

## **Project Implementation**

With the re evaluation of company structure and personnel, you as MD are now able to plan in detail the changes necessary at Burke Engineering. Except for the production director, departmental heads have now been selected. Senior management is now ready to begin implementing equipment introduction, staffing and training programmes. The main investors are keen to see the new valve production as soon as possible, and are not prepared to allow the total reorganisation of the plant to take more than 18 months.

In the short term they are prepared to invest additional funds of up to €500,000 to help the transition. The interest is 15 per cent per annum, substantially below the cost of bank borrowing. You must consider how each of the various areas of necessary investment are going to be handled, to achieve the most rapid transition from Burke's broad reliance in a number of areas, towards concentration on highly sophisticated and capital intensive valve manufacture.

You have decided to lease a large part of the current Burke Engineering site once the company has planning permission for a retail park. This would generate substantial income, which could completely reequip the factory with the latest computer controlled cutting devices. Of the current buildings, only the foundry would be retained. It would be increased in size to maintain the raw material stocks for production. Adjacent to it would be built a new tool and machine room. This new block would contain all production, administration and design, currently split between the main block and production.

The machine room would link with all three areas via a conveyor belt system, which would carry product through the production area to the warehouse. The warehouse would be reduced in size and redesigned with racking systems, allowing a much greater density of storage. A reduced warehouse staff could operate the system with the appropriate stock control technology and fork lift trucks, to move stock into and out of the storage area. As the company will be able to subcontract the tooling in the short term, it will be crucial to get the machine room into operation as soon as possible.

The administration block would be reorganised to centralise management activities on the upper floor, with offices surrounding an open plan resource centre with accounts and other support services. On the ground floor a central meeting hall and canteen area would be created, with meeting rooms and a large display area for companies products. This would be used for staff training, company meetings and for potential clients.

You have prepared a briefing document about the implementation of the plan, with a detailed list of all the actions that will need to be taken. It is obvious that some actions will have to take place before others for example plans have to be drawn up before planning permission can be granted. Some other items can be carried out at the same time. You have not listed these but they are fairly self evident.

When you investigate each particular issue you realise that there are a number of complexities. Each implementation phase was subject to considerable variation. Costs could increase; the amount of time could also be either greater or less than projected. Phases could be speeded up with greater investment. The briefing document gives you the following information which is listed below. Each item has the time in days associated with the action, the likely variation in time in days, the cost in thousands of currency, the likely potential increase in cost (in thousands of currency), Finally you note that in many cases you are able to decrease the time of the item by increasing investment expenditure.

Here is an example of a single factor:

Training on new cutting equipment (7,1,5,1,2). This means that the forecast length of training would be 7 days; the likely variation is 1 day; the likely cost is €5,000; the likely variation is 1,000, and the costs of reducing the training time by 20 per cent is 2,000. You have drawn up this detailed activity list, and now want to inform the various members of staff as to exactly when various items are likely to occur and to prepare a cash flow forecast for the investors.

