Alleviating conflicts within specialist organizations using co-design – an article about possibilities of further study

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Abstract

An introduction to common organizational conflict types of relationship and process conflict is provided to form a basis for considering the applicability of co-design methods for alleviating conflict within specialist organizations. Reasons for conflict are discussed with focus on enumerating distinct aspects for organizational improvement for increased productivity and employee satisfaction.

Different practical methods are introduced for implementing improvement projects built on a systematic approach to collaborative design to alleviate organizational conflicts. Emphasis is also herein placed on specialist organizations.

This article can also function as a source of ideas for further study focusing on specific subareas of conflict alleviation using co-design.

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1 Introduction

1.1 Overview

This article deals with alleviating conflicts within specialist organizations using co-design methods. For our purposes a specialist organization is defined as an organization that deals with solving highly complex tasks and employs specialists, i.e., professional experts that have the necessary background for meeting the goals of the given organization. Some examples of specialist organizations would be, e.g., universities, research and product development units and consultancy firms. Some parts of the discussed conflict alleviation are applicable also outside specialist organization context.

Organizational conflict is considered an important aspect of management research and it spans a wide range of multidisciplinary literature involving organizational psychology and organizational behavior research. It is generally accepted that unmanaged organizational conflict diminishes productivity, profits and employee satisfaction. [Wal95]

We will begin with enumerating common organizational conflict types in Section 1.2. Next comes discussion on reasons for conflicts in Section 1.5, which lays the necessary groundwork for dealing with requirements for conflict alleviation in Section 1.8. Having dealt with the problem scenario for conflicts, we will proceed onto introducing co-design methods as tools for conflict alleviation in Section 1.11.

It is assumed that the reader has basic knowledge of collaborative working so that this section mostly serves as a meta-analysis tool for defining organizational conflicts and their reasons, thus enabling the reader to become more aware of the relevant conflict characteristics when applying co-design methods in organizational context in practice.

The working assumption in dealing with organizational conflict within the boundaries of this article, is that every organization in the end consists of individual humans working in collaborating groups of varying sizes and with differing amounts of interaction taking place between these groups.

For additional details the reader is encouraged to study the given refer-

ences.

Co-design being a very broad subject, it might be helpful for the reader to read the last introductory Section 1.11 once before proceeding beyond this Introduction to bring into better focus what kind of co-design methods we are broadly recommending here for conflict alleviation. This cross-referencing is recommended, so that textual repetition can be avoided in writing this article.

1.2 Conflict types

Common organizational conflict types can be roughly divided into two types: relationship conflicts and process conflicts [Jeh97]. These conflict types are dealt with individually in the following two subsections.

It should be noted that in general relationship conflict is strongly detrimental for efficient organizational functioning and employee satisfaction, but a limited amount of process conflict can actually lead to more robust organizational evolution and efficacy. [Jeh97] [G+10]

1.3 Relationship conflicts

Relationship conflicts can be briefly defined as personal conflicts between people.

In any given organization having more than one member, it is natural for occasional relationship conflicts to arise. What is important, is for these conflicts to be limited in time so that trust between the participants does not get diminished [PB03]. Encouraging people to resolve relationship conflicts privately is recommended, since successful conflict resolution leads to better deep-level understanding between conflicting parties and increases knowledge exchange. Public disputes related to relationship conflicts have negative impact on working atmosphere and increase the risk of further such conflicts via emotional contagion affecting group behavior [Bar02].

The role of co-design methods in dealing with relationship conflicts should principally be such that these conflicts would not manifest in the first place. Prior improved knowledge exchange and trust building provided by co-operative design has preventive power over relationship conflicts. But even if relationship conflicts should exist within the given organization, involvement in co-design activities does provide a beneficial environment for indirectly increasing conflict-resolving communication between conflicting parties, provided that the relationship is functional enough for relatively neutral communication.

1.4 Process conflicts

Process conflict is an impersonal task related conflict that rises from perceived inefficacies in the practical realization of organization processes or operation methods.

Process conflicts are not usually caused by individual organizational employees, but it is natural to perceive process conflicts as being due to an individual human or a small group working close by the process, so that process conflicts can easily turn into more detrimental relationship conflicts.

In specialist organizations process conflict is often blamed on perceived inefficient coercive bureaucracy [AB96] or imagined incompetent top-down management seemingly lacking understanding of the environment at the level where their decisions are turned into practice.

