



### Hosiden Besson Limited

Hosiden Besson Limited, a subsidiary of the Japanese Hosiden Group, is a manufacturing company based in the south-east of England. The company designs and manufactures acoustics, plastics and electronics for the telecommunications market. The group specializes in the design and manufacture of components for the IT industry and has annual sales of over £600m.

#### Overview of Case

After a period of decline in the late 1980s, Hosiden Besson Limited began to concentrate on improving marketing and manufacturing processes. Complementary to these objectives was the plan to encourage ideas and involvement at all levels of the organization. In 1992 Hosiden Besson introduced CI, which was managed by a Steering Committee.

In 1994 two Teaching Company Associates were employed to manage the development of CI on a fulltime basis. Initial projects focused on the development of team building and problem solving.

Following this, the initiative was rolled out to encourage involvement at an individual level (Little Improvements From Everyone — LIFE). To date this has proved very successful in breaking down communication barriers and encouraging initiative.

The company has reaped both tangible and intangible benefits from CI and is currently in the process of creating a greater link between CI and the company strategy in order to meet overall business objectives.

#### Background

The group has 12 subsidiaries, nine of which are in south-east Asia, two in Europe and one in the USA. Hosiden Besson Limited is, however, the only manufacturing subsidiary outside south-east Asia, since the German and US operations are sales-based subsidiaries.

Hosiden Besson Limited has core expertise in three main areas: acoustics, injection moulding and PCB mounting and assembly. It manufactures a variety of products, ranging from consumer electronics components to complex telecommunications devices. The company employs around 550 people spread over four sites on the south coast: the main site at Hove, East Sussex (which encompasses two factories); two nearby in Portslade, East Sussex; and the fourth at Ryde, Isle of Wight. The Head Office, containing Personnel, Sales, Marketing and R&D functions, is located at Hove. In 1996 sales had reached approximately £32m.

#### Historical Development

The company was founded in 1957 by A.P. Besson to produce a miniature hearing aid but by the 1970s, after going through a number of ownership changes, the company had become a subsidiary of Crystalate Electronics plc. To optimize resources, in the 1980s Crystalate



merged two other companies with Besson. The logic behind the merger was that each of these companies had BritishTelecom as their main customer.

### Changing Competitive Environment

#### *Key points*

Hosiden Besson experienced a decline in competitive position in the late 1980s due to the following factors:

- slow reaction to changes in technology and the market place;
- low levels of investment in the company;
- internal inefficiencies such as poor delivery and quality performance;
- competition from south-east Asia.

Up to the late 1980s AP Besson had a high market share on sales of acoustic components to BT. It was a profitable business, operating within a stable environment with good margins. However, as BT started to become more cost- and quality-oriented, Besson was faced with a number of challenges.

As Besson's competitive position began to decline, internal inefficiencies became increasingly obvious, reflected in poor delivery and quality performance in the late 1980s. Further, the company's inability to respond quickly to the new challenges in the marketplace was compounded by management and financial problems within the parent company. Consequently, levels of investment in Besson were very low. From 1986 onwards, the company started to make a loss and its survival began to look very uncertain.

### Take-over by the Hosiden Group

By 1990 Crystalate was unable to continue to support the losses that Besson was making and, in March of that year, sold the company to the Hosiden Corporation. Hosiden, in common with many Japanese-owned companies at the time, wanted a European manufacturing base to guard against expected high tariff barriers on Japanese imports to the EU. Unlike the majority of Japanese companies who established green-field sites, Hosiden decided to invest in an existing UK operation. It was felt that they lacked the necessary management resources to start up and run a green-field site. In addition, the investment in an existing business would enable the group to build upon Besson's range of technical skills and home-grown sales and marketing expertise.

The company experienced the following changes after take over in 1990:

- reduction in costs;
- investment in technology;
- fostering relationships with new customers in the UK and overseas;
- development of existing products and the introduction of a new product development process;
- expansion to the two main sites and acquisition of a new site;
- flattening of the organizational structure.



Apart from initial restructuring and redundancies, the workforce, who had been expecting a major transformation, saw little immediate change. Instead, the turnaround was a more gradual process. On the operations side, the Hosiden Group took a long-term approach, writing off losses of around £450,000 and giving the management the autonomy and time to demonstrate their capabilities. As the company started to reduce costs and become fitter and leaner, money was made available for investment, which allowed the company to take on new technologies such as surface mount technology and injection moulding.

The most significant changes, however, were made on the product and marketing front, instigated by the new Japanese president. He devoted time and effort to fostering new relationships as part of a new customer and product development strategy. There were four main aims of this strategy:

1. Reduce Hosiden Besson Limited's dependence on one large customer and a large number of small customers. Instead, the aim was to develop business with a greater number of larger companies and a lesser number of smaller companies.
2. Target large original equipment manufacturers as potential customers, develop long-term relationships with them and then gradually expand the range of products supplied. The Hosiden name allowed privileged access to these major new customers that would not have been possible before the take-over.
3. A new product mix was introduced, based on the concept of product families. This involved the introduction of two or three entirely new product categories. Product managers were designated to look after each product category;
4. A new product development process was introduced.