#### Project stage

Training on new cutting equipment (7,1,5,1,2)  
Evaluation of new cutting equipment (15,0,0,0,0)  
Delivery of new cutting equipment (42,7,33,5,5)  
Cabling for integrated production management (21,9,15,2,5)  
Installation and testing of new cutting equipment (31,11,10,1,0)  
Site clearance (25,15,120,20,26)  
Planning permission for new factory developments (45,25,0,0,0)  
Planning permission for retail development (85,25,0,0,0)  
Choice of commercial estate agents (15,2,0,0,0)  
Agreement with commercial estate agents (10,2,0,0,0)  
Creation of new factory plans (40,5,25,3,5)  
Training on computer aided design (20,5,15,0,2)  
Finalisation of sales contracts for retail park (60,30,0,0,0, See Note 1)  
Refurbishment of upper floor of admin block (42,15,38,5,7)  
Refurbishment of lower floor of admin block (35,8,55,10,15)  
New minicomputer evaluation (20,3,0,0,0)  
Delivery of new minicomputer (45,3,150,25,0)  
Installation and testing of new minicomputer (20,5,5,1,1)  
Development of new management information system (45,15,5,1,1)  
Testing of new management information system (30,5,0,0,0)  
Selection of remaining personnel for each department (15,0,0,0,0)  
New road access to site (65,25,85,15,15)  
Installation, testing of warehouse stock control system (45,5,15,3,3)  
Identification of customer requirements for new valves (20,20,0,0,1)  
Introduction of terminals into administration block (10,2,10,2,2)  
Training of administration section in new software (5,3,5,2,2)  
Completion of the despatch of outstanding orders (40,20,0,0,5, Note 3)  
Auction of old stock as scrap (2,1,0,0,5, Note 2)  
Advertise details of old stock auction (15,0,0,0,0)  
Site levelling (25,5,120,25,15)  
Evaluation of research databases (45,15,10,2,0)  
Concrete foundations (10,2,25,5,5)  
Steel framework (tool room) (20,5,25,3,5)  
Steel framework (warehouse) (25,5,30,3,5)  
Steel framework (foundry extension) (15,3,15,3,3)  
Production trials (20,15,65,35,10)  
Conveyor belt evaluation (5,1,0,0,0)  
Conveyor belt delivery (20,3,55,5,0)  
Conveyor belt installation and testing (15,5,20,5,5)  
Production of new sales literature (20,0,8,0,1)  
New warehouse stock control system evaluation (15,5,0,0,0)  
Training of sales representatives (25,5,10,0,2)

Training of technical support engineers (25,5,10,0,2)  
 Testing of new product range in the market (35,5,10,5,5)  
 New racking installed in warehouse (5,1,15,1,1)  
 Completion of exterior (toolroom) (25,5,30,5,2)  
 Completion of exterior (warehouse) (27,5,25,3,1)  
 Training of warehouse staff in new stock control system (15,0,2,0,1)  
 Safety training for staff (5,0,0,0,0)  
 Completion of exterior (foundry extension) (25,5,18,2,1)  
 New warehouse stock control system delivery (15,2,8,1,1)  
 Security system (warehouse) installation (2,0,4,0,0)  
 Perimeter fence (site) (20,10,15,2,2)  
 Security system (administration) installation (2,0,3,0,0)  
 Security system (foundry) installation (2,0,2,0,0)  
 Security system (toolroom, machine shop) (2,0,2,0,0)  
 Redundancy of existing staff and management (20,5,250,50,0)  
 Evaluation of fork lift trucks (5,0,0,0,0)  
 Delivery of fork lift trucks (25,10,45,3,0)  
 Training of staff on fork lift trucks (10,2,2,0,0)  
 Integration of computer aided design with data processing system (20,20,25,15,3)  
 Installation of back up generator (3,0,40,5,0)  
 Issuing of new policy documents (2,0,0,0,0)  
 Meetings with staff on plans (3,0,0,0,0)  
 Training of staff on information system (10,3,6,2,3)  
 Development of detailed marketing plan (10,2,0,0,0)  
 Production of new promotional material (20,5,30,2,3)  
 Advertisements for new staff (20,30,15,5,3)  
 Recruitment process (15,20,5,1,1)

## Notes

1. The likely positive cash flow from the sale of the retail park units is calculated to be just over €3 million. The minimum revenue received in the first 90 days is expected to be 500,000 with a maximum just below €1 million. The remainder of the cash inflow is expected to follow on a monthly minimum and maximum in € 000's . The minimum expectation is 50, 50, 50, 50, 100, 100, 100, 100, 100, 120, 200, 250, 300, 300, 300, 300, 300, 300. The maximum is expected to follow the monthly pattern of 150, 150, 100, 100, 150, 200, 200, 250, 250, 300, 300, 300.

2. The likely maximum revenue for the old stock and components is €850,000; the minimum is €250,000.

3. The completion and despatch of the outstanding orders is likely to generate around €5 million, with the money coming in over the 4 months following shipment in fairly equal amounts.

You estimate that the fixed costs for the remaining staff that are left while the factory is being restructured, is around €3000 a day.

## Action

How should J Franklin organise the complex range of activities that will be involved in implementing the business plan? Which actions must be more closely monitored than others? In which actions should you as J Franklin be prepared to invest extra funds to reduce the overall completion time of the project? What is the overall impact on month by month funding requirements?