In the case of process conflicts co-design methods can function as natural tools for encouraging multidisciplinary co-operation between participants from multiple organizational hierarchy levels so that knowledge exchange boundaries are lowered and direct feedback can be included already in the initial design process leading to process design solutions that are better tailored to meet operative requirements at multiple organizational levels. Also when participants from multiple organizational levels have been involved in designing the process, the personification of process conflicts into relationship conflicts is diminished.

1.5 Reasons for conflicts

There is a multitude of reasons for different types of organizational conflict. We will dive into conflict reasons in individual subsections for relationship conflict and process conflict.

1.6 Reasons for relationship conflicts

General reasons for relationship conflict include: lack of trust, poor communication, general mood within the organization, political norms, personal values and personal taste [DDVV01].

The lack of trust can also be harmful in that once one person perceives another as untrustworthy, then that idea is easily transferred to others working in the organization possibly leading to undeserved bad reputation in larger organizational context, which can quickly become detrimental for the working atmosphere and task efficacy. In general, it is usually easier to gain bad reputation than to alleviate such perceptions by gaining positive reputation.

Poor communication can mean both the lack of communication and plain misunderstandings. If communication happens very infrequently, it is more difficult to become accustomed to the way that the active communicator is trying to get the message across, i.e., get "inside the head" of the other communicating party. Clearly only increasing quantitative communication cannot be the complete solution after sufficient threshold has been reached, but quality cannot be achieved without sufficient quantitative communication.

Due to emotional contagion [Bar02] the general mood within the organization should be cherished in good manner. Negative emotions are often transferred more easily across the organization than positive ones, so even one openly negative vocal employee can have huge detrimental impact in key organizational areas.

The importance of political norms is strongly culture dependent, but personal values and personal taste are more strongly universal factors in affecting relationship conflicts.

1.7 Reasons for process conflicts

Common reasons for process conflicts are: slow communication and transfer of knowledge, different perceptions of phenomena, coercive bureaucracy, slow reaction to feedback, insufficient workflow formalization, lack of resources, incomplete design and processes evolving slower than the environment [Wal95] [AB96] [X+09].

Similar to poor communication being a reason for relationship conflicts, slow communication and insufficient transfer of knowledge become also reasons for process conflicts, which underlines the strong need for efficient communication taking place within organizations. Uncertainty and lack of information feed mistrust and form a basis for increased amount of detrimental rumors and speculations, which do not help in solving process conflicts.

Different perceptions of phenomena can also be due to lacking communication, but personal characteristics play also an important role in determining perceived process phenomena. Here in general it helps if the organization has provided clear explanation for the way that the processes function so that individual interpretations should not vary as much from person to person.

Coercive bureaucracy should naturally be avoided. Within organizational context, bureaucracy should function and be advertised as an enabling entity that provides help for meeting the basic requirements for carrying out other work within the organization. Bureaucracy should be perceived as a helpful service, not as a necessary work-slowing evil.

Slow reaction to feedback is a common cause for even slower organizational evolution. Since the environment within which any given organization exists does usually change over time, so do the environments within which processes exist. This results in changes in the requirements for efficient functioning of processes, which in turn leads to need for process redesigning. Competitiveness often requires agile process evolution taking place quickly in answer to changes in process environment. If feedback providers are not tied closely to the process (re)design, then this will rapidly lead to increased detrimental process conflicts.

Insufficient workflow formalization is closely related to different percep-

tions of phenomena. If all the participants in process workflow share the same understanding of the process steps, then this obviously leads to better predictability and efficiency, but this does not help much if the common shared understanding is wrong. Sufficient workflow formalization should guarantee that all the process participants share the same correct understanding of the process behavior.

Lack of resources is a key limiting factor for any given process, but the effect of lacking resources becomes even more detrimental in combination with differing perceptions of phenomena relating to resource allocation. This dictates a strong need for efficient communication of resource consumption and availability between all the process parts.

Incomplete design becomes manifest usually when processes evolve slower than the environment, but many processes are incompletely designed from the beginning. Incomplete original design is often caused by designing the process at an organizational level that does not match the environment where the process will be implemented in practice, which calls for increased need for co-design activating participants from many organizational levels to enhance knowledge transfer and quality of process environment predictions.

1.8 Conflict alleviation requirements

The following two subsections will consider individually requirements for alleviating relationship conflicts and process conflicts, but here are also some common observations that are relevant for both conflict types. These observations are: active management is required because conflicts tend to get distributed within organizations, channels for feedback are necessary, there has to be the possibility to affect behavior of the organization and its employees and lastly one needs to acknowledge that there will always be some conflict. $[F^+13]$ [PB03] [Wal95]

1.9 Alleviating relationship conflicts

In short the following aspects are necessary for alleviating relationship conflicts within organizations: interpersonal trust within an organization must be increased, confidence should be nurtured, spontaneous communication must be encouraged, constructive feedback must be able to flow freely up and down within the organization and work within the organization should be as engaging as possible. [PS05] [G+10] [PB03] See also the discussion in the previous Subsection 1.6.

