GLOBAL CRISIS – CROSSROADS OF QUALITY

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DEVELOPMENT OF QUALITY FUNCTION

FROM FIRST SIMPLE STEPS OF QUALITY CONTROL IN PRODUCTION TO A SYSTEMATIC APPROACH OF QUALITY MANAGEMENT, NOT ONLY IN PRIMARY BUT ALSO IN OTHER SECTORS.

QUALITY has become AN INDISPENSABLE PART OF RELATIONS AMONG STAKEHOLDERS AT VARIOUS LEVELS - PRODUCTION, SERVICES, SOCIETY, STATE.
GLOBAL CRISIS OUTCOMES

- MASSIVE LOSS OF WORKING PLACES;
- A LOT OF BUSINESS PLANNED AT LOW WORK COST, PRODUCTION PLANTS BEING MOVED FOR THAT REASON;
- INAPPROPRIATE DEPLOYMENT OF ECONOMIC AND SOCIAL POTENTIALS;
- SUPPORTING AND/OR FAVOURING OF LOCAL INTERESTS;
- NON-ETHICAL BEHAVIOUR;
- EVEN FRAUDS.
MORE THAN 100 SLOVENIAN COMPANIES HAVE BEEN STUDIED, ALL OF THEM HIGHLY SUCCESSFUL. COMING FROM VARIOUS SECTORS, INCREASING THEIR TURNOVER AND PROFIT, MOST OF THEM WORLD-WIDE EXPORTERS, AMONGST THEM:

PIPISTREL (producer of small, ultra-light cruise aircraft and gliders), KOLEKTOR (car industry components and systems, building and industrial technology), KRKA (pharmaceuticals), LITOSTROJ POWER (turbines and hydro-energy components), AKRAPOVIČ (sophisticated exhaust systems), HIDRIA (climate and automobile technologies), KOVINOPLASTIKA (building fittings, components for car industry, toolmaking...), KOGAST (catering equipment), to name just a few.
FIVE KEY PRINCIPLES OF SUCCESSFUL COMPANIES

- **USING ISO 9001 VOCABULARY, WE CAN SAY THAT THEY ARE “IN CONTROL” OF THE SITUATION, READY TO REACT AND IMPROVE AT ANY MOMENT;**

- **THEY ARE STRONGLY MARKET-ORIENTED, NOT IN WORDS BUT IN ACTION;**

- **ORIGINATORS AND NOT FOLLOWERS, THEY ARE CONTINUOUSLY DEVOTED TO R&D, UPGRADING THEIR OWN AND – THEREBY - COMPETITORS’ ACHIEVEMENTS;**

- **EVEN SO, THEY MAKE GOOD AND REGULAR USE OF OUTSOURCING, WHEN POSSIBLE ;**

- **AND, FINALLY, THEIR EMPLOYEES’ COMPETENCE IS AT A HIGH LEVEL.**
FIRST PRINCIPLE

WHAT DO WE HAVE IN MIND UNDER “IN CONTROL” AND WHAT HAVE WE LEARNT ABOUT IT FROM THE MANAGEMENT SYSTEMS

(ISO 9001 essentials)

► One often comes across various analyses, research work and models, which may be done by world-wide known experts (so-called gurus); but, almost as a rule, even they end up with various statements, opinions and estimations instead of concrete actions or process improvements as outlined in ISO 9001.

► Let us bear in mind that each nonconformity, each not accomplished task or goal not reached, should immediately be followed by a correction, to “repair” the situation or - at least - avoid greater damage.
FIRST PRINCIPLE

WHAT DO WE HAVE IN MIND UNDER “IN CONTROL” AND WHAT HAVE WE LEARNT ABOUT IT FROM THE MANAGEMENT SYSTEMS

(ISO 9001 essentials)

► Correction should be followed by an investigation. Its results must “identify” the causes of previously mentioned problems. This is a very difficult part of the process and is often not properly implemented. All too often the problem causes are seen as the “major forces” or “external factors”, and only rarely as our own mistakes, wrong approaches and, sadly, even wrong beliefs!

