



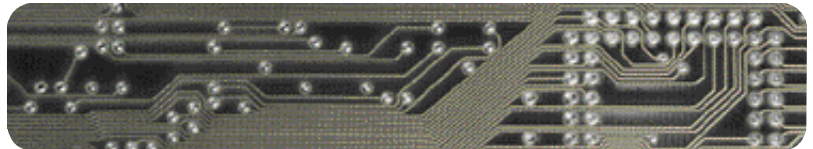
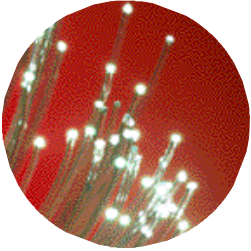
# Alcatel Transport Automation Systems

## THE CHALLENGE

- Alcatel TAS, a division of the French telecommunications giant, employs roughly 500 employees in two North American offices as well as some 30 personnel in major metropolitan areas around the globe. Roughly two thirds of these employees are engineers. Their product is a full software implementation that controls all aspects of intercity rail transportation; either manned trains or unmanned trains.
- The project was therefore focused on maximizing value by attacking the various root causes of rework throughout the project cycle. As it is predominantly an engineering operation, (in this case software engineering) value is added when an engineer is writing effective code. All activities that take away from this task needed to be identified and minimized (such as redesigns, rework, indirect administration, etc.).
- Our analysis of the key drivers of value indicated that the performance factors that needed to be managed were schedule attainment, quality and productivity. Customer defined schedule attainment needed to be the basis of all integrated planning, productivity needed to measure earned value against total paid hours.
- Quality needed to be measured to provide causal analysis tools to reduce rework.
- The project was completed over a seven-month period and involved all areas of the business including the project management office, technology, software engineering, procurement, hardware manufacturing and quality.

## THE RESULTS

- Annualized financial results are tracking at over \$2,000,000 generating a return roughly three times the cost of the initiative.
- In the "Direct" areas, earned value as a percentage of total direct time (i.e. taking out vacation, training, etc.) is tracking at a 30% increase over the base period.
- The new management system that was installed gives managers better visibility of specific deliverables. A Mini Milestone concept was introduced that decomposes 200-hour work packages into planning sections of less than 20 hours. This has led to improvements in flow through and output that is reducing backlog in the engineering departments to the tune of over 8,000 hours a month, effectively adding the work of over 60 extra engineers without adding any additional resources.
- As the backlog is being consumed, the company is headed for a record year in booked sales. The growth will more than occupy the current headcount and the company will be able to capitalize on that growth by increasing the leverage of departmental managers.
- In the indirect areas, the marketing department is revising and standardizing the process of estimation, the Project Management Office (PMO), finance and procurement departments have established new reporting procedures to the functional departments that they support.



## THE TESTIMONIAL

Mr. Walter Friesen, General Manager : "Our continuing program in this regard is progressing as we apply it to the rest of areas in the company. Maintenance of the completed implementations has been successful, as a result of an Alcatel employee working with your people during the project." The ongoing training to this person, which you will be providing over the next year, will be very instrumental in the long term maintenance of the initiated efficiency improvements.

The project has been carried out in a very professional and collaborative manner. The resulting non-threatening environment enabled a full acceptance and even enthusiasm by the employees. Please pass my compliments to the Carpédia staff for achieving this atmosphere of acceptance and collaboration.

The work effectiveness and manager awareness, in the work area activities has been substantially increased as well as managers now understanding the importance of actively managing the work."

**Carpédia Group International** is a management firm uniquely focused on helping leading companies implement sustainable improvements in revenue growth, productivity, and asset utilization.

