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ABSTRACT

Prior to the infamous "Bite Fight" in 1997, Mike Tyson was asked by a reporter if he was worried about Evander Holyfield and his superior strategy and fight plan. He answered; "Everyone has a plan until they get punched in the mouth."

Tyson comment is similar to the old saying "no plan survives first contact with the enemy". But does this mean that there is no need to plan?

Absolutely not!!!

An effective plan for frontline work is critical to reliable, safe performance in any operation but in many cases plans can be too rigid and inflexible to remain useful to frontline teams within a changing workplace. Planning systems should help people to make reasonable commitments to each other so that everyone can work as a coordinated team to get work done each shift. At Fewzion we believe;

"Successful organisations are **driven by a series of commitments** that **people** make to each other and **deliver on**"

The problem is that it's extremely difficult to do this reliably in most organizations despite large investments in planning and ERP systems. The best organizations are able to maintain the trust and commitment of their workforce and frontline leaders and deliver results even when the odds are against them.

At any level in an organization being good at "making and delivering on commitments" will improve the safety, productivity and trust of your teams. In operations with volatile economic, environmental and workplace conditions we need to be extremely capable at getting great plans to supervisors so that they can execute their work in a safe, reliable and productive way. Fail in this and you will see costs blow out, targets missed and operations become unviable, shed jobs and close.

This paper examines how operations can use a "Commitment System" to connect the "theory" embodied in technical plans (whether mine, project, maintenance or people) with the immediate reality "practice" experienced by supervisors and their crews in the workplace. We draw on management theory embodied in Management Operating Systems (MOS), Lean, Theory of Constraints & Six Sigma approaches to continuous improvement. We draw on a good dose of real world experience gained while working with a number of early adopters that have used a commitment system to help them achieve outstanding results.

Imagine a workplace where the structures, systems and behaviours all work together to deliver results, where employees invest discretionary effort and work together to get the right things done quickly and efficiently, where people trust each other, share a purpose and values and are all pulling in the same direction as hard as they can...

INTRODUCTION

A commitment system leads to adaptive, high trust workplaces and significantly improved results.

At Fewzion we believe successful organizations are driven by a series of commitments that people make to each other and deliver on.

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systems. The best organizations are able to maintain the trust and commitment of their workforce and frontline leaders and deliver results even when the odds are against them.

EVERYONE HAS A PLAN UNTIL THEY GET PUNCHED IN THE MOUTH

When Mike Tyson was asked by a reporter whether he was worried about Evander Holyfield and his fight plan he answered; "Everyone has a plan until they get punched in the mouth."



What Tyson said is similar to the old saying "no plan survives first contact with the enemy".

Holyfield was no doubt smarter and more strategic than Tyson, Tyson was a brawler, good at powerfully fighting his way out of a corner and landing devastating blows. In all his planning could Holyfield have had a plan for what to do if he had half of his ear bitten off? No... However the way he responded to Tyson's unpredictable behaviour when the "chips were down" was critical to his success.

 $Holy field won. \ Despite the \ massive \ 15/2 \ odds \ against him. \ However had he \ blindly followed his \ plan \ when things had \ changed he \ may \ not have.$

This example shows that how you adapt your plan when you get punched in the mouth is critical

Commented [A1]: This isn't really necessary

to your ability to survive in tough geological, operational and economic conditions. There are two key things here:

- Most of the plan should survive. Despite everyone being focused on the bit that is broken. So, keep
 the old plan in mind when working out the new plan. You may have a puffed up eye and half an ear
 but your arms and legs are still working so don't stop moving, defending and throwing punches.
- 2. The new plan needs to deal with right now reality. There's no point thinking about training and strategy while you're being punched in the face. Your ear hurts and your eyes are swelling so you need to think and make a decisive decision. In this case the fighter can either to go for a knockout now or stay away for a while, his choice will have knock on effects for the rest of the fight but the fighter must have the information and authority to make a decision or he'll get punched in the face again.

To bring this back to the workplace. If you've created a detailed work plan for your team that fully utilizes your people and equipment and key people call in sick or a machine breaks down. What do you do?

- 1. **Most of the plan should survive.** Priority jobs should still happen and most of the team should be able to carry on doing what they were planned to be doing. So, adapt the current plan to cope with the change, don't throw it all out and start again.
- 2. The new plan needs to deal with right now reality. In most cases planners won't be around to help so your supervisor needs to be able to solve the problem himself, this means they must both understand the plan (the why behind the what) and believe that they have the authority to change it. Someone didn't come in, I can borrow someone or do a different job from tomorrow's plan. Machine is broken, can I do contingency work, fix it or borrow another machine. The last thing you want is for people to stand around doing nothing.