Remote control devices and hand-free speakers were two of the first new products developed. The hand-free speaker business, supplying Motorola and Nokia, proved to be particularly successful, expanding rapidly from one to three assembly lines.

The company began to tap into new sectors of the electronics industry and identify new product areas within these sectors. By the mid-1990s, Hosiden Besson Limited's main markets were identified as:

- telecommunications;
- mobile communications;
- TV, audio and video;
- fire prevention and security

It took some time for these changes to filter through. As the new business was being developed, the pattern of declining sales and profit continued in the first year following the take-over, reaching a low point in the middle of 1991. As an increasing number of new products reached production, the company started to grow. In 1993 profits moved back into the black and in the following year the first significant profits were achieved.

Telecommunication (mobile) and consumer electronics products, which were not in the product mix in 1991, accounted for sixty-nine percent of turnover by 1994. Further, an increasing proportion of the new business was developed with overseas customers, such that by 1995, around forty percent of business went outside the UK.

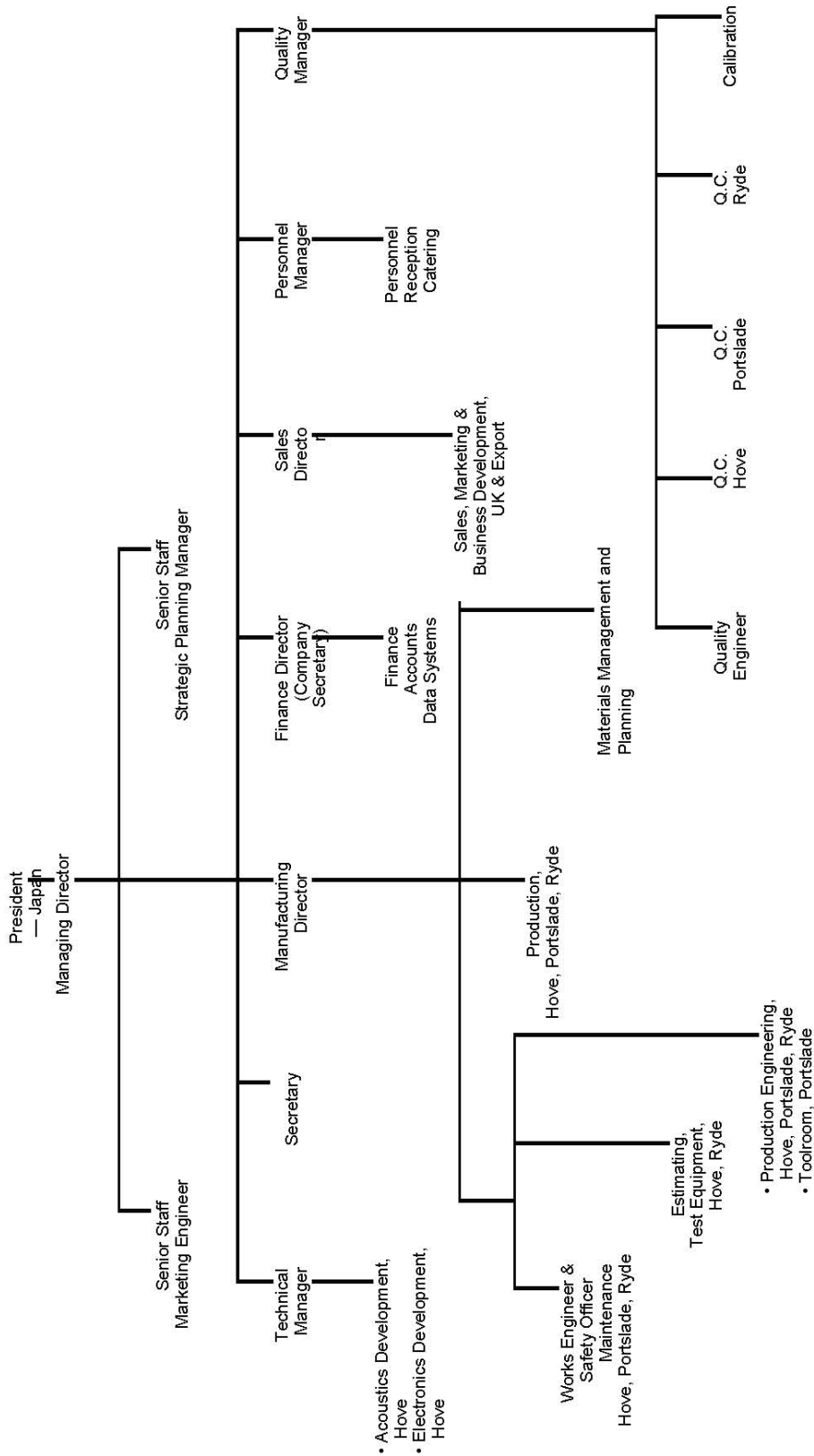
To support the business development activities, from 1992 onwards the company started expanding its manufacturing facilities, with extensions to the Ryde and Hove factories and the acquisition of a new site about a quarter of a mile away from the existing Portslade site. In May 1995, the hand-free speaker production and Siemens car kits were transferred to this new site. At the same time, the size of the workforce grew from around 350 in 1992 to 550 by



mid-1996.

