

CLAIM AND CONTINUOUS IMPROVEMENT

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Abstract

The claim will always represent the kind of information that is annoying to recipients. Systematic work with claims has a positive value for the company. Addressing the complaint has a positive effect on continuous improvement. This paper was worked out with the support of VEGA No.1/0229/08 Perspectives of quality management development in coherence with requirements of Slovak republic market.

Key words

claim, continuous improvement, customer

Introduction

There is no need to say, that claimed or returned products are always **the less welcomed forms of feedback from customers**. Claims and complaints will, however, remain a standard part of our lives, organizations, and that is why it is logically expected that the organization establishes procedures and mechanisms to work effectively with complaints and claims. Senior management is responsible for assurance that the organization has created a process for handling complaints and identifies its objectives. It must be satisfied that **the complaint handling process is planned, designed, implemented, and that it is maintained and continuously improved in line with the complaint of the organization**. Selecting the suitable claim system can be a significant task due to the risks involved in going with the wrong decision [5]. Learning by doing can be costly, the more so the more complex the systems involved – just think of products such as space shuttles and organisations such as big supplier networks [6].

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Claim and continuous improvement

The complaint and the claim will always represent the kind of information that is annoying to recipients. But this may be the reason that we should prevent them. Systematic work with complaints and claims is in fact a positive charge [1].

What is meant by the concept of positive charge? Every complaint is a communication with the customer in which an organization can find a source of guidance and information. Through transparent and systematic record thoroughly examined failures of the product, a wide base of information can be created, that is an invaluable tool in the ongoing filling of such amendments and actions that lead to continuous increases product reliability. Claim enables to gain ideas for improvements in measuring and analysing the customer's needs, its own product quality control, technology supply and distribution organization.

Dissatisfied customer may not always be in the role of adversary. *His disagreement points to weaknesses in the organization and allows him to remove* and it is in the interest of the organization to keep him. This method of communication with customers will often detect small defects of the product before they become major deficiencies, which are removed with high costs and may also lead to a significant loss of customers in favour of competition [2]. Claims and detailed analysis of their causes are very valuable information for future improvement of all activities of the manufacturer, respectively suppliers. Although they mean more effort and additional costs, they have negligible potential for future savings, as long as the causes of negative perceptions in projects are permanently eliminated [1].

In short, we will define what we mean by *continuous improvement*. Improving quality by today's terminology is seen as a part of quality management focused on increasing capacity to meet quality requirements. These are activities aimed at achieving a higher level of quality compared to the previous situation [4].

Now, we would like to point out to address complaints from the field and then implemented corrective and preventive measures in the process of cables in the company. The company offers complete energy solutions and services for global IT and telecommunications market. The production of energy products and systems, the company produces cable sets, entering into manufactured products.

Accrued claims NC 5984 and NC 6008 is a serious problem related to cable eyelets, see Figures 1 and 2.



Fig. 1 Claim NC 5984 of BMK 445 905/ 6R1A product



Fig. 2 Claim NC 6008 of BMK445 011/ 6R1A product

In dealing with both claims, we followed the methodology 8D. After the identification of the problem, the establishment of the team (Quality department) and precise definition and quantification of the problem, we started to take an immediate action.

Regarding NC 5984, we found the basic information. Thirty-one systems were ordered by customers, 5 pcs of BMK 445 905/ 6R1A were checked with the customer and the 3 pc had a problem with cable eye, i.e. loose cable eye. In the latter case, the NC 6008, it was found that in one cabinet BMK 445 011/ 24R1A, a cable eye is released (dropped) from battery cable during installation. In both cases, the cable having a cross section of 70 mm^2 .

In the first step and the primary information that we found, product number "cable problem" NTM 445 905/ 6R1B - TFL 103 107 / 08 was identified. An immediate 100 % check of cable in stock was carried out, see Table 1.

