Information to managers and experts or communication with all within organizations and networks – Case HSEQ

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Abstract Planned interplay of tangible and intangible assets are needed for production. Efficient and effective interplay is enabled by both technical and non-technical social skills, leadership within psychosocial work community – in addition to formal management. The whole “continuum of understanding” comprising data, information, knowledge, and wisdom is needed, intra- and inter-organizationally. The above issues are here dealt with an industrial case – a Finnish cluster of big companies that is running a procedure for Health, Safety, Environment, Quality Assessment (HSEQ AP, www.HSEQ.fi). HSEQ AP provides a comprehensive picture of a supplying company’s capabilities, consisting of description of Integrated Management System (IMS) and a lot of alphanumeric or categorized performance indicators, to experts and managers. One leadership approach emphasizes following drivers of excellence: (1) all employees’ involvement to build motivation, competence and confidence; (2) this participation “provides” humans’ all skills then fully available. So, more human-centered communication is needed for managing employees in a wise way, based on HSEQ-style knowledge as well. The main stream of quantitative information only is not enough for effective business and individuals contributing to it. In brief, this paper presents needs and gives examples that quantitative info should be enriched with illustrative, qualitative and appealing, affective features, especially when directed to all employees

1 Introduction

Production is depending on skills and competences used by planned interplay of tangible and intangible assets. This paper deals with efficient and effective contribution of human assets to production. As far as human assets are concerned, holistic quality of work life (QWL) is more and more seen as a key factor for high total quality of companies and work communities. Well-being at work is often used as a holistic concept comparable to QWL, too (Anttonen and Räsänen, 2009). The set of the 10 dimensions in the European Union’s (EU) definition for QWL is (Royuela, Lopez-Tamayo and Surinach, 2008): 1. Intrinsic job quality 2. Skills, life-long learning and career development 3. Gender equality 4. Health and safety at work 5. Flexibility and security 6. Inclusion and access to the labor market 7. Work organization and work-life balance 8. Social dialogue and worker involvement 9. Diversity and non-discrimination 10. Overall work performance. QWL together with productivity are continuous challenges within each individual industrial company. In more and more frequent cases of bigger business, the whole value network plays a key role for companies’ success, and so do network’s QWL and productivity management. The excellent and consistent management of the wholeness requires taking into account the network: a company is purchasing services and doing production together with many supplier employer parties operating in the same premises and sites (shared workplace of multiple employers). Management of knowledge, communication, unity of different employee communities, participation of all contributing organizations and their all people comprise important prerequisites. Involving all employees is seen a very important starting point for excellence. That has been very clearly emphasized by the chain of the following drivers of excellence: (1) all employees’ involvement to build motivation, competence and confidence; (2) this participation “provides” humans’ technical and social skills then fully available for employer’s outcomes (Wilson and Haines, 2000). Saari (1984) showed in his analysis that disturbances in the information processes within workplace and bad human communication comprise an important factor behind accidents at work. Hughes and Ferrett (2003) emphasise communication to be as a key of good safety culture.

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Crawford, Davis, Walker, Cowie and Ritchie (2017) speak about the continuum of understanding that comprises data, information, knowledge, and wisdom. In practical management and development, most often we use while speaking and writing the category knowledge. All the four categories of understanding are related to skills and competences. For guaranteeing more and more wisdom, psychosocial factors and social skills, as well qualitative facts and description, are needed. Items of the continuum of understanding must be communicated within work community. Related to effective communication, Glendon, Clarke and McKenna (2006) conclude that the trainee (here employee) is many times more likely to remember the presented material if he or she is looking at pictures or watching a demonstration than if he or she is in a situation in which he or she is only hearing words or reading the relevant material. Glendon et al. (2006) as well remind that learning can be significantly boosted by active participation, simulation, and performing. Crawford et al., (2017) emphasize that strategy for communication should always start from the perspective of the intended recipient: think first how can knowledge best be absorbed rather than how can it be provided. The above key issues of production are in this paper dealt with the context of an industrial case – a Finnish cluster of manufacturing and other big companies or company units, the one for running an activity of multiple issues management, comprising Health, Safety, Environment, Quality Assessment Procedure (HSEQ AP, www.HSEQ.fi).