### **Organizational Structure**

The company had a traditional hierarchical structure. Problems were reported to managers by staff, and management then took decisions and delegated accordingly. As a result the people at the bottom did not have confidence either in management decisions or their own ability to solve problems. In 1989 changes were made in the production system (from a batch system to flow-lines.) The new production layouts proved to be a success and flow-lines were subsequently introduced in other areas. However, no single production method is applied throughout the factory; instead the organization of production tends to vary according to what is most appropriate for a particular process or product.



**Figure 1 Organizational chart — management structure**



### Introduction of CI

#### *Key points*

- Establishment of a Steering Committee.
- Membership of the CIRCA CI Network.

### Initial Interest in CI

During 1992, both Richard Edwards (managing director) and Jeremy Evans (manufacturing director) became increasingly aware of the concept of CI and the potential role it could play at Hosiden Besson Limited. In September 1992 the production department were very busy with a lot of overdue orders. The company were unable to recruit fast enough to get enough shop floor staff so they hit upon the novel idea of getting office staff to work (unpaid) overtime on the shop floor every evening for a week, to increase production output. The MD had the job of stamping an item code on the area of an ear piece which would be covered with a pad in a later production stage. He asked the supervisor why this apparently unnecessary job had to be done. She said, 'Because the drawing calls for it!' Next day, Edwards investigated and found that the original reason for including the stamping operation was lost in the mists of time. As a result the MD became convinced that there were thousands of opportunities on the shop floor, the cumulative impact of which would be significant, and that they needed to mobilize all their staff to find those opportunities.

Following a five-minute consultation in October, both the MD and manufacturing director agreed that CI was the ideal vehicle to support the development of the business. By January 1993, Evans had set up a steering group, whose brief was to investigate CI further and determine how it could best be implemented at Hosiden Besson Limited. The steering committee consisted of around ten people in engineering or quality assurance roles across the sites, most of whom reported directly to Evans. Evans selected people from these areas on the basis that they were likely to have been exposed to the need for change and, therefore, were more likely to be receptive to the concept of CI. Membership of the CIRCA CI Network also proved useful in enhancing understanding of CI.

The steering committee decided that the first major step in the implementation of CI would be to develop a training package through which to educate the workforce. Evans started to develop this but, due to other commitments, was unable to devote any significant time. It soon became apparent that, if they were to make any real progress, more resources needed to be devoted to ensure that it did not run out of steam. Ideally, someone needed to be managing the CI implementation on a full-time basis. Following discussion with the researchers running the CI network, the DTI's Teaching Company Scheme was suggested as a possible solution. Further work on implementing CI was then put on hold whilst attention focused on the preparation and submission of a bid for two Teaching Company Associates.

### Preparing the Ground – Cultural Change

Whilst the launch of the CI programme itself was put on hold, an external audit conducted by researchers from a local university highlighted significant obstacles to the introduction of CI within the company, the majority of which were cultural. In particular, the audit revealed a need to reduce the 'us' and 'them' barriers between managers and operational staff. Feelings



of being undervalued were widespread amongst the workforce. People felt that no-one really listened to them and they received little recognition for their efforts. The 'us' and 'them' culture was reinforced by lack of management visibility.

Although the organizational structure had already been flattened, the hierarchical culture persisted in other ways. For example, communication channels were predominantly top-down, with most information disseminated to employees through supervisors. The introduction of a monthly, written team brief to disseminate information about strategy and company performance to employees through the supervisors had done little to improve communication. Some employees simply did not understand the information, whilst others paid little attention.

There were few mechanisms to promote lateral communication and employees had little insight into the operation of the other sites within Hosiden Besson Limited. The few existing opportunities for bottom up communication were rarely used. For example, a Company Council was held every month/six weeks, attended by a representative from each area of the company who would put forward items or questions from the colleagues in their area and feedback responses. However, many felt that it was not worth putting forward questions as they received little feedback.

A number of changes were introduced to help overcome these barriers and smooth the future path of CI:

- A series of inter-site visits for operational staff so that they could see what went on in other sites and meet people from other sites.
- As part of the 'Training School' run for new recruits to help develop the necessary technical skills, a new management slot was introduced where senior managers would tell them about the company. This also provided an opportunity for the trainees to get to know the managers.
- The briefing system was changed from a cascade approach, through supervisors, to a direct briefing from the managing director and other directors on a quarterly basis.

These changes made some progress in improving communication and the visibility of senior managers, but for many employees the change was relatively minor.

