



WORKING TOGETHER WITH IMPLEMENTATION CONSULTANTS

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Tehran, Iran



Maximilian Tan
Manager
T.A Cook Consultants

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T.A. COOK CONSULTANTS - MAXIMILIAN TAN

Background:

- ◆ Engineer Electronics / Electro technology
- International MBA, MIT (Massachusetts Institute of Technology)

Responsibilities before T.A. Cook

- ◆ Electro technician, ABB Overhead lines
- ◆ Electro technician, Siemens

Consulting focus:

- ◆ Maintenance strategies and -management
- ◆ Shutdown: Planning, Scheduling, Optimisation
- ◆ Work execution excellency: Lean, Kaizen, 6-Sigma, SMED

Focus industries:

Petro / chemical, asset intensive industries



T.A. Cook Consultants

Established 1994

Offices:

Berlin

Birmingham

Calgary

Hong Kong

Houston

Paris

Raleigh

Rio de Janeiro

1	About T.A. Cook
2	Our Methodology & Project Approach
3	Reasons for Engagement
4	Project Examples
5	Key Success Factors

T.A. COOK CONSULTANTS

We are a Management Consultancy that specializes in Asset Performance Management

Our Focus is the implementation of Asset, Service and Operations Excellence.

- ◆ T.A. Cook Consultants has offices in Berlin, Birmingham, Calgary, Hong Kong, Houston, Paris, Raleigh and Rio de Janeiro.
- ◆ We employ more than 120 experienced employees who have successfully implemented over 400 projects.
- Our comprehensive consultancy services help companies to achieve efficiency and effectiveness improvements.
 Our main focus is on leadership, organization and management processes.
- ◆ Our clients are generally businesses with significant industrial assets such as process, utility and infrastructure service providers (oil/gas, chemicals, nuclear, timber).



120+ EMPLOYEES

400+ PROJECTS

IMPLEMENTATION

T.A. Cook as an expert in asset performance management has successfully worked with client globally for over 20 years

Consultants	Engineers	Conferences
 Experts in asset performance management 	 Independent provider of turnaround management services 	 Conferences, seminars and workshops for managers
◆ Work globally	◆ Conduct and support world- class turnarounds	 Innovative approaches to solutions
Programs to improve profitabilityApproach is pragmatic	 Apply the latest tools and management techniques 	 Wide spectrum of seminars and workshops to exchange experience
 Certainty of results and speed of delivery 	 Deliver significant reductions in project costs, risks and duration 	 Public or in-houses seminars - tailored to our customers' needs

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SELECTED CLIENTS

In the last 20 years, T.A. Cook has successfully completed more than 400 cost management, reorganization & efficiency improvement projects

We offer profound knowledge and established methodology in following areas:

- ◆ Maintenance
- ◆ Turnaround / Shutdown / Outages
- Engineering & Projects
- Production / Operations
- ◆ Contractor Management
- ◆ PSM & Site Services incl. logistics

































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We achieve sustainable results/benefits through implementation of behaviour change

People, Behaviors & Management **Processes & Tools Organization Systems Capabilities** Organizational setup -◆ KPI tree Reduction of Training design for the future complexity ◆ PDCA cycles One-on-one coaching ◆ Standardization Roles & Constant Improve- Application Responsibilities compliance Installation of Best ment process **Practices** Single point of ♦ Visualization accountability ◆ People development Enhancement of Short term follow up & Communication ◆ Competencies & interface Skills dialogue (change, progress,...) management Shared values Meeting routines Implement tools Insourcing vs. Outsourcing

BEHAVIOR CHANGE

Clear objectives, transparency in decision making, collaboration & teamwork

SUSTAINABLE RESULTS

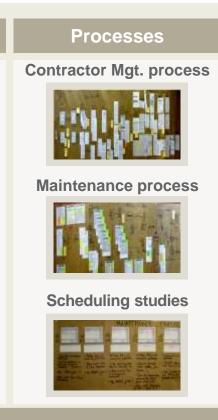
Operational improvements, sustainable financial benefits, cultural changes