SELECTED CABLE FOR 100 % INSPECTION

Table 1

Selected items	Pieces
NTM 2110 000/ 4R1A	20
TRE 211061/ 1003R1A	61
TRE 211061/ 1004R1A	107
TRE 211061/ 1005R1A	110
TRE 211061/ 1006R1A	107
TRE 211061/ 901R1A	274
TRE 211061/ 925R1B	276
TRE 211061/ 927R1B	494
TRE 211061/ 975R1A	37
TRE 211052/ 1	80
TRE 211052/ 2	96
TRE 211052/ 4	84

After 100 % of control cables and cable sets, it was found that all the items were in order. **In the second step** we took control of all manufactured and finished products in stock, entered into with "cable problem", see Table 2.

SELECTED PRODUCTS FOR 100 % INSPECTION

Table 2

Selected items	Pieces
BMK 211 0000/ 4R1A	12
BMK 211 0000/ 7R1A	1
BMK 447 905/ 27R1A	2
BMK 447 905/ 28R2A	1
3/ BKY26104R1B	36
BMY 201 301/ 1R1A	5
BMK 445 901/ 73R2A	10
BMK 447 085/ 312R1A	2

After 100 % inspection of selected items, all types except the cabinet BMK 2110000 / 4R1A were all right. Cabinet BMK 2110000 / 4R1A was immediately corrected. It should be noted that *the principle of the control was manual pulling of the cables*.

In the third step, we focused on the cable shop, where we found some interesting facts:

- Discrepancy between the used crimping machine Klauke (Press) and tool Chamber,
- Cable lugs Chamber and machine Klauke were not applicable in this combination,
- Cable lugs Chamber were thin – walled with difference 1.6 mm (external diameter) towards Cable lug Klauke,
- Most suitable combination is Chamber crimping machine and Chamber tool,
- Pull test in cable shop area is missing,
- Cable lugs which are used in Cable shop area Chamber,

- This issue occurred when previous Ericsson cable was exchanged for Top Cable (new supplier from April 2009).

In the fourth step, we took immediate remedial action:

- Tool Klauke was taken from Cable shop area,
- Tool Klauke was changed on Chamber tool.

In the fifth step, we provided a pull test conducted with the assistance of other divisions. Samples were prepared in our cable shop with diameters of 35, 50 and 70 mm² for each type of 5 pcs. After the tensile test, we obtained additional observations, see Table 3.

RESULTS OF PULL TEST

Table 3

Record of pull test			
Date	Number of cable	Tool	Result
2.12.2009	1.1	KM 051	90
2.12.2009	1.2	KM 051	90
2.12.2009	1.3	KM 051	90
2.12.2009	1.4	KM 051	73
2.12.2009	1.5	KM 051	90
2.12.2009	2.1	KM 051	90
2.12.2009	2.2	KM 051	90
2.12.2009	2.3	KM 051	90
2.12.2009	2.4	KM 051	90
2.12.2009	2.5	KM 051	90
2.12.2009	3.1	KM 051	90
2.12.2009	3.2	KM 051	90
2.12.2009	3.3	KM 051	90
2.12.2009	3.4	KM 051	90
2.12.2009	3.5	KM 051	90

Table 3 shows that cable No. 1.4 withstands only 73 kilogram, while other cables withstand the maximum value (90 kilograms). It should be noted that the test check was regarded only as a reference for us because the machine on which we performed the test is used for much smaller diameters.

Conclusion

Root cause was that the machine tool was from another manufacturer. After an exchange of the Chamber instrument type, claims of a similar nature have not occurred. Within a frame of preventive measurements, we found a company that is able to practise the testing procedures of cables. Each cable has a diameter of the minimum size by a force that must be met. For each diameter 3pcs are made, where 1pcs is tested up to its destruction and the other 2 pcs are tested up to their minimum power the cable has to withstand. We sent all of our

manufactured types of cables to the companies to find out the 100 % satisfaction and the promise that no similar case will be repeated in future.

Complaints and claims set a detailed analysis of their causes and are very valuable information for future improvement in all activities of the manufacturer. They are a fair mirror of how the delivering organization systematically examines perception and sells the needs of its customers as a part of its quality management system.

Professionally selected claim management system affords the opportunity to retain customers in the case of a complaint and to improve customer loyalty.

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