FPC is a global management consulting firm with an operational focus. The FPC team works with its clients’ teams to be operationally ready when starting up and improves operational effectiveness and efficiency with those already producing.

Using a unique approach, diagnostics and projects always start with the end in mind and focus on three key elements: Empowering people, making business processes lean and getting the most out of technology.

This has led to an enviable track record where clients produce ‘more for less’, consistently leading to impressive bottom line results. FPC provides solutions, methodology and extra resources for implementations.

Find out more: [www.FirstPrinciplesConsulting.com](http://www.FirstPrinciplesConsulting.com)
Mining Focus, Cross Industry Capability

Clients often expect consulting firms to specialise in one industry only. This is often applicable to technical consulting firms. Management consulting is different by nature. Here are four reasons how hiring consultants outside your industry can actually benefit your company:

1. **People are people - managing them does not change:** No matter what work they are doing, the way people respond to given situations is very similar. A far bigger impact on their behaviour can be traced back to leadership and organisational culture.

2. **Business Processes & Management Systems are similar across all sectors:** Dr Deming’s famous and well-proven Plan-Do-Check-Act approach is industry-agnostic, as is Lean Six Sigma as well as most other models.

3. **Not stuck in old thinking:** Consulting firms that are new to an industry are not saddled with the same paradigms that the ‘experts’ in those industries are. They can often bring fresh ideas to old problems that operators with years of experience sometimes simply overlook.

4. **Cross-fertilising from other sectors:** External groups can bring in cross-industry experience, which by its nature may be more revolutionary than evolutionary.

It is common for many consulting firms to work in industry sectors that may be new to them.

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**Integrated Management Systems**

**Operations Management System Manual (Blueprint)**

**Project:** Large Global Mining Corporation - Co-developed a very specific and comprehensive integrated manual, which, in its 260 pages, defined a hands-on, standardised method for managing mine sites. It ensured more reliable outcomes and systematic continual improvement was embedded into the daily operations cycle. This Blueprint was subsequently rolled out globally to realise the business opportunity.

**Operations Blueprint Proof-of-Concept Pilot**

**Project:** Implemented the above-mentioned management system blueprint at a large Gold Mine in the USA. The objective was to prove the blueprint's validity prior to rolling it out to the global corporation.

**Outcomes:** This Integrated Management Systems (IMS) aligned functional departments, enabling improved cross-functional collaboration. This was the true for all segments of the closed loop Plan-Do-Check-Act cycle. No longer were plans developed in isolation only to be found they could not be executed, but developed jointly instead. Execution was managed more tightly through Short Interval Control processes, resulting in higher, more reliable and safe production. Checking for variance against the plan was now being done hourly, daily and weekly, not just monthly. Closing the PDCA loop, the site-wide action management system that had been installed enabled the systematic elimination of issues, risks and unwanted events, resulting in structured, continual improvement in every aspect of the business.

**Client Testimonial:** First Principles Consulting assisted Seqwater's policy, strategy and research team in developing a roadmap towards building an integrated management system. The challenge was to convince the executives that implementing a management system in a comprehensive way is a powerful enabler to achieving strategic goals and not just an organisational burden driven from a compliance perspective. Mark's unique combination of extensive business management knowledge as well as a deep understanding of how quality management systems and a process framework supports the achievement of strategic goals have enabled him to map out a journey that made sense from a business and strategic management perspective. Having this roadmap is assisting the policy, strategy and research team in continuing to promote the message around the benefits of a holistic management systems approach as we work towards improving our systems for asset management, product quality, environment and safety.

- Annalie Roux, Manager Policy Strategy Research and Innovation, Seqwater
Core Competencies & Capabilities

- Business & Operational Readiness
- Integrated Management Systems, Processes
- Project Management Framework (PMF)
- Strategy Development & Execution
- Business & Operations Improvement
- Mergers & Acquisitions
- Organisational Effectiveness
- Constraint Management (De-Bottlenecking)
- Change Management

Our Business Improvement Methodology

Our approach is based on our philosophy of what makes or prevents an organisation from functioning. Our model:

- Business Processes deliver the results
- People operate Business Processes
- Technology enables the Business Processes (or not)

If any of these three fail to deliver, the value chain is compromised. Empower your People, make the Business Processes functional and lean, use appropriate Technology to enable the Value Chain to deliver repeatable results from end-to-end.

Our approach is simple, structured and comprehensible. We always start with the end in mind by designing your Business Processes with you to be only as complex as they need to be. We then help you identify the most suitable technology to enable the Business Processes to deliver the results you expect.

