CONSÓRCIO CONSTRUTOR RIO-BARRA
Getting to the launch on time

Consórcio Construtor Rio-Barra (CCRB) is a Consortium comprised of five construction companies whose objective is the execution of the expansion project associated with the Rio de Janeiro subway system. The Group is comprised of the following construction companies: Queiroz Galvão, Oderbretch, Cowan, Carioca and "The partnership with Renoir has provided conditions for to think the construction project in a different and more effective way"  
Lucio Silvestre Chruceski  
Contract Director

ANALYSIS
Renoir was brought in to support the management team in meeting its project schedule whilst containing/reducing operational costs to protect their margins. As a result of a three week analysis, the scope was defined as a ‘wall-to-wall’ intervention which included the following work streams: Production; Maintenance; Supply Chain Management; Planning; Engineering; Quality; and Human Resources. The implementation and execution of the program was conducted over a 38 week period.

With the objective of improving its internal processes and increasing its productivity CCRB engaged Renoir Consulting to positively impact the following work streams:

• Increase the productivity of its core resource - Manpower and Equipment
• Improve contract management efficiency and effectiveness
• Reduce indirect costs across all areas of the business
• Improve the interface and communication of support areas decreasing lost time.

PROJECT APPROACH
Renoir’s project approach encouraged the active participation and collaboration of all parties in the pursuit of new opportunities. This ensured the development of the optimum solutions and their subsequent implementation.

Management Control System (MCS) And Elements
Each individual element of the MCS was designed and developed in direct collaboration with the client's staff using diagnostic and brainstorming techniques. Critiques of the existing systems and processes were converted into opportunities and aligned with the business needs and key drivers.

As a result, the tools and routines that were installed guaranteed that

Key Results

| Manpower & Equipment productivity improvement: 13% |
| Supply chain backlog reduction of 33% |
| Concrete cycle time reduction: 17% |
| ROI during project: 1.4:1 |
| ROI annualized: 4.1:1 |

World Leaders in Sustainable Change
© Renoir Consulting Limited. This document remains the property of Renoir Consulting Limited and must not be copied or distributed in hardcopy or electronic form without the prior written approval of Renoir Consulting Limited.
adequate control was gained over its processes. In order to improve the decision making process, appropriate KPI’s and data management tools where developed and installed to provide the correct information, at the correct time, to the correct person.

**KEY DELIVERABLES**

During the course of the project the following deliverables were achieved:

- Implementation of an MCS with appropriate key performance indicators
- Well defined roles and responsibilities for all operational functions and support services
- Management training and rollout of all developed systems, processes and practices
- Transfer of knowledge, toolbox and systems with desired behavioral changes across the operational teams

The project’s key initiatives were qualified and quantified in collaboration with the defined management action teams (MATs). This ensured that the project’s key objectives were clearly understood, enabling a sense of ownership within the project team.

The CCRB & Renoir relationship, in line with internal initiatives, delivered the following benefits:

**Productivity (CR/CO)**

Manpower + Equipment - 13% Improvement - From 0,994 to 0,868

**Support Areas:**

Supply chain: Backlog > 20 days - Reduction of 33% - From 1115 to 751 items
- Lead-time - Reduction of 30% - From 28 to 19 days

HR: Backlog > 15 days - Reduction of 92% - From 64 to 5 processes
- Lead-time - Reduction of 57% - From 30 to 13 days

**Industrial:**

Cycle time reduction-Concrete - Reduction of 17% - From 230 Min to 190 Min
Number of truck mixers - Reduction of 21 % - From 28 to 22 truck mixers.

**Support Areas/Indirect Costs:**

Indirect Labor and General Expenses: Reduction of 19%

**Return on investment:**

ROI During Project: 1.5:1.0
ROI Annualized: 4.4:1.0

“Now we have what it takes to efficiently manage our construction project: adherence, reliability, productivity and detail of deviations. It’s the reality of any manager’s ambition!”

*Paulo Messa Martins Operations Manager*