► Only when the proper causes have been investigated and identified, is it possible to consider and undertake steps/actions/processes to eliminate those causes. We call the former corrective actions, although this is not the best way to call them!
FIRST PRINCIPLE

WHAT DO WE HAVE IN MIND UNDER “IN CONTROL” AND WHAT HAVE WE LEARNT ABOUT IT FROM THE MANAGEMENT SYSTEMS

*(ISO 9001 essentials)*

- Planning and implementation of corrective actions can range from verbal instructions and issued orders to new market and business plans, up to highly demanding projects, urgent investments and even new core business developments.

- The requirement for review and verification of such actions is reasonable and necessary, if we want to close the circle. Practical experience shows that actions often have not been realised, have been diverged somewhere else; and the willingness and knowledge required have disappeared ...
SECOND PRINCIPLE

MARKETING: HOW TO RETAIN EXISTING CUSTOMERS AND ACHIEVE NEW ONES

► Allocation of key, former and potential customers – examination of “direct marketing” possibilities (without agents).

► For each group a specific approach should be considered. For key customers, personal interviews should be planned and conducted in teams (CFT – Cross Function Team), especially in the final stages of projects. For important customers, regular consultations should be organised.

► Specific methods should be applied to prevent customers from leaving.

► Develop techniques to approach potential customers - using various associations, conferences, fairs, literature and brochures.
SECOND PRINCIPLE

MARKETING: HOW TO RETAIN EXISTING CUSTOMERS AND ACHIEVE NEW ONES

► Follow internet enquiries and tender invitations from all over the world.

► Continuous updates of web pages, including most recent data and differentiation marks, such as acknowledgements, certificates, appraisals, special innovative achievements...

► Attend all fairs and conferences where various awards or differentiation marks can be won.
SECOND PRINCIPLE

MARKETING: HOW TO RETAIN EXISTING CUSTOMERS AND ACHIEVE NEW ONES

► Keep tradition of "house fairs“ and other forms of customer animation. This is a good approach to support and enhance one’s image and trade mark. Invite clients in small selected groups, avoiding conflict of interest with distributors, agents and representatives.

► Make video conferences to boost business, thus avoiding long-distance travel.

► Implement regular comparisons with the best-of-class (benchmarking), that helps to recognize one’s weak points and provides a good opportunity to react.
Measurements and evaluations of customer satisfaction should be performed case by case and based on modern methods, taking into account the slides that we have shown so far.

Claims and complaints should be treated consistently, promptly and always in customer’s “favor”. Corrective action must be undertaken for every single case, with its results passed on to the customer.
SECOND PRINCIPLE

MARKETING: HOW TO RETAIN EXISTING CUSTOMERS AND ACHIEVE NEW ONES

When analysing the collected data, pay special attention to the following:

- falling behind in R&D;
- poor trademark recognition;
- misunderstandings of any kind;
- difficulties in communication;
- bad access (phone, internet, personal contacts...);
- slow claims reaction;
- not keeping promises.

Those factors could cause that even “yesterday loyal customers” leave
THIRD PRINCIPLE

DESIGN AND DEVELOPMENT: HOW TO GET CHEAPER PRODUCTS BUT WITH HIGHER QUALITY

► The ongoing crisis is directing development towards a good ratio between “over-” and “under-” engineering, wherever possible. The first one can be too expensive, while the second one may not meet the requirements. ...

► Re-engineering and/or value analysis as the adequate tool for price reduction should be considered.

► Product renovation – from first sketch, on to design and use of appropriate materials. The role of verification and differentiation marks should also be taken into account.
THIRD PRINCIPLE

DESIGN AND DEVELOPMENT: HOW TO GET CHEAPER PRODUCTS BUT WITH HIGHER QUALITY

► Manufacturing process, new layouts and automation should be considered.

