SME Supplier Management

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- Sunalex Ltd is a small company with 27 employees with a turnover forecast of £2.7m

- Sells a range of lights, reading lamps and related products via catalogues, internet and newspapers.

- The target market is the 'affluent over 50s'.

- For many products, the company acts as a distributor.

- The company also manufactures a core product range branded the 'Alex' light.

KTP to investigate:

- Product Failures – why so many failures were reported and what to do to eliminate them.

- Sales order 'Miss Picks' – Again; why so many and actions required to eliminate them.

- The introduction of robust policies and procedures through the application of TQM methodologies.
    1. Measurement and Analysis of key KPI's
    2. Process Mapping and Management
    3. Acting on data to solve problems.

Initial Analysis of Problem

- Quality of work on the production line. Some key issues identified were;

  - Soldering technique and use of non-lead solder.
  - Complicated transformer design and assembly
  - Packaging design and time taken to assemble it

Initial Analysis of Problem

- Some other key areas highlighted were;

  - Use of in line quality control tests (burn tests)
  - No LEAN principles applied in assembly or stock replenishment
  - Staff training – no one multi-skilled

- Organising and labelling of product holding areas required – having fast moving items close to despatch bench etc.

- No picking list or holding area identified for products.

- No ownership or responsibility for errors. (Introduction of name stamps)

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- Supply chain and poor quality components

- Design issues

- Personnel attitude

Supply Chain - quality of components

- Transformers, switches, bases, arms, cables and soldering.
- Two examples:
  - Transformers – visiting suppliers
  - Soldering – working with University and supplier

Design Issues - Product Design

- Foot switch, connector, bulb holders, electronics in lamp head, packaging.
- Two examples:
    - Connector – University Product Design Students invited to critique design
    - Foot Switch – customer requirement – improved design resulting LED indicator

- All leading to reduced product failures and reduced customer satisfaction.

Personnel - morale and attitude

- Human error (e.g.: lack of concentration)

- Repetitive tasks - increasing error.

- Lack of product training.

- Personnel attitude towards change (motivational theory)

- Unfriendly working environment. (healthy living initiative)

- From the problems outlined above a number of techniques and tools were applied.

- Pareto analysis identified the most 'urgent' problems

- 5 'S' techniques applied to packaging area

- Ishikawa Diagrams

- Flow Charts and process charts

- Deming PDCA

- Not all 'text book' ideas and techniques were accepted or made the transition onto the factory floor

- Each step was not 'imposed' but a scheme of demonstration, benefit and acceptance had to be put into place.

- Initial "hostility"

- Gradual acceptance

- Agreement

- Final celebration

Results and Conclusions

- Reduced failures from 4.7% to 1% avg

- 'Miss-Picks' reduced from 1.9% to 0.7%.

- Cost saving of £57,000 during the 2009/10 financial year

- Finding new supplier and increased capacity

Results and Conclusions

- Improved product design and development leading to an increase in capacity of 66%

- Improved staff morale and attitude, as changes that led to improvements are visible.

- Improved customer satisfaction

- KTP project a major success within the company

- All project aims and objectives have been met – including a few not in the plan!

- The Associate now a major influence within the company – well respected and accepted

- Despite the recession the project and Associate have achieved fantastic results in dynamic and volatile environment

- Project has given the company an 'embedded legacy' which will (hopefully) not falter when the Associate leaves

'How much easier it is to be critical than correct'

Benjamin Disraeli, *January 24, 1860*

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