Plans don't survive the first punch in the mouth but you need one in the first place to be able to adapt it for changes in reality...

So, put a plan together in sufficient detail to 'win first' but ensure you can adapt this plan so that one unplanned setback does not result in defeat. Because, as Holyfield discovered when he lost much of his ear, some things you just can't plan for.

ADAPTING FOR CHANGE WITH THE END IN MIND

The military realized many years ago that "no plan withstands first contact with the enemy. So, they created the concept of "commander's intent" (the description and definition of what a successful mission will look like) and gave their supervisors (sergeants) "operational control" so that they were authorized to adapt the plan and make the decisions in the field necessary to achieve the commander's intent.

How does your team respond when a plan changes? Does everyone seem to know what to do or is there confusion, a lack of meaningful activity, or people standing around waiting to be told what to do next? Planning is difficult whether in business or the military. Commander's Intent is a key element to help a plan maintain relevancy and applicability in a chaotic, dynamic, and resource-constrained environment.

Harvard Business Review gives the following description of Commander's Intent.

Commander's Intent is the description and definition of what a successful mission will look like. Military planning begins with the Mission Statement that describes the who, what, when, where, and why (the 5 W's) of how a mission will be executed. Commander's Intent describes how the Commander (read: CEO) envisions the battlefield at the conclusion of the mission. It shows what success looks like.

Commander's Intent fully recognizes the chaos, lack of a complete information picture, changes in enemy situation, and other relevant factors that may make a plan either completely or partially obsolete when it is executed. The role of Commander's Intent is to empower subordinates and guide their initiative and improvisation as they adapt the plan to the changed battlefield environment. Commander's Intent

empowers initiative, improvisation, and adaptation by providing guidance of what a successful conclusion looks like. Commander's Intent is vital in chaotic, demanding, and dynamic environments.

A Battlefield Example of Commander's Intent by Storlie (2010)

During World War II, the sea and airborne invasion of France on June 6, 1944 (D-Day) had been planned for years. British, Canadian, and American airborne forces planned and rehearsed for months a precise series of glider and parachute landings that were designed to secure bridges, road junctions, and other key terrain that would enable the ground invasion forces to advance rapidly inland. The airborne invasion forces took off from England and months of planning appeared to vanish instantly. Parachute forces dropped into unmarked landing zones, gliders landed in the wrong areas, and thousands of soldiers from different units were mixed together in the night. It appeared that a military disaster had occurred. Yet, only hours later, the original military objectives were bring accomplished by ad-hoc units that faced much fiercer German resistance. Commander's Intent had saved the day. Leaders and soldiers at all levels understood that no matter where they landed, they had to form into units and seize the bridges and key terrain. The plan was a failure, but good Commander's Intent and superior training allowed improvisation and initiative to save the mission.

Commander's intent works well but only in the context of an organization that provides its frontline leaders with "operational control (MilitaryFactory.com, 2016), that is:

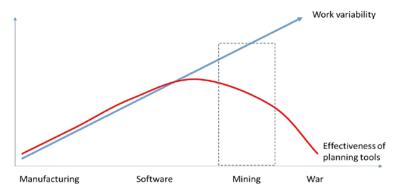
...the authority to perform those functions of command...necessary to accomplish the mission... Operational control normally provides full authority to organize commands and forces and to employ those forces as the [leader] in operational control considers necessary to accomplish [the mission]

This amounts to authorising the frontline leader who is closest to the action to adapt the plan to the conditions and not simply "follow orders" that may no longer be effective.

Not every plan may stand a 'punch in the mouth' but great organizations are able to adapt to such setbacks, regroup and still achieve their objective. How does this work in your organization? Are your people clear about what the "commander's intent" is? Do your supervisors have the authority to deploy their team in a way that is best aligned with the commander's intent but with respect to the changing reality of operational and geological conditions?

PLANNING TOOLS NEED TO MATCH THE VARIABILITY OF THE WORKPLACE

Top-down planning and process design works well when it is clear what needs to be done and how. But where there is variability, judgment, creativity, non routine work, or exceptions, rigid planning can do more harm than good. As process variability increases, the cost of top-down planning and process design goes up, while rigid adherence to inappropriate or misaligned plans or processes can prove counterproductive.