2 Case: HSEQ AP – related organizations and their cooperation

Networking is a typical solution for companies of different sizes to combine and manage their contributions in a competitive way in contemporary business environment. It is typical that employees from several supplying companies or contractors, and independent workers, work simultaneously for same production e.g. in process industry (customer of suppliers). The situation mentioned has set up new requirements for managing HSEQ issues and achieving desired results within that framework. Those requirements are partly regulation-based. On the other hand, they are voluntary, business-driven, promotional ones. Large-scale process industry companies in Finland have developed, in collaboration with R&D institutions (Väyrynen, Koivupalo and Latva-Ranta, 2012; Väyrynen, Jounila, Latva-Ranta, Pikkarainen, and von Weissenberg, 2016), and started the collaborative cluster to apply HSEQ AP for measuring and evaluating suppliers. The objective of HSEQ AP is to ensure that outside employees in shared workplaces have conditions, as well as knowledge and skills good and consistent enough of HSEQ to operate in the principal companies' premises.

Integrated Management Systems (IMS) (cf. Wilkinson and Dale, 2007; Zülch, Keller, and Rinn, 1998)) are used for internal reasons but as well to assure customers that production, products and services satisfy requirements for holistic quality. Responsible organizations have also to be concerned about QWL, i.e., the work environment and community ones (HS), the impact on environment (E). The HSEQ management comprises planning, organizing, control, monitoring and review of the measures, and its features as an IMS is described by Kauppila, Härkönen and Väyrynen (2015). Diverse facts, figures, observations, hearing session, and discussion are needed for HSEQ assessment: the list of the main topics and questions being dealt with, answered by the representatives of assessed company, is presented, e.g., by Koivupalo, Junno and Väyrynen (2015). For presenting assessment results, sharing information and communicating within and outside the cluster is used very typical illustration, in addition to listing numerical data in text and tables, is used. Graphs, consisting of points, lines, areas, and other geometric forms, are describing typically accidents happened, near misses, errors, deviations, or hazard conditions observed, and various scores assessing management actions. Variables are presented as function of time (years), supplying or purchasing companies, individual suppliers, HS, E or Q variables grouped together, opinions of employees or experts within suppliers or purchasing companies, and so on.

HSEQ assessments need to be effectively supported by the internet-utilizing ICT system. Increasing share of Finnish process and other industries is utilizing HSEQ AP as far as a prerequisite factor of guaranteeing success in network collaboration. Many of the suppliers (N=200, around) have been assessed according to the HSEQ AP. E.g., regarding steel manufacturing companies being active in developing and many-year-long utilizing of the HSEQ AP, the drop in accidental injuries is significant, both in purchasing principal company itself and supplying companies (cf., Koivupalo et al., 2015). Intranet communication about HSEQ concerns mainly purchasing companies belonging to the HSEQ AP cluster, the supplying companies, the head assessor and the assessors. Public section of the ICT www pages provides information to the above but mainly to others interested in it. But how is it with special service for the employees of principal purchasing company and the supplying companies, as key stakeholders, too? They need to be better involved and taken into account. The main stream of them, intra- and inter-organizationally, are lacking of the information and

communication related to HSEQ issues at the shared work place, multi-employer issues are not risen on the communication agenda. Of course and only, though, the channel available to the public is possible to be utilized by them, too. To conclude our objective, regarding the lacking informing of the employees we are making proposals how to include necessary issues for them, too. As well generally, we aim at making proposals with an objective how to improve, enrich the current HSEQ communication.