It is rather easy to point out some general ways for alleviating relationship conflict, but the practical implementation is the challenging part requiring adept management. The weighted importance of such "soft" values like positive relationships within organizations and employee satisfaction has often been historically neglected in favor of management by productivity numbers – those who cannot adapt to the requirements of the working environment are replaced, but this becomes more difficult when the employee expertise is highly specialized. With the modern instant global communication channels like the internet, the public image and reputation of specialist organizations has become increasingly important when competing for limited employee candidates in an international environment. Soft values should obviously not be neglected any longer.

1.10 Alleviating process conflicts

We can succinctly tell how process conflicts can be alleviated in general terms: knowledge should be shared effectively within the organization, effective communication channels are required, multidisciplinary expertise alleviates problems in complex tasks, organizational commitment of the employees should be sufficiently strong for example via shared identity, shared context is necessary for process participants and bureaucracy must be enabling; not coercive. [Wal95] [DDW03] [Cum04] See also the discussion in the previous Subsection 1.7.

One often neglected aspect of process design in organizations of increasing size, is the documentation and sharing of best practices in successful process design. Once a process has been constructed in such a way that it can effectively be updated to meet changing requirements, the practical steps needed to achieve this way of functioning should be well documented and used as a helpful stepping stone for (re)constructing other organizational processes when necessary. One should document also the process design phases, not just the end product for maximal synergy – it is not useful to repeat the same mistakes when implementing processes.

Achieving shared identity within specialist organizations is also challenging, as this often requires first achieving a brand status for the organization itself, which is a slow and difficult process. Shared identity cannot usually be achieved if relationship conflicts are abound, which again highlights the importance of positive working atmosphere.

Shared context does not need to be anything more complex than the ability to communicate efficiently and understandably between the organizational participants so that the perceptions of process phenomena would differ as little as possible. Boundary objects used in co-design are often helpful in establishing stronger shared context. [IE14]

1.11 Co-design as conflict alleviator

Methods of co-design can be used for alleviating organizational conflicts – both relationship and process conflicts – by the virtue that co-design can increase communication and increase knowledge sharing between multidisciplinarily diverse group members in an engaging and shared context, thus co-design methods also build trust, which powers confidence. [Mel11] [G⁺10] [IE14].

Since co-design in itself is a very broad subject, it is in practice efficient to focus on those co-design methods that strongly employ mutual engagement and interactive communication between participants from many different organizational levels. The stronger the emotional involvement in the co-design process is, the stronger will the feeling of authorship also be in the realization of the designed product, which in turn should increase employee's personal investment in the organizational projects. Achieving thoughtful emotional involvement in co-design is far from trivial especially if the co-design participants are new to the used methods or hold strong adverse predispositions. The role of a skilled co-design facilitator is crucial in introducing a new design methodology to organizations if thorough co-design adoption is desired for conflict alleviation purposes.

It should be noted that when possible co-design should be used in such a way, that the designing partners will also be able to affect the designed product after it has been taken into use so that continual organizational evolution can be achieved. The minimal requirement would be an efficient implementation of a feedback system.

One significant strength of co-design is the ability to purposefully lower information exchange boundaries between knowledge silos within specialist organizations by involving a heterogeneous group of participants with different backgrounds. Diversity of knowledge has stronger potential for achieving innovative efficient solutions since people with different backgrounds are more likely to bring novel perspectives to problem solving.

Clearly co-design is not suitable as the only method for solving difficult already existing malignant relationship conflicts, but it should have significant preventive power against future conflicts and it helps in establishing more open communication for curing existing conflicts if the relationship is functional enough.

If co-design has already been adopted as a common method of working in an organization before the employee enters into service, passive group pressure would likely encourage even stronger emotional openness towards participation in beneficial co-design processes.

2 Methodologies for alleviating conflicts within specialist organizations

2.1 Introduction to the chosen methodologies

Within this Section we will be transitioning to a domain more practical and less academically theoretical. Built upon ideas drawn from the references of Section 1, the considerations built in the previous Section, the author's experiences in different working environments and analytical discussions from different decades, we will embark upon a journey for constructing practical applications of co-design for alleviating conflicts within specialist organizations using numerous methodologies. Throughout the analyses and the examples the level of detail will be kept at a level suitable for aiding in concrete implementation in organizational environments, while still allowing for meaningful adjustments for tailoring the methodologies to be suited to specific unique features inherent in any given organization. For review literature, the reader is encouraged to look into the references given for Section 1 and the further references within those sources themselves.