The briefing sessions helped people to feel more involved and valued, but the informal grapevine often proved to be a more effective way of finding out about what was happening.

Further, although the visibility of the managing director increased, there was still little contact with other senior managers. Any further progress was curtailed when all the changes except the briefings were stopped at the end of 1993. Production had become too busy for the inter-site visits and the Training School was disbanded in favour of on-the-job training.

## Re-initializing CI

### *Key points for developing CI at Hosiden Besson*

- Recruitment of Teaching Company Associates to manage CI.
- Development of a company strategy document to strengthen links between CI and overall company goals.



- Between August and September 1994 all staff were given training which included awareness sessions to improve team working and to introduce the use of problem-solving tools.
- Five pilot projects, which tackled specific problems, were launched across the different sites and helped to get the commitment and involvement of supervisors.

### Teaching Company Scheme

The application to the Teaching Company Scheme was successful and in March 1994 two Teaching Company Associates joined the company as 'CI engineers'. Over the next two years, their task was to guide, facilitate and support the introduction of CI. Instead of the previous steering committee to co-ordinate the implementation of CI, the CI engineers reported directly to the manufacturing director and attended the monthly Quality Assurance senior management meeting to update the management team on progress<sup>1</sup>. Support and guidance were also provided through regular meetings with the academic Teaching Company Scheme supervisors to facilitate technology transfer from the university to the company.

Initially, the CI engineers spent some time familiarizing themselves with both CI and the operation of the company. The latter involved following a number of products through the organization, examining information flows across the whole process, from sales enquiry to customer despatch. In the course of informal discussions with managers and other key personnel, they became increasingly aware of a lack of consensus over the strategy and future direction of the company. The strategic direction of the company was represented by 'Target 35', a goal of increasing turnover to £35m by the end of 1996. This target was to be achieved through three objectives:

- improving quality;
- improving customer satisfaction;
- increasing sales.

However, this broad strategy was not translated into any specific means for achieving the desired growth. As one of the CI engineers commented, 'Target 35 was a medium-term target, rather than a real strategy'.

### Staff Questionnaire

In order to clarify further the divergent picture that seemed to be emerging, the CI engineers conducted a confidential questionnaire survey of all senior managers (around 30 in all), to establish their views on the company's vision, strategy, values and capabilities, and how they saw CI fitting into this. Analysis of the questionnaire responses confirmed a lack of consensus and varying interpretations of the 'strategy'. The circulation of the results caused a degree of surprise amongst the managers, particularly the directors. Consequently, the management team decided to address the issue of strategy.

<sup>1</sup> Senior management meetings were held every Monday afternoon, with four rotating subject areas: Quality Assurance, Production, Sales and NPD. In addition to the core of the four directors and three functional heads, other key personnel attend according to the subject of the meeting



### Developing a Strategy and the Strategic Context for CI

In June 1994, the four company directors, three senior managers and the CI engineers participated in a one-day strategy session, facilitated by an external consultant. The session addressed the process of strategy formulation and started to explore a number of critical issues within this process.

Although the managers recognized that it would take time to develop the detailed strategy, they felt that a more pressing task was to develop a formal statement of the strategic context for CI to support the implementation process and provide a focus. This reflected the agreement that, whatever the strategy, CI would play a key role in its achievement.

Following the session, a CI strategy document was produced, linking CI to the company goal of achieving sustained profitable growth. This growth was to be achieved through two main routes: first, through the introduction of new products, technologies and processes, and, second, through the continual improvement of existing products, technologies and processes. The focus for CI was to be on quality, service and delivery. The strategic role of CI was also summarized and communicated through a CI policy statement:

It is the company's policy to continually improve all its products and processes to enhance business performance and create sustained profitable growth. The company recognises that it requires the creative involvement of all staff to implement this policy and has established a set of business processes to enable staff in all parts of the company to participate in the improvement process. The company will enable this activity by providing appropriate resources.

### CI Awareness

The first main step in rolling out CI was to educate all employees in the concept of CI and its role within Hosiden Besson Limited. This was achieved through a series of awareness sessions, consisting of a forty-five minute presentation by the CI engineers and a short exercise to demonstrate the benefits of team working. The presentations highlighted what CI would mean for employees, gave an overview of the implementation plan and launched the forthcoming pilots of CI teams. At the end of each session, time was made available for feedback or questions from the participants.

The feedback from these sessions was fairly mixed. Although most people agreed with the concepts behind CI, there was some scepticism as to whether or not it could be made to work at Hosiden Besson Limited. Some people questioned the level of commitment from senior managers and there was some feeling that, 'We've not been listened to in the past, so how will it be different this time?'

The bulk of the sessions were run over August and September 1994, in groups of around twenty employees, each comprising a mix of staff from different levels and functional areas. The majority of the workforce attended, although the subsequent growth in the size of the workforce suggested a potential need to carry out further sessions in the future. An



introduction to CI was, however, incorporated into the induction training for new recruits<sup>2</sup>.