3 Psychosocial Quality of Work Life and social skills for a successful work organization – a generic frame in brief

Social skills are a key to success both in a specific work organization and generally in working life. Level of social support can be identified by psychosocial factors in a work place (Carayon, 2009). Social relationships and communication are able to create functionality to work, increase engagement and commitment (Schaufeli and Bakker, 2004; King, 2005). The importance of social skills is emphasized in dialogic leadership which concentrates on the interactional process of supervisor and subordinates instead of individual characteristics of the leader (Isaacs, 1999; Hersey and Blanchard, 1979; Yukl, 2002). New approach to management highlights the role of communication and interaction in management. For instance, Isaacs (1999) thinks that ideal leadership and management comprises an interactive relationship between leader and employees. The impact of the quality of this relationship has been shown to have great impact for example on employee job satisfaction, well-being, reduced staff turnover and innovativeness (e.g., Erdogan and Enders, 2007; Loi, Chan and Lam, 2013). The last mentioned authors continue that the relationship between supervisor and subordinate is an important aspect of employee well-being as well. We used the setting supervisor –subordinate in communication skills training for employees and managers in a recent study in which social and communication skills were shown to be increased due to training (Kiema, Mäenpää, Leinonen and Soini, 2014). Communication can support the goals of action and helping to attaining goals (Greenberg and Baron, 2003). Regarding fluent communication at the team level, the cooperation skills, participatory decision making, wide information and data management and interactive team work are emphasized. (Putman, 1993). Laine (2008) describes importance of trust (both emotion and knowledge, cf, Wilson and Haines, 2000): in business as factor for success generally, as well specifically regarding frictionless connections in work organisations both vertically between subordinates and superiors, and horizontally between colleagues who share the similar work situation.

4 Case-related and other practical emphases and examples of including more cognitive, psychosocial and social skill factors in organizational contexts

Glendon, Clarke and McKenna (2006) were going through a lot of issues of successful (safety) training, and they concluded that the trainee is 2, 3, or even 5 times more likely to remember the presented material if she/he is looking at pictures or watching a demonstration than if she/he is in a situation in which she/he is only hearing words or reading as such relevant material. Furthermore, this boost can be significantly increased by active participation, simulation, and performing (Glendon et al., 2006). A proven collection of possible “knowledge management tool”, for specially enhanced communication, can include, e.g., narratives, story-telling and story-boards for gaining augmented picture, utilized with a very active role of employee participation and co-creation of solutions (cf, Rajala and Väyrynen, 2013). Smart phones provide features enabling various pictorial and demonstrative abilities that are much effective learning aids than hearing or reading only (Glendon et al., 2006). Tools for technology-mediated communication been utilized more and more include apps for mobile devices of every employee, e.g. ones available from the App Store, or corresponding Android sources. Information, and communication by and for the key stakeholders of HSEQ AP could comprise the following new features, according to the preliminary proposal and recommendation development we made for this article, mainly based on the reviews presented above. Idea sessions, followed by the ones assessing them, were carried out in practice. Possible added features are the following: (1) Presence to all” of managers, even from highest level, possible remotely and more frequently, ”virtually-enabled”, unified and communicating work community even if individual employees are located remotely and moving a lot; (2) empowerment, safety, health, work conditions both for productivity and high quality of working life (individuals, teams and groups, companies, managers, experts, workers; intra and inter-organizationally; (3) remote guidance, control and feedback related tasks and the whole contract or other contributions; (4) meetings, whether face-to-face or virtual, can be supported and improved by ICT applications for every one, and adopting enhanced toolbox meeting features.