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Fig 1-The operational environment is extremely variable so traditional planning tools, as suggested by manufacturing based business improvement philosophies such as 'six sigma' or 'lean', are not adaptable enough to be effective.

In a business where there are many departments and teams across multiple shifts and roster patterns it can be extremely tough to coordinate work at the frontline. Many operations end up with extreme tension between silos, i.e. there is competition rather than collaboration between maintenance, production, services, technical & operations. This tension must be resolved to enable frontline leaders to coordinate safe and effective work where it happens.

ERPs and siloed planning tools don't help as they only increase the false confidence of the planners in those silos. People make commitments within their teams in good faith without understanding that they are part of a larger team that has to play together. This can result in a game where the forwards won't give the backs the ball and the backs don't trust the forwards when they have it. You simply can't win like this.

Meanwhile the captain on the field



(the supervisor) has to work together with everyone and to be successful needs a high quality, adaptable plan for the whole game.

Another problem frequently observed is the lack of interest in operational reality from technical staff. Technical staff often see their role as planning for the future and resist being dragged into the day-to-day reality of the operation. But what if the reality on the ground is not as it was designed or imagined, the technical team needs to help adjust the design and plan to meet the needs of the operations team. The operations team needs to be heard so that they can avoid waste and rework to utilize their equipment effectively at good rates, designs need to be respected so that the right dirt is moved at the right time to hit important deadlines.

While these issues remain true, trust remains low and results remain poor.

IMPROVING TRUST IMPROVES RESULTS

What would happen if your team could see all work planned for the coming week in one place and collectively make trade-offs in the best interests of the business? What if supervisors and their crew could see the plan for the next few days in advance so that they can prepare for the work and avoid reasonably foreseeable issues before they occur. What if supervisors could track their performance and create tasks for themselves and their colleagues in the field. What if managers were able to share where the business is going and their "commander's intent", and ask great questions that cause people to think?

In their paper "Building Workplace Trust 2014/15", Interaction Associates correlate higher trust workplaces to significantly better results than those of low trust workplaces.

- High-Trust Companies are 2 ½ times more likely to be High Performing Organizations relative to Trust Laggards. Trust Leaders are better at revenue growth, profit growth, cost reduction, competitive market position, demonstrating company values, and achieving predictable business results.
- High-Trust Companies involve employees, and retain them better as a result. High-Trust Companies
 are far more likely than Low-Trust to have highly engaged and involved workforces and better
 employee retention.
- Trust Leaders prioritize innovation, and are more likely than other companies to be innovative.
 What's more, 8 out of 10 employees report that a high level of trust inside an organization fosters both innovation and investment in new projects.

An effective commitment system is the key to building a "high trust" workplace.

At its foundation, trust must be earned through individual exchanges and behaviours—it does not
come with a job title or seniority in an organization. Earning trust requires consistency,
predictability, and transparency. The difference in the prevalence of trust building behaviours and
practices between Trust Leaders and all other organizations is stark. This gap reinforces that trust is
affected by what we do—leadership behaviours—and can be systematically constructed through
focused, deliberate leadership practices.(Atkins, 2015)

This research reinforces the importance of being purposeful in combining management systems with leadership behaviours to create sustainable, high trust habits. The key to this is a "System" that makes it much easier for people to behave in a high-trust manner than not.

THE NEED FOR A COMMITMENT SYSTEM

A commitment system is an adaptive system for helping operations to work together as a team at the front line. To do this it must draw together all the sources of work from each silo and system so that the supervisors leading work each shift can confidently go to work with a good plan.

Over the years it has been found one of the toughest challenges of a Business Improvement or Management Operating System project is to get people to believe that the plan they are committing to is in fact possible. This is normally because their plans seldom play out the way they are planned. To managers, supervisors and crew it looks a bit like what you might see in Figure 2.

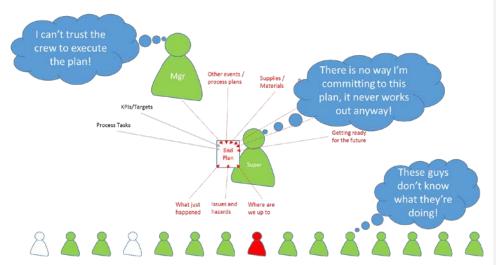


FIG 2 – Frontline leaders often can't complete the work that is 'planned' for them because they don't have a full picture of the 'shift plan' for their work area.

It's very hard to create a high trust and effective workplace when this kind of thing is happening every day. Seldom are a team in an operation is able to simply get on with their work without some interaction with other teams. In most processes or departments there is a focus on the work of the process or department only, planners are busy and find it hard to collaborate with other departments because they seldom encounter them except at meetings.