The importance of winning over the supervisors was seen as a critical factor in minimizing resistance to CI. Consequently, a meeting was held with supervisors at the end of October, to update them on progress, explain their role in the CI activity and to support employees, for example, if they came to a supervisor with an idea or if they need to be released to attend group meetings. The attitudes and reaction of supervisors was largely positive, with less opposition than had been expected.

### CI Process and Tools

In parallel to running the awareness sessions, the CI engineers started developing the process and tools to support the vehicles that were to be introduced, including a CI Process Flowchart, a Process Improvement/Problem Solving (PIPS) cycle with a user guide, CI procedures and a CI Tool Book. Although the initial CI vehicle was to be formal problem-solving groups, known as CI teams, the process and tools were designed in such a way as to support any CI mechanism irrespective of whether or not it was a team activity, an individual initiative or a one-off meeting to co-ordinate an activity.

In addition, the CI Process Flowchart was designed to link CI activities and the Corrective and Preventative Action (CPA) system. This system dealt with issues raised by quality 'incidents', for example arising from customer complaints, audit failures, supplier failures, customer returns or production yield problems. Linking the two systems would allow CI activity to resolve CPA problems if appropriate (i.e. PIPS methodology would be used to determine and implement corrective action).

Before the introduction of the pilot CI teams, some of the ideas behind this material were 'tested' in the Surface Mount Technology (SMT) improvement group. This was an improvement group that had been set up in 1993 to tackle efficiency problems in SMT processes — and succeeded in raising efficiency from 30% to around 90% by the end of 1994, and achieving tangible savings of £10,000 per month.

### Piloting the Process — CI Teams

The CI engineers put together a list of potential projects for the first CI pilots, drawing on a variety of sources, ranging from ideas suggested by employees in the awareness sessions to problems which had been identified by managers. These were prioritized on the basis of a number of criteria, namely:

- visibility;
- impact;
- quick result;
- spread (at least one pilot on each of the sites).

---

<sup>2</sup> Whole system of induction and training for shop-floor was reviewed by one of the new CI teams.



Using these criteria, five initial pilots were selected, each to be facilitated by one of the CI engineers. The team members were chosen and one member of each team was selected as a team leader, with responsibility for managing the team and ensuring that it achieved its objectives. The team leaders were also required to keep a project folder with notes (decisions and actions) from all the meetings. To help minimize potential problems in the management of the teams, those selected as team leaders were generally in supervisory positions, since these were likely to already have some experience in the running of meetings and were, hopefully, more confident in dealing with people. However, as other employees became more experienced in group working and the CI process, the selection of team leaders was widened for subsequent projects. The CI engineers held briefing meetings for the team leaders to explain their role and help instil confidence. The team leaders were given the opportunity to discuss any concerns about their role or the team as a whole. Further meetings were held periodically to discuss any problems which arose.

At the start of each pilot project, team members were given a CI folder and pens (intended as a one-off, for the first time each person participates in a CI team). Each pilot project was allocated an initial budget of £100, to be spent at the team's discretion, although further funding could be made available subject to approval. Records of expenditure were kept by team leaders.

At the initial team meeting, the CI engineers (facilitators) gave an overview of the range of tools, but left out the detailed introduction to the point at which the tool was to be used.

Alternative approaches to tools training were considered but time pressures led to this approach being chosen as opposed to having a more detailed tools training session at the outset. It was also felt that this more gradual introduction might be more effective than 'blinding' people with a detailed tool training session at the start of the project; instead they would learn how to use the tools more gradually as they reached each successive stage in the PIPS cycle (although this proved not to be the case).

The pilots started in November 1994 and most reached their conclusion toward the end of May 1995 and all had achieved significant tangible and intangible benefits. At the end of each project the team members received a CI lapel badge, to mark their first participation and a certificate (ongoing for each project). These were presented at buffet lunch attended by at least one of the directors. At the end of the project the folder was closed and kept in the drawing office for future reference. The outcomes recorded for each project were also collected by the CI engineers in order to monitor the cumulative benefits of CI activities.

### Key Outcomes of Pilot Projects

- Feedback on the learning points from pilot studies were presented.
- Staff were trained as facilitators (18 facilitators have been trained to date).
- New projects were set up and teams were formed to carry them out (47 to date).
- A newsletter and other forms of communication were introduced to support the CI system.