The general working assumption in all the following subsections introducing different methodologies is that one should aim for improvements both for the organization in question and for the employees constituting a part of the organization being considered. What is beneficial for the employees will also be beneficial for the organization in the discussions that follow.

When considering any of these methods for one's organization, it should be borne in mind that usually the practical implementation may involve a merger of multiple different methods simultaneously to achieve optimal results. Especially cultural changes in introducing co-design methods to an organization for the first time may take time to mature and require skillful facilitation as outlined in Section 1.11.

2.2 Mutual engagement

This first of the methodologies for alleviating conflicts within specialist organizations is also the one remaining on the most general level as compared to the methodologies introduced in the following subsections of this chapter along with their practical implementation examples. Here we will build upon the outlines introduced in Section 1.11 and follow up with an example of what mutual engagement can signify on the level of an individual employee, although mutual engagement in itself is a broad enough concept to include possibilities for countless of other examples. E.g. mutual engagement will also be utilized in a constituent capacity in the following subsections dealing with different more specific applications.

Here as stated we will concentrate on those aspects of co-design that strongly employ mutual engagement and interactive communication between participants from many different organizational levels. We will work based on the assumption given in Section 1.11, that the stronger the emotional involvement of the employee in co-designing parts of the organization, the stronger will the feeling of authorship also become, which should increase the employee's personal investment in achieving success in the organization's projects.

By introducing an example on a practical level targeting an individual employee, we will at each step of the example present how each of these steps ties into the framework of mutual engagement involving multiple individuals from different organizational levels.

We take as a premise a scenario where an employee works within an organization where it is part of the organization's culture to encourage active self-driven and self-initiated participation of each individual employee in those parts of the organization's operations that the employee is interested in working in, aiming towards benefitting the organization and his own interests and drives simultaneously. As we are dealing with a specialist organization, let us take as an example a programmer that wishes to develop the organization's international operations by expanding the target customer markets to a new foreign nation where the programmer happens to have relatives and

some existing contacts relevant for the organization's business. Here there are many organizational parts that have required tuning in order to enable the employee to even consider carrying out a mission like this.

Firstly the organization should have advertised the actively supported opportunity to bring under consideration employee-driven projects that have potential beneficial outcomes for both the organization and the employee in question. If on the other hand the workforce would have been commanded to just focus on specific tasks given by the management, such as in this case programming a new specific software system for a client, then it would be less likely that the employee would have brought up a new business opportunity for the organization that involves expanding the business venues internationally.

Secondly we note that the organization must have demolished strict boundaries and conceivable responsibility silos between different operational parts of the organization. Namely in this example we can point out that a stereotypical image of a programmer might not include capabilities in marketing or expanding sales to new client bases. If the organization would have had strict enforced responsibility boundaries between for example sales department and programming offices, the programmer might not have dared to suggest an international client base expansion beyond those that existed and were under the handling of sales department for the sake of argument.

Thirdly it is natural to assume, that the programmer in question must have heard about previous success stories within the organization about employee-driven projects becoming adopted as integral parts of the employing organization. If on the contrary the employee would have only heard about miserable backlashes from the management in cases when an individual employee suggested new business opportunities and was struck down as overstepping one's boundaries, then it is once again less likely that the programmer in question would have estimated bringing forth his business idea as profitable for himself and the organization. Of course the organization should not cater to every whim of an employee and it is possible that an idea that the employee thinks is beneficial might actually not produce an expected net-positive outcome if the idea is investigated in a wider organi-

zational context taking into account business details from those areas of the organization that the employee himself might not be familiar with. But in the event of having to refuse the implementation of the employee's suggested project, the organization has ample reasons for presenting the declination in a constructive manner that enables the employee to possibly refine his idea in a direction that can meet also the needs of the organization, the employee might be offered further education to grow within the organization towards a direction that is more profitable for the employee and the organization both or for example the organization might be aware of pre-existing similar projects within itself or other employees with similar interest so as to co-work with the employee in a manner that might ultimately result in an outcome that is lucrative for all parties involved.

