

Assessment case study Toy Manufacturer

	ACTUAL*
Output increase at existing speed	Increase 230,000 units pa
Health and Safety	Meets HSE requirements
Non-value add activities	Reduce by 25%
Changeover reduction	Reduce by 50%
Planning Efficiency Savings	370,000 Euros
Capital Project Cost	Budget created
*Figure = identified improvement	

The Scenario

Our Client manufactures some of the most recognisable board games in the world. As such, they place a major emphasis on their responsiveness to their customer base. Working within short lead times to react to market demands, the unpredictable nature of output from the factory was a cause of concern. WBS Group were tasked with reviewing the current state, understanding the reasons for the productivity issues and recommending potential improvements.

The Work

In order to gain a thorough understanding of the business issues, WBS Group performed an intense Company Assessment, focussing on all areas of the business that impacted on the ability of general assembly area to meet production demands. In effect this meant a complete supply chain review from forecast through to shipment of product.

The Assessment Findings

Several areas were found to affect productivity and were highlighted by the assessment. These included:

- No focus on reduction of changeover times despite the fact that the business was experiencing increasing numbers of changeovers
- Multiple handling of components with no value being added
- Inaccurate data recording leading to difficulties in problem resolution
- Overall product awareness poor for some operators
- Inconsistent methods of operating production lines resulting in confusion in completing production runs
- Planning at family product level as opposed to SKU level
- Conflicting measures and targets on functions and departments



The Recommendations

At the Assessment presentation stage, methods to significantly reduce changeover times, improve line output and reduce component handling were highlighted. The potential business benefits of these recommendations were calculated either in potential extra product throughput or reduced hours required. Further recommendations were made on best practice for data recording, line supervision and on planning methods (and the breakdown of SKUs).

RECOMMENDATIONS	BENEFITS
Reduction of Assembly Line Changeovers	Increased availability of Assembly Line of 142mins per week = 249,000 extra parts per annum
Reduction of Assembly Line Changeovers	Increase in Output of Assembly Lines Increase in output of over 10% of existing output = 607,000 extra parts per annum. Elimination of 1 existing assembly line
Introduction of Differing Demand Fulfilment Models	Reduction in changeovers = 468,000 extra part finished components per month in upstream activities
Improved Displays of Line Output & Status	Reduces errors in cycle counts and provides early warning of forthcoming changeover.
High Level Redesign of Assembly area	Creation of material staging areas adjacent to point of use thus reducing product handling & distance travelled. Elimination of potential Health & Safety issues in working areas

The WBS Group were further commissioned to provide a detailed redesign of the factory layout.