To complete the upgrade process, all personnel are skilled up and empowered to act within their clearly defined sphere of control to become fully functional team members. Clearly established process ownership (especially those processes that so often belong to no-one and rarely function well) rounds out the implementation.

Business Review Approach

In line with our improvement philosophy, we approach the diagnostic phase by focussing on these four aspects:

1. Assess Leadership, Values and Culture
2. Deconstruct Systems & Processes and their Technological Enablement
3. Observe Behaviour
4. Analyse the business results manifested in Statistics

Review Leadership, Values and Culture: Leadership values and their behaviours set expectations of how team members are expected to behave (“The standard you walk past is the standard you accept” - Lieutenant General David Morrison, Australia, June 14, 2013). For better or worse, leadership behaviours form the basis of the organisation’s culture. We examine your officially published values and contrast how actual behaviours match those values (at all levels of the organisation) and if not, what do these behaviours really reflect?

Deconstruct Systems & Processes and their Technological Enablement: By deconstructing the organisation’s systems and processes we can understand their intended outcomes. Are the systems and processes adequately designed to achieve their intended outcomes? Does technology enable the systems and processes appropriately, empowering the team to achieve the intended results?

Observe Behaviour: Nothing happens until people actually do something. By observing behaviour we confirm how well the previous steps are working.

Analyse Statistics: This is what it’s all about: Results. By analysing statistics, which are lagging indicators of all the previous steps, we verify if the organisation is attaining its goals. Having taken the previous aspects into account we can now tell a cohesive story of where the opportunities lie.
**Business & Operational Readiness**

**Operational Readiness at the operations level**

**Project:** Substantial upgrade to a crushing circuit at a remote site in PNG. Conducted early stakeholder engagement sessions resulting in a mutually owned project plan; instrumental in the delivery of Standard Operating Procedures (SOPs), identification of scheduled preventive maintenance (PMs) tasks in preparation of loading these into the Computerised Maintenance Management System (CMMS). Reliability Engineering activities, Spares and Inventory, maintainer and operator competency upgrades, Risk Management.

**Outcomes:** Personnel had been trained, operational management system elements had been implemented and critical spares were in store prior to turning the production unit on. This resulted in a faster ramp up and more reliable operation, delivering the ROI earlier than promised in the project proposal.

**Client Testimonial:**

"I head up a small team of professionals and our role is that our new mines are effective and efficient as early as possible. The better prepared the site is the more quickly and safely they will ramp up production. We had a good experience when we asked FPC to assist my team in the development of business readiness processes. Most of the work was done remotely keeping travel and accommodation cost to a minimum. They used up to date technology and project management processes to facilitate hassle-free remote collaboration. We got what we were looking for which allowed us to manage business readiness for a large global project portfolio with a very small team."

- Brad Barnum, Director Business Readiness,

**EPCM/BR Phase Sync**

**Project Management Framework (PMF)**

**Example of Project Management Framework – Overview**

**Developed and deployed a customised PMF**

**Project:** Gold Miner in Queensland, Australia - Analysed requirements, custom-developed a PMF based on the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK) and the organisation's culture, maturity level and other requirements. Facilitated the customisation of the PMBOK-based training to match their new custom PMF.

**Outcomes:** Projects are now managed through the five stages (initiating, planning, executing, monitoring & controlling and closing). The improved project funnel and project initiation rigour now allows the organisation to choose the most important projects and stage-manage them to their successful completion. Planning is now done with more foresight and proactive measures are put in place where required. Execution is carefully monitored and support provided when a project is at risk. Structured post mortems identify valuable lessons learned and the site-wide action management system ensures those lessons are actually converted into process improvements, technology fixes or competency upgrades as required.

**Client Testimonial:**

"We had trouble getting our people to think in terms of what is a project and what is not. We had late deliveries and budget issues. We lacked a framework for project management. Our processes were unclear and we had no standard tools and templates, leading to confusion and rework. FPC not only helped us develop our customised framework, they also worked with our people to transition us into daily use. These transitions are often not easy but with their help we succeeded beyond expectations."

- Mark Boon, GM, Evolution Mining
Organisational Effectiveness

Production and Productivity Improvement Project

Project: UG Gold Mine Western Australia - A smallish gold mine had become part of a large multinational organisation. This site had changed ownership a number of times leading up to this divestiture and morale was at an all-time low. Unsurprisingly, safety and production performance were reflective of the low team spirit this workforce had sunk to. A series of One-on-One interviews were conducted as well as some workshops to help identify root causes beyond corporate ownership issues.

Outcomes: Once the reasons were clear, including some big ‘elephants in the room’, a plan could be developed that allowed the teams to rally behind a common cause and regain their safe, productive and happier esprit de corps.