Fourthly we will note that it is unlikely that the employer has as comprehensive amount of information about its employees and their backgrounds as the employees themselves. Additionally even if the employer had this unnatural amount of information available, it seems unlikely that there would be enough resources within the organization to actively ponder about possible further methods for utilizing each individual employee in as effective way as possible given for example in this case the aspects of e.g. emotional desire of the programmer to expand his occupation to a country where he has relatives or the fact that the programmer has pre-existing contacts in the target foreign country in such a capability that the employee would be willing to utilize those contacts for the benefit of the employing organization. Here both the organization and the employee benefit from there existing a prebuilt process for introducing employee-driven ideas and projects to the management in a way that does not require further active probing and active demands from the organization's side – instead of the organization having to ponder how to more effectively utilize its workforce in this kind of capacity, some of the possibilities and opportunities are transferred to the employees themselves. And as this employee-driven procedure can be targeted to include employees from all levels of the organization, this will provide a potentially profitable method at all parts of the organization for enhancing the future of the organization and the employees that constitute parts of it.

2.3 Continuous feedback integration

With any action there should be thought given as to why the action is being performed. Incorporating feedback mechanisms into an organization is no exception. Effective feedback mechanisms are not just limited to collecting feedback in a mechanical manner, for there should be in place efficacious processes for also taking refining actions based on the collected feedback in a timely manner. Nor should one exclude the feedback mechanisms as themselves from the targets of feedback for further improvement. The quality of handling feedback and taking organizational action based on this feedback is a tangible measure of any organization's capability of being responsive towards the interests of employees being involved in addition to possible other parties involved as sources of feedback. If there is no visible reaction from the organization's part to the potentially deceptively simple act of feedback submission, in the minimum in the form of acknowledging the feedback as having been received for processing by a human, then this is bound to cause diminished reciprocal interest and expressions of respect from the feedback giver's side towards the organization. Awaking within an employee a sense of being ignored as unimportant is likely not beneficial for the organization in question, although no harm might be meant by the organization by the inefficient handling of received feedback.

Within the methodologies of co-design we are interested in effectuating a mutually involving process for further improvement in reaching of the organization's and the employee's shared interests and goals as outlined in Section 1.11. Thus we are working with the assumption that it is perceived as beneficial for the organization to make its processes more efficient and profitable to affect the working environment and occupational atmosphere in a positive manner. These are some of the goals in integrating continuously feedback from within the organization into the daily operations of the organizational entity being investigated. Efficient feedback mechanisms and actions taken based on them can help in alleviating both process and relationship conflicts as introduced in Section 1.2.

To bring into focus practical ways of constructing efficient feedback mech-

anisms, we will divide the process of continuous feedback integration into constituent parts. The presented way of handling feedback processes by individualized components is not the only way of describing feedback systems, but we will use it for the sake of practical exemplification. Roughly one can first divide the feedback process into two parts, namely the input part of collecting feedback and the output part of taking action based on the given feedback. Then we can proceed by linking the input and output process parts by introducing a middle third part for processing the feedback. Furthermore we will explicitly include a fourth constituent process part of continuous improvement of the feedback process as a whole itself. One could continue on by splitting the feedback mechanism into increasingly numerous different components and their interrelated connections and affecting methods, but we will limit ourselves to the four part division given here to remain on the practical side allowing for freedom in the realization of the feedback process itself within the organization. Blindly copying any processes from one organizational context to another organization without considering specific uniqueness inherent in one's working environment is able to lead to unnecessary challenges and suboptimal results.

Now first we will consider the input part of the continuous feedback integration process. Hereby we will need to define from whom the feedback will be collected and by what party. Equally importantly we need to define what type of feedback we are interested in, as in what are the plausible subjects of feedback and in what kind of form the feedback is produced i.e. is it freeform text, formal questionnaires or something else or a combination of many different possible forms. Here we also must define what are the channels for submitting the feedback for processing – do we use intranet, web forms, chat rooms, email, letter boxes, anonymization, pseudonyms allowing for personalized feedback responses and dialog, discussions, workshops or still something else. In the interest of enabling mutual involvement in the most efficacious manner the answers to these choices will depend on the organizational scale and the willingness of the organization in committing resources to the feedback process itself. The choice of methods and context is dependent on the nature of the organization in question. In general, in smaller

organizations with possibilities for discussions about open topics in private or publicly, the feedback might become collected along with other daily discussions in the workplace; this is more likely to happen, if the management acts supportively towards fostering an atmosphere of including feedback in daily routines between not just the employee and the organizational management, but also between the employees themselves, although there might be a fine balance to be struck in mandating the feedback to be passed on in a constructive manner. Generally on the other hand larger organizations might require more formalized methods for feedback collection to act as input in the continuous feedback integration process.