**Table 1 Pilot CI teams**

<b>Team/area</b>	<b>Problem</b>	<b>Solutions</b>	<b>Outcome</b>
Invoice queries	Supplier payments delayed due to invoice queries and invoices sent for approval being held too long	Changed the level of freight charge which can be authorized in Accounts	Average turnaround of invoices for purchasing authorization within the five-day target set Saving of around two work-days (£150) per month Less friction between Purchasing & Accounts
24A unit	Low efficiency levels on the unit (running at around thirty percent)	Changed the method of soldering PCB bracket assembly Removed two stages of inspection	Improved quality Reduced throughput time by five minutes per unit (12.5 hours per run)
Audible warning devices packing	Inefficient and costly packing on line	Overtake box holds 50 devices instead of 46 Labelling boxes later in the process Kit storage relocated Equipment re-layouts	Easier to count boxes and fewer boxes needed More responsive to customer needs Saving of £48 per month in material and transaction costs, two days per month handling time Improved working conditions and efficiency
Ryde stores	Problems in the movement of stock shortages from stores to shop floor once they had arrived at the company	Introduced a system for getting urgent production items from loading bays through stores, to production	Average shortage clearance time reduced to 19 minutes Heightened awareness throughout the site of urgent items Expediting resources better targeted
Remote control units (Portslade)	Problem with rate of remote control rejects	Use of measurement to identify causes of problem	Reject rate reduced by 90% (exceeding target of 50% reduction)



### Learning from the Pilot Projects

The CI engineers noted some early teething problems in the operation of the CI teams. There were some initial complaints that people were too busy to attend meetings.

Following discussions with the senior management team, it was agreed to allow team to designate a regular weekly lunchtime slot for the meetings, with a buffet provided by the company. In practice, however, there proved to be no demand for the lunchtime sessions; as people began to recognize the value of their improvement activities they were more willing to prioritize time for CI.

Other teething problems were experienced with some of the team leaders who were uncertain about their role and lacked the confidence to guide the team effectively. Consequently, they tended to lean heavily on the facilitators, particularly in the early team meetings. To overcome this problem, a modular team leader training programme was introduced, which could be geared toward an individual's need. Modules covered the following areas:

- project management;
- team dynamics;
- documentation;
- monitoring and measuring;
- roles in the team;
- overview of team training

To capture wider learning from the pilot projects, the CI engineers ran two focus group sessions (April 1995). Two or three representatives from each CI team were invited to attend one of these to feedback on their experiences of teamwork and the CI process. In general, the feedback from the sessions was very encouraging, indicating that much of the initial scepticism had been overcome through participation. Participants had enjoyed the teamwork, felt a sense of achievement and were keen to become involved again in the future. One of the main changes suggested by participants was that they felt the tools and PIPS cycle training would have been more effective if run before the start of the project, giving them a better understanding from the outset. Consequently, two half-day training sessions were introduced for team members at the start of a project. The training was intended to satisfy the following objectives:

- to give team members a basic understanding of CI;
- to explain the benefits of CI for Hosiden Besson Limited and the individual;
- to equip team members with the skills to get started on the project;
- to allow team members to become familiar with the PIPS cycle and CI tools.

The training adopted a practical and participatory approach, giving people the opportunity to practise using the tools and PIPS cycle.

### Selecting and Training Facilitators

In parallel to the pilot CI teams, preparations were begun to support the wider launch of CI teams by training additional facilitators. A group of around ten people were chosen to train as CI facilitators. In selecting these new facilitators, the CI engineers looked for people who were enthusiastic, approachable, open-minded and knowledgeable about the company. In



addition, all held some position of responsibility, although not necessarily one which involved supervising others. An initial meeting was held with this group, as an open forum to explain the process and their future role as facilitators. Where possible, these employees were included as participants in the pilot teams so that they could start to familiarize themselves with the CI process.

Formal facilitator training was carried out in February 1995 as a three-day course off-site<sup>3</sup> with the assistance of external consultants<sup>4</sup>. The first day of the training introduced the concepts of CI and put them within the strategic context of Hosiden. It also explained their role as facilitators. The remaining two days focused on using the PIPS cycle and the associated tools, using a number of interactive exercises to enable a more hands-on approach. The training also covered facilitator skills, including interpersonal skills.

Whilst the facilitators were enthused by the training, there was a general agreement that they did not feel sufficiently confident to start facilitating CI teams. Consequently, it was decided to provide the facilitators with a further opportunity to practise the tools and process by allowing them to work together as a CI team on a live project. The facilitators chose to investigate ways of improving the effectiveness of notice board communications, an issue that had arisen earlier in the training session.

As the first pilot projects were drawing to a conclusion at the end of May 1994, preparations began to launch the next wave of projects to be facilitated by the newly-trained facilitators. Each of these projects was passed through the authorization procedure, where the project proposal was submitted to a panel consisting of the relevant manager, the potential facilitator and one of the CI engineers. Proposals that the panel decided were valid as a team problem-solving activity were presented to the Monday management meeting for final approval and to ensure commitment of the relevant senior manager.

To provide further support for the facilitators the two CI engineers adopted a coaching role. Each facilitator also had an individual action plan, one objective of which was to highlight any further training requirements. To heighten their visibility within the workforce, the facilitators were issued with name badges. Having taken into account the learning from the pilots, the first step for the facilitators was to train their team (assisted by the CI engineers).

### **Sharing Learning and Communicating Progress**

The suggestions for change that emerged from both the facilitator training and the focus groups highlighted the need to incorporate learning mechanisms into the CI process. Firstly, periodic meetings between the facilitators were introduced to allow them to share and learn from each others' experiences. Secondly, a learning feedback form was introduced for the CI teams so that they could reflect upon and record learning from the project.

