## Just-in-time ('jit')

**Technology** 



LE was a high risk project with BA's image being at stake till the completion of LE; hence quality was measured in terms of safety. Safety was the highest concern throughout the operations. Projections of 2. 2 million customers in the first year of operation prompted confirmation to quality/safety.

LE was to be launched by the turn of the millennium and BA's project commitment in terms of time and image was subject to its safe and timely completion. Any delay in operations would have a knock-on effect on project cost (initial estimate 11 million rose to 75 million), making operation speed an important objective to the project.

LE was moderately flexible in its operations (changes in design and delay in operations). However, the project was not well equipped against contingencies as there was no plan B (alternate plan). Scope is a boundary-setting exercise that sets the framework within which tasks need to be preformed. LE had a limited scope (wheel design to suit the environment, wheel completion by millennium) within which multiple complex tasks were to be performed. Responsibilities of LE's contractors/suppliers were defined and unambiguous.

Example: Contractors used various operational techniques like Just-In-Time ('JIT') and Materials Requirements Planning ("MRP') to perform their roles without ambiguity within the set project scope. Strategy is the most feasible alternative of handling complex tasks to achieve the defined objectives. After assessing the present and anticipating the future, LE opted for specialisation of tasks by allocating the project responsibility, design and technical support

to Mace Ltd and other specialists for attaining optimum utilisation of resources.

The project strategy consists of phases and milestones set in each phase of project LE. Design phase Designing the wheel to withstand high winds and dampen any natural-frequency resonance by use of technology and engineering was allocated to European specialists to enable LE to reap benefits of specialisation and economies of scale (figure 4). JIT system was implemented to signal the appropriate specifications of materials at the right time to facilitate organising and assembly of wheel parts on site most effectively.

Testing phase The testing phase examines the quality and dependability of the project. LE was test-run successfully for 490 hours, but faced a technical challenge in the last 10 hours of its safety test-run. LE adopted the strategy of involving the media to gain their support in prioritising quality and safety over time as their objective. Delivery Phase LE was completed safely and successfully and launched in February 2000 though not as per the predefined strategy but was quite close to the original plan.