Secondly we will discuss about processing of the collected feedback by leaving the final actions to be taken based on the feedback to be talked about in the paragraphs below. One should begin by acknowledging that a systematic approach to processing the feedback is required and this is not something that happens by itself – doing otherwise would be a recipe for making the feedback fall into a symbolic blackhole, the results of which where summarily warned about above. This should seem obvious, but unfortunately there are some instances of feedback gathering that have resulted in such null behavior. Especially this can happen via a process error whereby for example the person previously responsible for processing the feedback has been assigned to other duties without backup in place or the assignee has otherwise fallen outside the organization. Other examples of feedback processing turning into neglect include unspotted errors introduced into electronic feedback platforms during software or hardware updates that have remained undetected for significant amounts of time due to there having been no processes for verifying routinely the correct functioning of feedback collection, or simply introducing automatic junk email functionalities into email servers that have erroneously adapted with time into classifying feedback coming with formal email headers into trash mail folders. These examples would suggest that any procedures for processing the collected feedback should include a routine for checking that feedback submitted via the feedback channels actually reaches the organization intact. Other possible subtasks that can be assigned to feedback processing can include e.g. classifying feedback to be directed to suitable agents for further handling, generating summaries of frequencies with which concerns targeting specific parts of the organization are voiced, providing instant responses acknowledging feedback as having been received by a human and with estimates by which time frame and by which steps the feedback will be processed possibly requesting further input from the feedback submitter, and prioritizing feedback received based on the estimated impact towards the organization mayhap leading to alerting involved parties to take suitable action.

Thirdly as output part of the process of continuous feedback integration, we will concentrate on implementing concrete actions based on the feedback received and processed. From the co-design perspective we should avoid using isolated organizational silos that plainly take action without taking into account wider insight that might be available from additional stakeholders. Therefore implementing actions based on the acquired feedback should be realized as a process involving relevant stakeholders in assessing how the feedback ties into the most current context and if there would be possibilities for increasing organizational effectiveness on a more extensive scale by utilizing potential synergies manifest in letting multiple parties from different organizational levels partake in the implementation of actions based on feedback. As with any co-design endeavors the organization should signal clear commitment and appreciation for the work done by those involved in the continuous feedback integration process. It is not only the feedback giver that will be evaluating the performance of the organization in the context of handling feedback, but all the parties involved in realizing actions based on feedback. There are also sound bases for not implementing feedbackdriven actions as one-way exercises of power without there being measures for estimating the impact of the newly implemented actions. Once actions are designed and executed based on the received feedback, the organization should monitor do the actions taken actually result in net-positive outcome for the organization and the stakeholders involved. If possible, the original submitter of feedback should be involved in a suitable capacity in all the stages of actualizing changes in the organization based on the feedback.

Fourthly as the final step we will turn our attention towards the continu-

ous improvement of the feedback process as a whole itself. Within this scope we aim to effectuate concrete methods for refining the process of continuous feedback integration in such a way as to construct recurring improvements in the three other constituent parts of the feedback processing, that is to say feedback input, processing and output. On the input's side the organization should at least be on the lookout for ways to tailor the steps required for submitting feedback to be as painless as possible – if the amount of work required to getting a feedback report submitted for processing is unnecessarily complex and time-consuming the employees could understandably be driven away from benefitting the organization with their potentially significantly valuable feedback. Additionally in collecting input feedback the organization should be wary of projecting an image of managerial incompetence by pushing undue amounts of requirements for organizational improvement to the shoulders of individual employees only; there should be clear and advertised procedures in place for also improving in a self-driven fashion the organization's workflows down from the higher managerial level to all the relevant levels of the organization without explicit irreplaceable need for feedback from employees not directly involved with the duties of improving the organization's workflows – the feedback processes should be shown to be appreciated and valuable, but not the only source for organizational improvements.

Continuing on for the fourth step of improving the continuous feedback integration procedure as a whole itself, we will next investigate how to improve the second constituent process part i.e. feedback processing. As noted above there should be an auxiliary fail-safe for detecting cases when processing of feedback comes to a potential deadlock. In addition all the stages of feedback procedures should be monitored and reported on in a manner that enables identifying opportunities for improving the procedures and registering possible failures in the feedback information and action workflow so that these problems may be corrected in a timely manner. As processing of feedback is just one part of the whole process of handling feedback, it is meaningful to from time to time review if the feedback funnel as a whole from input to output still matches the organizational needs and is implemented in a scope that matches actual demand.