At the beginning of the pilots a periodic CI newsletter was introduced to update all employees on progress and publicize successes. The newsletter also included some of the problems that teams had experienced to lessen frustration by showing that people were not alone in facing difficulties. Further, CI updates were incorporated into the managing

<sup>3</sup> Three separate days, each a week apart

<sup>4</sup> Although it was intended that future sessions would be run internally.



director's quarterly briefings to the whole workforce. Although these proved useful, following the pilots it was decided to introduce further communication mechanisms to facilitate greater learning, namely:

- Tours of work areas to illustrate improvements to both Hosiden Besson Limited staff and customers.
- Displaying CI activity through storyboards.
- Encouraging teams to present their projects to one another (optional).

Communication through the company noticeboards was also improved as a result of the CI project undertaken by the facilitator group. There had long been a feeling that the noticeboards were poorly located and untidy, which was confirmed by conducting a survey. Two main changes were introduced. Firstly, two different types of noticeboard were designated, one for company information and one for 'community' information. People were nominated to look after each noticeboard (six in total, across the sites). Secondly, notices were colour-coded, categorizing information according to whether it was a company notice, sports and social, job vacancies or health and safety. The new noticeboards were introduced during the summer of 1995.

Toward the end of the first pilot projects, the benefits of CI to date were collated to produce a summary of achievements. This was circulated to all directors, managers and supervisors, to help increase awareness of the success and scope of improvement and to demonstrate the benefits of releasing staff for CI activities.

Managers were asked to talk informally to those who had participated to show their gratitude and commitment. The summary of achievements was also communicated to all employees through the CI newsletter (July 1995).

### Senior Management Commitment

By the end of the pilots, the majority of managers and supervisors appeared to be behind the programme, with the exception of a few dissidents who were still to be convinced that the scale of the benefits from the CI teams justified the time and effort involved. As one manager commented:

Considering it is only a year on, there has been a lot achieved. I was quite surprised actually when I read the newsletter that we had attempted and achieved as much as we had.

### Problems

However, although senior managers were generally committed, there were some concerns over the lack of visibility of this commitment. Despite encouragement to spend some time walking around the factory and chatting to people informally and to drop in on team meetings, there were few signs that this was happening in practice. There were, however, mixed views from shop floor staff about senior management presence at team meetings. Whilst some felt that this would demonstrate commitment, others thought that the presence of senior managers would upset the team balance. The buffet lunches to celebrate the successful conclusion of a project proved an ideal opportunity for senior managers to recognize the achievements of the individuals who had participated in the CI teams.

These problems, however, do not appear to have significantly affected the levels of involvement and commitment on the shop floor. The fact that people can see real changes being made and that there is a clear organizational commitment reflected in the provision of



resources (two full-time staff) have proved to be more important motivators. People recognized that making changes through CI activities ensured that the issues were given greater priority and were therefore easier to push through.

However, for some of the employees who had not been involved the scepticism persisted and they remained to be convinced of the benefits of CI. The level of knowledge and understanding about the changes being introduced under CI was not very high. Information included in the CI News was not being reinforced and communicated in others ways — highlighting the need for additional ways of publicizing CI. Among those who had not yet been directly involved there was a feeling that little had happened during the year the CI engineers had been with the company - they had expected to see some activity in their area by now.

Even though a limited number of employees had participated in the initial pilots, by communicating progress and results, widespread interest and enthusiasm in CI had been stimulated amongst the workforce. To harness this enthusiasm before it died down, it was decided to start setting up a mechanism for individual involvement (design work started in May 1994). This CI vehicle was called LIFE (Little Improvements From Everyone).

## Individual Involvement in CI

### *Key points*

- In late 1993 the LIFE initiative was launched to involve individuals at all level of the organization in CI.
- LIFE means Little Improvements From Everyone. The idea was copied from the scheme of the same name at Lucas Diesel Systems (also members of the CIRCA CI Network).
- Ideas submitted by individuals are placed in a visible area of the department, or section, which ensures that they are acknowledged. Feedback is given to the individual if it is not feasible to implement their suggestion. For every idea implemented the company gives a small donation to a local charity.
- The LIFE scheme has been introduced to all areas of the company. At present 400 proposals have been implemented and the quality of ideas is improving all the time.

### *LIFE*

The Portslade site was selected to pilot the new vehicle. A team was set up consisting of supervisors and facilitators. Each member of the team acts as a contact point to whom individuals can come with ideas for improvement. If the contact feels the idea is something the employee can implement immediately by themselves, then they are given the go-ahead straightaway. Alternatively, they will meet with other members of the team to discuss the idea and decide the most appropriate course of action. Whatever the outcome, this is relayed back to the originator. If they decide that the improvement requires a CI team activity, the idea is put to the proposal panel. For every improvement implemented, £2 is donated to charity.