5 Discussion and conclusions

Glendon et al. (2006) suggest taking into account even more and specific topics within industrial organizations, such as the hierarchy, team structure, team performance, centralisation degree of the teams and networks, attitudes, and the quality of communication. The latter strongly relates to the roles and systems of ICT in company and individual levels, too. More precisely, Glendon et al. (2006) encourage us to study the aspects in the following way: with adequate dissemination of top-down communication, but also bottom-up communications, ease worker relations, reduced status distinctions operate through encouraging communication, sharing ideas. Quantitatively and qualitatively enriched information, knowledge and communication from own close environment of every employee is needed for enabling the steps towards a “better” work place. There is needed enriching a wide base of relevant data to the level of wisdom (Crawford et al., 2017) for developments. Emerging views for ICT can be found while going through the variety of communication channels, ambient, embedded or mobile technological views, contemporary requirements and possibilities for moving multi-site jobs being often the case within HSEQ AP-related companies, for remote work, possibilities linked with enterprise resource planning (ERP) systems, and social media. Possibilities may comprise “Presence to all” of managers, even from highest level, possible remotely and more frequently, remote guidance, control and feedback related tasks and the whole contract or other contributions, communication allocation to individuals, teams or groups, one company, group of companies, all employees of both purchasing main company and all supplying companies, updating frequently www pages, making direct speech of information or for specific reasons due to leadership or management purposes, tailored communication or messages, alarms, etc.

Additionally, one contemporary qualification needed, described by Coyne (2016), can be called “transpersonal leadership” that is defined as a mode of a leader “extending or going beyond the personal or individual, beyond the usual limits of ego and personality”. First, we recommend the clearly enhanced utilization of the psycho-social-cognitive-communicative emphases presented in this paper, for “running” the various drivers around and with HSEQ AP value network: (a) every employee is enabled and resourced to give her / his best social and technical skills at own work tasks and close work environment, though in many case featured strongly conditions of changing and mobile nature at and with purchasing companies premises, at shared work places. Second, interesting concept of management we want to rise here as interesting one possibly to be dealt with – could enhanced information and communication need, and been utilized by, “fair process” (Kim and Mauborgne, 2003). The main finding they made, and got evidence related to it, is that decision making process by a manager is assessed being of equal importance to employees, often even more important, than the outcomes of it to themselves. The fairness of managers and top executives is sensed in very clearly way. ICT support for the above would be a necessity taking into account the conditions and frequent remote working out of normal spaces of the supplying company. Our recommendation as researchers, based largely on the argumentation presented in this paper, is to start, in a small scale first, to follow in an essential and extend enough way, the action style following the second vision, again related to the one of Kim and Mauborgne (2003). They comprise key issues for promotion by the three terms – engagement, explanation, and third clarity of expectations in all relations between management and employees – which can be significantly boosted, we think, by a wise utilization of current and especially potential future smart ICT, in addition to face-to-face communication practices of leadership and management. One very recommendable tool including the above pros is so-called toolbox meeting practice, common in construction sector, covering all job-site people and their foremen, superiors, and in some occasions experts as well (Levitt and Samelson, 1993). Mobile ICT offers even so-called disruptive options for process and safety efficiency and effectiveness. All assets need information availability for field people – one good innovative example being an app for railway industry (Bye, 2013). Regarding well-known smartphone apps, WhatsApp messenger for instance has gained a wide popularity among medical doctors in their clinical work use (Thomas, 2018). Use for more psychosocial purposes only, e.g., for praising employees on good performance in social or technical sense during work (Horishita, Yamaura, and Kanayama, 2013), could be carried out by smartphones, directed whether to an individual or a group of employees.

We think, the aid of digitalisation can and should be utilized more – the close on-site presence of employees together with supervisors, can be supported by high-level visualized up-dated information, and even, e.g., by direct video discussion and spoken instruction provided by peers and or managers and experts of special issues, including direct remote showing and demonstrating what and how need to be carried out, “hot tips for safety and productivity”. Virtual collaboration remotely is possible for instance outdoors, in cold conditions, at a site belonging to premises of heavy

industries. Collaborative toolbox meetings could be called, e.g., virtually supported toolbox meetings, the ones in that participation comprises at minimum employees and foreman physically, quite often job-site manager as well, and virtually or physically, depending on case and its issues, safety and health professionals, trainers, representatives of purchasing company, outer special experts, and some times high managers of both purchasing and supplying companies. More potential for enhancing the roles of psychosocially-enriched leadership shall be found throughout sophisticated digitalisation, for both intra- and inter-organizational situations at work.

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