.

OUTCOME

- Size of the prize.
- Justification for investment.
- High level plan.

Training & Pilot Planning

- Introduction CCPM.
- Advanced CCPM.
- Leadership training.
- Awareness training.
- Cultural training.
- Learning from experience (e.g., from Australia, US Air Force, Boeing, Embraer etc).
- Pilot planning.

OUTCOME

- Capable teams.
- Knowledgeable leadership.
- Plan for pilot.

Pilot Deployment & Pilot Review

- Pilot mobilisation.
- Pilot delivery.
- Pilot results review.
- Pilot lessons learned.
- Communication and engagement to stakeholders.
- Build internal CCPM capability.
- Plan deployment.

OUTCOME

- Initial benefits, performance improvements
- Lessons learned
- Experience & confidence
- Plan for Deployment
- Root cause/buffer analysis results

Deploy & Review

- Mobilisation.
- Delivery & ongoing improvement.
- Results review.
 - Lessons learned review.

OUTCOME

- Performance improvements.
- Plan for sustainment.

Sustain & Review

- Delivery.
- Results review.
- Lessons learned review.
- Expand internal CCPM capability to reach full autonomy.

OUTCOME

- Sustained improved performance.
- Annual review and corrective action plan.







Lessons Learned

Enablement

- 1. Active Leadership and Sponsorship.
 - Number one improvement priority for the business and the leaders.
- 2. CCPM Champion has enough capacity to lead the implementation.
 - Must have enough time available to provide the necessary focus.
- 3. Core cross-functional team with the management authority and capacity to execute.
 - Must represent management of all the functions in the business.

Plan

- 4. Implementation plan agreed and managed to hit a due date.
 - Too slow and we lose momentum, no change control in place we do not understand the impact of delays to the schedule (in benefits, scope and costs).
- 5. The rules of flow implemented in the right sequence to generate big wins quickly
 - Without the changes to the behaviours and system of work, buffer management will have little impact.

Execution

- 6. Manage the number of released tasks on the plan.
 - Too many WIP tasks delays flow.
- Maintain understanding support and morale throughout the implementation of all people.
 - Weekly communication of the effects in performance and progress.







Questions & Answers