Client Testimonial: Our weekly ops meetings were often frustrating and not as effective as I would have liked. FPC thoroughly analysed our needs and worked with our people to develop not only the meetings, but the entire infrastructure around them. The developed reports, how they were generated and reviewed and how we developed our plans to get back on track if required. They also provided software to help us ensure we actually complete our tasks. Then they coached us in their daily use and effectiveness.

- Mark Boon, GM, Evolution Mining

Mergers & Acquisitions

Changing the Culture of the Acquired Operation

Project:
Food manufacturing plant, Sydney, Australia - The client acquired a competitor in another city and was challenged in their efforts to make the ‘newcomer’s’ culture more compatible with their own. We played a part in their quest by aligning values between organisations and personnel, transferring key management system elements to the new operation and coaching the new team in their use.

Outcomes:
This resulted in the two cultures being more closely aligned (manifested in more similar behaviours) and therefore more productive in their collaborative efforts.

The McKinsey 7S Model

Organisational Effectiveness is about getting all the key elements of an organisation aligned. People become more productive and all 7 types of waste are reduced.

Mergers & Acquisitions
Strategy Development & Execution

STARR Implementation - Our ‘Signature Dish’

Project: Iron Ore Mine, WA - This client had recently transitioned from commissioning to operations and many issues remained unsolved. A series of workshops identified all the major problems that needed to be resolved urgently and a set of project plans were developed. Metrics to track progress objectively were identified together with target completion dates. On a monthly basis these goals were then translated to achievable deliverables for that month and committed to. Progress on these deliverables was reviewed weekly and interventions taken when necessary.

Outcomes: The ramp up towards production targets started to become more predictable, resulting in better ROI as well as reduced stress due to clearer expectations, communications and more reliably attained outcomes.

The West Australian (November 21, 2014): "Production for the September 2014 quarter saw an increase of 35.5 per cent over the previous June 2014 quarter."

Client Testimonial: Having become a veteran of business improvement programs at several sites and within varying work site cultures over the years, I was very impressed with the STARR process when it was proposed to me by FPC. Given that it was clear to me that such a system for capturing, tracking, actioning and closing out priorities was desperately needed at my new organisation I advocated it to those managers in my team and external to it as well as upper management. The take up on site in terms of the use of the new tools, the way the system and the people helping us with the implementation from FPC were accepted and the results since have really impressed me. We are happy that we have a system that can be built upon in the future to take full advantage of the potential for improvement from the STARR system’s full implementation. - Neil Meadows, COO, Mining, Western Australia

Business & Operations Improvement

Production and Productivity Improvement Project: Project: UG Gold Mine Western Australia - An unusual assignment, this project had a poorly defined scope and deliverables, with the only client brief being to improve production and productivity. This was the kind of project that drew on all of our diagnostic skills, requiring physical observations, statistical analysis as well as systems and process reviews. Furthermore, a series of One-on-One interviews were conducted as well as some workshops to help identify other issues. Through the lens of People-Process-Technology, contrasted against a well-proven To-Be management system, the gaps soon became obvious. A business improvement plan was developed, client stakeholders recruited to the project team and a structured, stage-managed project was in full swing.

Outcomes: Interestingly, the largest initial bottleneck in the end-to-end value chain turned out to be in a different place than most people suspected. It was found that a support process (in this case the Geology function) was preventing the production process from running smoothly. Once identified, KPIs and management processes were put in place. A daily focus on the backlog of drill core processing reduced the backlog from 1500m to 0, thereby eliminating that particular production constraint. The team continued to focus relentlessly on the trinity of People-Process-Technology and worked towards that ideal management system. A large number of other interventions also contributed to an improvement of productivity of approximately 10%.

Client Testimonial: Our weekly ops meetings were often frustrating and not as effective as I would have liked. FPC thoroughly analysed our needs and worked with our people to develop not only the meetings, but the entire infrastructure around them. The developed reports, how they were generated and reviewed and how we developed our plans to get back on track if required. They also provided software to help us ensure we actually complete our tasks. Then they coached us in their daily use and effectiveness. - Mark Boon, GM, Evolution Mining

Plan Do Check Act Deming Cycle

- Knowledge gained from analysis is used to develop high quality corrective and preventive actions and better plans
- CSI: Requires that all actions are well defined, assigned to individuals and tracked through to effective completion
- True Variance Analysis (Actual vs. Plan)
- Identification of Root Causes
- Meaningful Reporting with meaningful explanations
- CSI: Requires well-structured reports
- Strategic Plans
- Tactical Plans
- Budgets, Quarterly, Monthly, Weekly, Daily and Shift Plans
- Performance Expectations
- CSI: Requires plans to be developed from first principles
- Work Assignments
- Work Execution
- Follow-up during execution
- Accurate, timely actual recording
- CSI: Requires a performance expectation to be communicated with the assignment
- FPC
Constraint Management (De-Bottlenecking)
Production and Productivity Improvement Project