Our collaborative change approach fosters an integration of the client's colleagues through the entire lifecycle of the change project

Phase	Analysis	Conception	Implementation	Audits
Client Involvement	 Interviews Process Monitoring Observations Workshops Meetings Discussion of Improvement areas 	 Workshops Conceptual working sessions Progress meetings Development of solutions 	 Training on /off work floor Coaching Leadership feedback Performance reviews Implementation reviews 	 Interviews Review Workshops Shop floor reviews Feedback sessions
Positive Effect	 Agree the need Buy in Sensitive for change 	Shared targetsTailored solutionsLess objections	 Less roadblocks Accelerated implementation Benefit realization 	 Behavior change Sustained results Further improvements
	2 - 6 WEEKS	12 - 30 WEEKS	12 - 30 WEEKS	3 - 6 X 1 WEEK

ANALYSIS TOOLS TO EVALUATE POTENTIAL IN COST AND EFFICIENCY

Data / Facts **Employee Split** Contractor no. & Spend Break down analysis











Understanding the activities and removing the non added value work. Development of work to time relationship to define resource requirement

Value-added:
 All activities that contribute to the business goal.

Inherent to the job: Activities that do not directly serve the valueadded, but are necessary.

Non-value-added: Activities that do not have an added value to achieve the business objective.



Based on the economic situation all activities have to be challenged:

- Is the activity appropriate at all?
- Does content and effort match the value?
- Does the frequency of the activity correspond to the value?

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ADVANTAGES

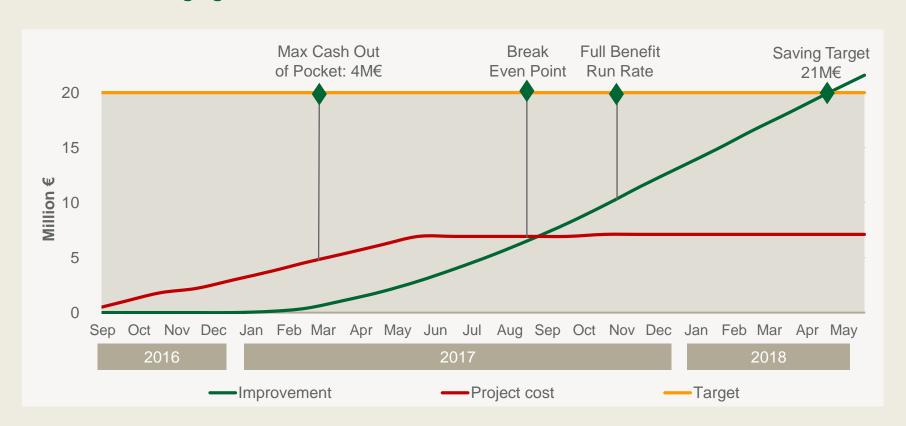
Reasons for engaging an implementation consultant are diverse

- We are seen as a reliable and inspiring partner in the oil/gas industry
- ◆ We bring **speed and certainty** of delivery
- ◆ We adapt our people to your needs and requirements
- ◆ We are the preferred management consultancy for many asset-intensive companies because they trust us, we have expertise (knowledge & skills) and experience
- We work with you and your workers together, every day
 and if required every night
- We have practical and proven management tools that became industry standards in Europe, Asia and Americas
- Our projects generate more benefits (savings/increased turn-over) than you invest in us



FINANCIAL BENEFITS

Besides qualitative benefits, a business case is often the base for consultant engagements



Real example from a Northern Europe company in Europe

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PROJECT EXAMPLE - REFINERY, NORTH EUROPE

Implementation of planning and scheduling significantly reduced costs

Refinery in Northern Europe asked T.A. Cook help implementing world-class planning and scheduling.