In contrast their supervisors must collaborate every shift, whether they have a plan to help or not. For example a supervisor will need to arrange a pump to be installed, talk to maintenance about when a machine will be back from the workshop, talk to training about skills and work with a project team who need some help etc. etc. All within the context of a changing frontline operational and geological environment. This is a lot to process and keep on top of, particularly when you have a one dimensional plan from your department.

With most frontline planning tools it's impossible to reliably bring all these pieces of information together onto a single page so that a supervisor has the full picture of what needs to be done and when. This means people at all levels are reticent to commit to the plan, symptoms of this include rework, waste, incidents and poor productivity. Piece meal systems for scheduling for example maintenance or projects exist but are ineffective in creating a "whole of mine" plan as they don't encourage collaboration, they make the individual department plan better in spite of necessary interactions with other teams. (Figure 3)

Operational Systems Map on a Typical Operation

If your systems map looks like this you probably have a lot of gaps in the plans that crews do each day and find it hard to ensure the most important work gets done every day. This reduces productivity and increases risk as many people are working without a plan each shift.



FIG 3 – Information from many different sources (mine planning, maintenance, project, safety, people, rosters etc) must be pulled together to be useful for frontline leaders on the shift. Spreadsheets and whiteboards tend to form a barrier to successful shift planning.

It's ironic that most operations teams have great information about what should happen in the future, extremely granular data about exactly what is happening right now, good analytics packages that tell

management what happened yesterday, but nothing other than spreadsheets and whiteboards to say what's going to happen across the site today and tomorrow. A chain is only as strong as its weakest link and the "what's going to happen tomorrow" link in this chain is extremely weak. (Figure 4)

In operations like this the crew often end up with the target for the week divided by 14 shifts as the target for each shift. The crew see low targets on some shifts and unachievable targets on the shifts where the work they have



FIG 4 – An operational management system is only as strong as its weakest link.

know what they're doing... More importantly the preparation tasks such as dewatering or drill prep seldom get planned and often don't get done. Unfortunately, it's often just this type of work that holds up production.

What's needed is a single view of what's planned to happen for everyone on site tomorrow. This means drawing together all the "source of truth" systems into frontline planning system that makes it easy for your people to make commitments to each other visually and publically and to see when these

commitments have been met. We call this a "Commitment System" and believe it is a critical element in any high trust and high performance workplace. (Figure 5)

A Commitment System pulls together all the sources of work for frontline leaders so that they always have a reasonably executable plan to lead their team with.



FIG 5 – An enterprise quality 'commitment system' can bring the whole operation together onto the same page to enable frontline leaders to always have a complete plan.

Many operations currently have a MOS (Mine or Management Operating System), in most cases it is made up of spreadsheets, whiteboards and paper tools that seldom include more than one source of work and require lots of manual work to keep together. It is possible to take your current MOS and turn it into an effective commitment management system. In most cases the missing link is a visual software tool that helps people make these reasonable commitments to each other, communicate these commitments visibly across the site and then see when these commitments are delivered upon.

Operations using a commitment system are delivering greater than 30% improvements in production whilst also reducing costs. If you want better results in these tough times, you need a sustainable and effective "commitment system" that creates a high trust work place and reliably delivers world class financial and safety results.

Fewzion™ is the world's first enterprise commitment system.

It is currently being used to improve results at a number of sites in Australia and Africa for some of the world's largest organizations.

Examples of performance improvements at "Fewzion" sites include.

Anglo American's Grosvenor mine construction project delivered 7 months early and \$100m under budget.



Glencore's Oaky Creek, development crews deliver 1880m vs a target of 1400m two months after implementing Fewzion and say "we're just a whole lot more organized than we used to be"

Anglo American's Grasstree mine delivers a record 10m tonnes to the ROM, the team on site say "Nothing happens if it's not in Fewzion (the plan)"

Anglo American's Moranbah North mine won coal mine of the year 2 of the last 4 years and increased Longwall output by 39% in 2014/15.

Glen Britton (Head of Underground Coal Operations at Anglo American)

"The implementation of Fewzion in September 2014, its integration with other systems (SAP, CITECT, Compliance) throughout the year and enhancements to encourage tighter planning control that have been rolled out have assisted us to achieve these fantastic results.

The people that have worked with us at these sites are usually happy to talk and/or arrange visits to see their site in action. Contact us so we can help connect you with the right people or arrange a visit.

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