In mid-1996 the LIFE initiative was introduced to the site at Hove and is currently being launched at Ryde. In general the LIFE initiative has been well received across the company and it has had a positive impact on teamwork, internal efficiency and communication.



However, some initial problems arose at Hove. These included conflict between sections, due to the fact that some supervisors encouraged participation in LIFE and others did not. Some supervisors were not convinced that LIFE was a good idea to start with. In order to overcome these problems the manufacturing director attempted to convert and convince 'one of the most cynical supervisors' as to the benefits of CI. As a result others followed suit and were converted to CI. To date over 400 proposals have been implemented which have had an impact on both large and small issues.

### *Outcomes of CI initiatives*

- Improvement in the quality of goods, which has resulted in a lower level of customer returns.
- Reduction in dispatch costs and delivery time to customers.
- Reduction in stock, materials and spare parts held in the factory.
- Improvement in teamwork and cross-functional working (for example Production Line and Quality Assurance).

## Further Developments

### *Computer system*

At present the company are in the process of developing the new computer system which was introduced in the last year. The new computer system will cover all aspects of the business, for example, sales order processing, purchase orders and stock control.

### *Quality measurement system*

The company is in the process of developing a quality measurement system with one of their major suppliers. The system will enable the company to determine the cost of internal failure for critical areas on the production lines across all sites. A programme has been designed that will be issued to operators and used to identify instances of internal failure. The results will be collated on a weekly basis and the cost of 'non-quality' calculated. (The activities that are quality issues have been timed so that a total cost can be estimated.) The measurement system and its purpose has been discussed with operators to gain their support and the establishment of this system is one of the milestones of implementing CI.

## Defining CI

A set of CI skills have been listed for the personnel manager to help identify skills gaps at appraisals and aid in the development of a company skills training plan:

- training and presentation skills;
- problem solving and analytical skills;
- knowledge of tools and their uses;
- team leader and team member skills;
- facilitating skills;
- knowledge of measuring techniques;
- communication skills;
- knowledge of company systems;



- people skills;
- listening skills.

The definition of CI skills is also intended to help identify potential team leaders or facilitators. The skills would be required in different degrees depending on the role being adopted.

### Performance Appraisal

In August 1996 a new performance appraisal system was introduced which captures issues relating to CI (for example, involvement in CI projects) as well as more general performance indicators. The appraisal form has been designed in a short and easy-to-complete format. The appraisal interview takes place between the staff member and their immediate line manager. Initial feedback seems to suggest that the new system is perceived to be a useful forum for sharing ideas as well as assessing one's performance and should have a strong impact on helping CI to be integrated into general work practices.

### Conclusions

The two Teaching Company Associates finished their programme in 1996 and were succeeded by a third Associate, employed to help the company to consolidate and advance the CI. CI has led to an improvement in team working and sharing of ideas which is being utilized to drive change (for example, in developing new products). Efforts are now being made to focus CI activity on overall business objectives and strategy, as well as quality issues.

### Hosiden Besson Limited – Review of Implementation

#### *Key points*

- Continuous improvement was initially introduced in Hosiden Besson as a means of tackling internal inefficiencies and declining profits.
- The change process was driven by management and supportive personnel, such as the Teaching Company Associates who were employed to manage and co-ordinate the improvement programme.
- The approach to change was to improve the internal company culture and communication, which had been identified, in an external audit, as among the key obstacles to improvement.
- Pilot projects were set up across the different sites, which helped to improve efficiency in the production area, gain commitment among shop floor supervisors and reduce initial scepticism.
- The company provided formal channels for communication such as a newsletter and the allocation of set times for CI meetings - including the managing director's quarterly briefing to all staff, which helped to raise the profile of Continuous Improvement. This went some way towards breaking down the 'them' and 'us' climate which had existed.
- The 'Little Improvements From Everyone' (LIFE) scheme was introduced to



encourage individuals to put forward ideas and increase the level of involvement in CI.

### ***Summary***

CI has helped the company to gain a number of benefits including a reduction in dispatch costs and delivery time to customers, and an improvement in the quality of goods which has resulted in a lower level of customer returns. One of the key internal benefits has been an improvement in team working and cross functional working, for example between Production and Quality Assurance functions.

The company demonstrate an awareness of a number of the key behaviours associated with successful implementation, in particular the need for high levels of management commitment, as well as the opportunity for involvement at all levels. A number of enablers have been put in place to encourage CI such as the LIFE vehicle and the supportive role of the CI engineers. The LIFE scheme has now been introduced to all production areas of the company and at the time of writing over 400 proposals had been implemented with the quality of ideas improving all the time.

However, one of the problems with introducing CI at 'grassroots' level only is that it offers a limited opportunity to link improvement activities to the overall company strategy. As a result CI can operate in parallel to the rest of the organization, making it more difficult for the change to become deep-seated.

In response to this Hosiden Besson are now in the process of integrating CI into the mainstream company, for example CI is being incorporated into the new performance appraisal interview and form to help the improvement process become more associated with everyday work practices.