► Renovation of classical “construction & technology”. To be transformed into simultaneous engineering. It includes an integral approach (combining the technical, technological and operational arrangement of manufacturing process), thus enabling shorter production times at lower costs.

► Computer technology and software tools enable integrated manufacturing procedures, while technical staff has been trained and organised according to the old Tayloristic treatment – “per partes”.

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“Heterogeneous” production program seems to be just the opposite of the above requirements (as products from such a program are more expensive), but in a time of crisis it could well be an advantage in comparison with “monolithic” program.

Classical lean production in a time of crisis is highly sensitive and relies on outsourcing in local environment, which can pose some risk but is sometimes necessary.

Full automation seems to be the inevitable solution, although cheapest products do not always come from highly automated production. Therefore, in many cases, flexible automatic production cells have been developed.
FOURTH PRINCIPLE

EXTERNAL PROCESSES: OUTSOURCING, SUBCONTRACTORS, SUPPLIERS

- The old rule is: Whatever comes from “outside” – of same quality and cheaper –, leave it as it is! Not good any more! Recently performed research has shown that, from R&D point of view, it is necessary to equilibrate the external processes.

- Insist on subcontractors’ and their processes being complementary to the company’s basic processes. Introduce “groups of subcontractors”, functioning according to agreed rules of responsibilities and authorities.

- In some cases such groups could be made responsible for various processes covering the entire production or service performed.
FOURTH PRINCIPLE

EXTERNAL PROCESSES: OUTSOURCING, SUBCONTRACTORS, SUPPLIERS

- The latest version of ISO 9001:2008 lays a great emphasis on suppliers, because they do not adequately fulfill their role. “Education” and development of a new supplier – well known in automobile industry -, should be applied to other sectors as well.

- Suppliers’ profile should be adjusted to the companies’ specific needs for various types of services and products.

- The company expects each product or service to be delivered up to date and of best quality.
FIFTH PRINCIPLE

COMPETENT PERSONNEL

► The need for competent personnel is definitely not questionable. It makes part of standard clauses, business technical presumptions, legal obligations and requirements...... However, how to reach it?

► There are huge differences between more and less competent workers. In manufacturing environment 1: 2, while for intellectual tasks the ratio is even 1:5. How do we treat these differences when discussing wages/salaries?

► In terms of competence, what matters is appropriate education, training, skills and experience.
FIFTH PRINCIPLE

COMPETENT PERSONNEL

► Apart from “professional” competence, based on the aforementioned elements, which are sometimes abbreviated as PIQ (Professional Intelligence Quotient), we should not forget PEQ (Personal Emotional Quotient) either.

► Let us develop the profile of personnel as highly faithful, devoted to the company and ready to invest in themselves (self-education and self-training). Employees should see clearly that acquiring more knowledge - assisted by the company - is a privilege!
FIFTH PRINCIPLE

COMPETENT PERSONNEL

► Develop professional profiles trained for highest requirements of modern sophisticated equipment. Be aware of bottle necks.

► Be careful with crisis management teams. Make sure that these teams adapt to the existing personnel and ensure their cooperation.

► Despite current tendencies to reduce personnel, in this time of crisis, it is essential that R & D and sales departments keep employing.
CONCLUSION

► Study cases of successful companies have proved that a great majority of them manage to be in control of the crisis. How? By concentrating on five principles shown in this presentation. All of them have made good use of ISO 9001 - a special emphasis on continual improvement, with corrective and preventive actions in place.

► It is possible to offer lower cost products and services at a higher quality level, but this can only be achieved by originators, not by followers.

► And, finally, each of us should try to find a place for himself and his organisation somewhere among the practical cases shown. Begin by critically assessing what can be done and what is out of your range. However, we all should keep in mind what A.Einstein said: “We cannot solve our problems with the same thinking we used when we created them.”