Project:
UG Gold Mine Western Australia - A smallish gold mine had become part of a large multinational organisation. This site had changed ownership a number of times leading up to this divestiture and morale was at an all-time low. Unsurprisingly, safety and production performance were reflective of the low team spirit this workforce had sunk to. A series of One-on-One interviews were conducted as well as some workshops to help identify root causes beyond corporate ownership issues.

Outcomes:
Once the reasons were clear, including some big 'elephants in the room', a plan could be developed that allowed the teams to rally behind a common cause and regain their safe, productive and happier esprit de corps.

Client Testimonial:
They did some good work in a professional way for the Geology Dept. at our underground gold mine in helping us setup a system to effectively and efficiently manage our bottlenecks by eliminating them and eventually passing them on to the next section in the mine planning process who regrettfully did not use the expertise that Mark and his team offered.

- Ettienne DuPlessis, Manager, Geology

Change Management
Large Scale Management System Implementation

Project: Large UG Copper Mine, South Australia - During a Management System upgrade project of large scale and scope the client was unable to provide a sufficient number of dedicated, full-time project team members that would ensure client ownership of the changes. This put the external team's efforts in jeopardy as the project might have been seen as an external one. A solution was found by building a larger team of part-time client representatives. The cross-functional internal/external team developed and executed a Change Management (CM) plan tightly interwoven with all project activities. This approach quickly resulted in identifying the stakeholders with a high degree of influence and a willingness to provide their time and 'political capital' to the cause, building unprecedented momentum for the initiative.

Outcomes: The amount of traction, client ownership and all out success this project achieved was so outstanding that it won first prize against 144 competing entries after it was entered into a Business Excellence competition in London in 2011. After 6 years, all personnel still used the management system on a daily basis in its entirety. The financial ROI has been recouped over and over many times.

Client Testimonial: We relocate executives and engineers, and we operate as a distributed team based in a number of different locations. We hired First Principles Consulting to help us improve the way we communicate internally, especially how we request tasks, assign them and track them to their completion. We are very happy with the new processes they helped us implement. But they didnt stop working with us until our new processes became embedded in the culture of our company, thanks to their daily coaching. - Kim Franklin, Director, Relocation Services Australia

Fundamentally, we believe that change management should never be a separate activity when making improvements and changes to the business. People don't mind being accountable for an outcome as long as they have an input into it. On the flip side, people will never 'own' that outcome if they've had no opportunity to shape it, make it their own.

To watch the client testimonial video follow the link below:
http://youtu.be/DSjRMOEYqVk
Key Team Members

Mark Franklin, Owner & Principal
- Consulting since 1997 in a multitude of industries; proven track record in business improvement projects
- Background in automotive manufacturing, supply chain, engineering and mining
- Third World: 3½ years in PNG, led business reviews in Ghana, Peru & Chile

Kate Hobbs, Senior Consultant. Qualified Lean Six Sigma Blackbelt
- Masters in Mining Engineering, tertiary qualifications in management, marketing, and international studies
- Many consulting, operational and project-based roles across a number of industries including
- Led successful organisational change management effort for BHP Billiton’s Uranium CSG during a global business transformation project

Lara Jefferson, MBA, Senior Consultant
- Ph.D. Philosophy, Environmental Sciences
- Invited speaker at the Global Reporting Initiative (GRI) conference on Sustainability & Integrated Reporting (Melbourne, 2012)
- Received the Department of Mines and Petroleum (DMP) Golden Gecko Award (2010).

Ivan Popowski, Senior Consultant, Qualified Lean Six Sigma Blackbelt
- BE, Chemical Engineering
- Consulting experience across multiple industry sectors in the areas of strategy, operations and project management
- Operational strategy, business process improvement, analyses and implementation projects, post implementation reviews and management (operating) system compliance audits, change management and communications

Patrick Mullen, Senior Consultant, MBA
- Mathematical Science
- A variety of roles across large and small public and private companies in industries such as Waste and Recycling, Mining & Resources, Local Government, FMCG, Automotive and Building Products
- Systems and process development, change management, implementation project management, business analysis, contract negotiation, training / coaching / mentoring, facilitation, quality management

More team members can be viewed on our team webpage (http://www.firstprinciplesconsulting.com/team/)