As the last continuation on the fourth step of improving the feedback integration procedure itself wholistically, our concern will be enhancing the output of the feedback handling process. The final output from feedback handling will be concrete actions aiming to improve the organization's efficacy both from the side of the organization and from the side of the employees that constitute the organization's human resources. As suggested above, implementing actions based on the received feedback should involve stakeholders from all organizational levels resources permitting and while assuming organizational commitment to the process of feedback handling. As there are many individuals involved or groups of individuals involved in implementing effective feedback-driven actions, it becomes natural to gather and process feedback on the process itself of implementing feedback-driven actions. This multilevel collaboration provides also an opportunity for mutual involvement of employees from different parts of the organization to facilitate improved flow of information and enhanced knowledge exchange. Providing a social context such as this can also foster alleviation of potential relationship conflicts as this social context functions as a professional framework for bringing into light information that can be beneficial in building mutual understanding and shared context as named important in Section 1.7.

2.4 Emphasizing meaningfulness

In common parlance people tend to discuss the meaningfulness of work and in some cases feelings of describing an occupation as a calling. A sense of purposefulness and especially meaningfulness can function as a driving force guiding employees to higher work efficacy, job satisfaction and diminished preoccupation and doubt directed against performing occupational activities; in effect perceived meaningfulness of one's tasks will support the employing organization in achieving its goals while simultaneously helping the employees themselves.

As discussed in Section 1.11 stronger emotional involvement from the employee's side towards working mutually in reaching organizational goals will result in stronger feelings of authorship and thus increased employee's

personal interest in the organizational projects.

But personal interest alone does not automatically equal sense of meaningfulness in one's occupation. The problem is far from trivial and within the scope of this article one can only hope to present one theory of the many possible to help in achieving at least some level of increased satisfaction in the felt meaningfulness in work related activities. In the spirit of focusing on co-design aspects of conflict alleviation within an organization and thus between and within the organization's employees, we will put forward an approach utilizing methodologies related more directly to co-design itself.

We will work based on the following assumptions, namely first we assume that there is a positive correlation between employee's perceived occupational meaningfulness and the amount of positive social interaction centering around activities related to one's occupation. Second we assume that either the end results of employee's work or the process of achieving those results will have to be sensed as meaningful – preferably both the end results and the process of achieving them. Finally third it is assumed that the employee should feel as though he is not forced into his current employment, but this final point is not strictly mandatory for all aspects of the following exploration.

Based on what we assume above, it is feasible to construct steps for tackling each of the assumptions individually. We will begin in the same order as the assumptions were presented previously.

The first step of enabling positive social interaction related to one's occupation might be taken as fostering trust and openness in communication within the work environment as presented in Section 1.5. Trust and open communication can help in nurturing a feeling of belonging in a social extended clique formed outside individual's family ties. There is possibly a significant cultural dependency on how this might be achieved in the most efficient way in any given organization, and it is not completely problem free to assume that a situation like this would be appropriate in all contexts. But for the sake of discussion carried out within this section of the current article, we will work based on the precept that positive social interaction leads conceivably to sharing of personal experiences of challenges and successes, the

sharing of which may result in feeling of being cared of and being the target of receiving help, advice and helpful speculations from different viewpoints if so desired. This extension of employee's social circles to include organizational environment in a positive manner could be interpreted as being beneficial for the wellbeing of the employee and the organization.

In the second step we aim to enlive perceived meaningfulness within the employee's work's end results and the process of achieving them. Albeit one could, and likely should, seek to achieve this by multiple means, here we will limit ourselves to just few. When it comes to the end results, one could emphasize how the results are related to the more encompassing strategy of the organization – the strategy which has possibly been chosen as such that it caresses so called soft values implicative of for example improving quality of life within a society or enabling future development of positive outcomes in a sociopolitical context. Basically meaningfulness of the work's end results can be fostered by e.g. pointing out a desirable raison d'être for the goods or services being produced in a capacity that narrows out doubts of there being no use for what is being achieved. It is also worth actively seeking better understanding with co-design facilitation within the organization of what values does the workforce itself or the society at large see as meaningful at any given time, since this is not something that remains completely static throughout the decades. Based on the findings it might be justified to revisit the stated organizational strategy and mission for better alignment with those aspects that are deemed meaningful.