- Analysed need and specifics area by area
- Developed together with client most suitable solution
- Strong involvement of worker from beginning
- Implemented changes (org.-structure, responsibilities, way-ofworking) together with client coaches

Results

- ◆ Workforce fully accepted and supported required changes
- Contractor costs: significantly reduced due to better coordination and alignment with contractors
- Variable costs: reduced by adjusting org.-structure to changing business needs (no-one lost job)
- Work efficiency: increased due to clarifications in planning phase and reduced waiting time
- Material mgt.: Material available when/where needed, no waiting or ad-hoc movements



Benefits:

Contractor costs: -15%, 5.6m € Variable costs: -10%, 2.1m € Material mgt. costs: -11%, 0.7m €

Schedule adherence: +75%

PROJECT EXAMPLE - CHEMICAL PLANT, SOUTHERN GERMANY

Changing market demand requests for more flexibility and cost savings

Chemical plant in Germany asked T.A. Cook to help reducing costs and to become more competitive

- ◆ Analysed engineering, maintenance, SD and procurement activities
- Employees first approach: nobody lost their job
- Developed & implemented a combined production / maintenance / SD concept
- ◆ Focus on the important business aspects
- ◆ Implemented changes applying the train-the-trainer concept

Results

- Company grew to the world-wide market leader (sales volume)
- Implementation of sustainable changes, workforce and workers union was involved in every workshop
- ◆ Implementation of Total Productive Maintenance system (conditional, preventive) leading to increased machine utilisation, higher work efficiency, maintenance done by production personnel
- Variable costs: reduced by adjusting org.-structure to changing business needs (no-one lost job)



Benefits:

Variable costs: -14%

Production cycle time: -30%

Half-finished products: -30%, €€€

Maint. schedule adherence: +40%

PROJECT EXAMPLE - REFINERY, WESTERN EUROPE

Turnaround cost review incl. improvement of contractor management processes

Oil/gas giant asked to help significantly reducing their spending to stay competitive

- ◆ Analysed TA processes and created company specific best practise
- Defined process focus on planning, scheduling, front-end-loading and the related responsibilities & accountabilities

Results

- Contractor costs significantly reduced after reviewing fix price agreements
- ◆ Work efficiency of internal/external personnel significant increased
- Definition and strengthening of core competencies
- Insourcing / outsourcing
- Funnelling process (engineering) adjusted to the requirements
- Improved planning of work
- Schedule optimisation applying time/cost savings methods



Benefits:

TA period: -7 days (€€€)

Variable costs: -16% (11m€)

CAPEX costs: -5% (€10m€)

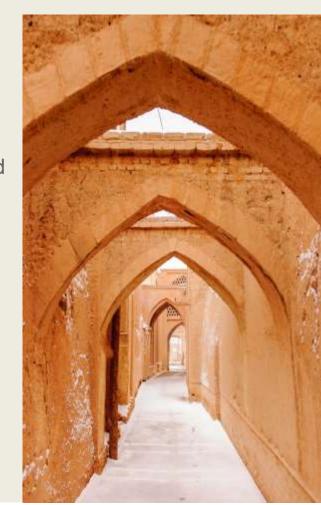
Fixed Cost: -12% (8m€)

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SUCCESS FACTORS

Our experience shows that the following topics are crucial in managing change and implementing Operational Excellence initiatives

- Senior management supports and commits to worked-out improvements
- ◆ Senior management buys-in and drives improvements
- ◆ Management communicates continuously and clearly to its personnel, showing commitment, preventing rumours, and providing transparency throughout the whole change management process
- Definition and communication of SMART objectives for the project
- Specific roles and responsibilities for all project personnel clearly defined
- Management needs to demonstrate and take ownership
- ◆ We accept no excuses



ENGAGING SUCCESSFULLY

Proper project set up is a key success factor

- It is your project Your participation is key to success
- ◆ The project is a team-effort Responsibilities are split throughout the team
- ◆ Communication among the team and to the management is open and honest. Constructive feedback is welcome. Confidentiality is guaranteed
- ◆ There are no areas that can't be improved thinking outside the box is allowed and welcome
- ◆ A positive and enthusiastic "We can do it" spirit should be present at all time. The focus should be problem solving not refusal
- We ensure that dates and milestones agreed with management are adhered to. If due dates are in danger, it is communicated early in advance