As a continual part of the second step, now we should also notice that there is additionally importance to be achieved in the meaningfulness of the processes themselves for achieving the organization's processes' end results; i.e. it is not only the end results that matter but also the ways with which they are accomplished. Since we are dealing with specialist organizations, we surmise there to be living interest in continuous development of improved skills and capabilities for achieving effects of extending scope or impact or at least achieving the existing end results in a more efficient manner. This involvement in continuous improvement and furthered excellence is something that should not be only in the interest of the organization itself, but

furthermore this should be a desired quality and value element rising from within the personal priorities of the employee in question. It is in addition realizable to include active expressions of support from the organization's side for promoting the relative merits of continuous self-improvement when it comes to the organizational processes but also the modes by which such positive refinement can further empowerment on a per person employee level in the employees themselves by increasing their personal skills, know-how and capabilities that might be beneficial also outside their occupational environment. In short, one seeks to imbue meaningfulness into employee's occupation via offering ways for personal growth within the workplace – and as such stated, there is no express reason for limiting opportunities for employee's personal growth within the workplace to just to be achieved in the context of improvement during carrying out organization's productional processes, but these opportunities might also include e.g. favor towards recreational activities sponsored by the organization in groups or individually.

The third step was introduced as limiting the employee's feeling of being forced into his current employment. By this step we aim to materialize a sense of freedom of choice in the employee's status as a worker within the organization. Often in a free society this is practically guaranteed on a literal level by the option of changing one's employer, but such an action from the employee's side might also carry for example some fears of uncertainty of the future and doubts about there coming to pass actual improvements in the sense of meaningfulness by just switching the employing organization. If there is no actual or merely perceived feeling of freedom in being employed as is in the current occupation, there might be no room for sense of meaningfulness, since by definition of enforced conditions the question of meaningfulness in one's actions becomes watered down by the deterministic aspect of there being no other choice than to carry out the tasks that are given by the environment one works in. To liberate the employee, as it pertains to actualizing improved feelings of freedom in defining one's occupational context and activities, the question becomes one of enabling flexibility in job advancement and horizontal movement within the current employing organization. Some methods for achieving this are outlined in Section 2.6, but the organization should also work in a preemptive way by advertising these freedoms to the employees in advance and not at the possibly too late point of there having festered a sense of serfhood in relation to one's current occupation.

To summarize, there are many ways in which sense of meaningfulness of work can be fostered within any given organization and we presented only a very limited selection, but ultimately it remains the responsibility of active and skillful management within the organization to promote those procedures by which meaningfulness is to be achieved. It should be kept in mind that meaningfulness stands for conceivably multiple different things for different people and sometimes these sources of meaningfulness might even be mutually exclusive, so also in this context it becomes recommended to emphasize the importance of knowing the organization's workforce on a level that goes beyond the occupational skillsets and reaches into the domain of personal values and interests – herein lies the danger of overstepping organizational authority in prying into what constitutes an employee and the questions of ethicality of tailoring work environment and task contexts based on what are the employee's interests or even hobbies that are not directly related to occupation.

2.5 Enabling experimentation

In this section we will be focusing on ways to foster increased self-expression within organization's workforce via which the organization can aim to reap increased occupational satisfaction in the staff, novel ways to solve organization's process challenges in a more efficient manner and extended avenues for further strategical expansion along with improved focusing on fixing occupational issues felt as troublesome by the employees themselves in an autonomously self-directed manner requiring in the best cases minimal oversight and directional management from the organization's side. Usually it is the employees themselves that possess the most current perceptional capabilities into carrying out the processes running on the practical level of business of the organization, although this does not cancel out the necessary implications for efficient management at all levels within the organization.

The working assumptions for the methodology covered within this section are that we are dealing with sufficiently skillful specialist employees that possess the necessary insight into applying their own skills and know-how to problems that are not specifically dictated by the employing organization or any part of their managerial hierarchy – the problem setting for seeking solutions is assumed to be coming from within the employee himself as a member of the organization's staff that has first-hand experience from the practice of solving existing job-related problems as they have previously been posed by the employer and/or extensive experience of carrying out activities required for fulfilling the functionalities required to perform the work assigned to the employee in question. As part of the set of assumptions we will also consider it given, that the employee in question is capable of using due caution and sufficient self-driven motivation for furthering the goals of the employing organization in a manner that will not cause undue hindrances for the organization or its members including other staff. Ultimately this will necessarily be an exercise in mutual trust between the organization and the employee – trust that is one of the requirements for efficient co-operation and mutual goal-seeking action in the partnership between the organization and the employee in most of the cases in any event.

The desired outcome of this whole enterprise will be increased costbeneficial utilization of the capabilities inherent in the workforce without requiring the employer as an active party in seeking how to utilize in the most efficient manner all the possibly hidden talents materializing in the employees. Simultaneously the workforce can increase its experience in selfexpression and self-management. One should keep in mind, that the following kind of activities might not feel natural to all the employees in any given organization, so the recommended course of action would usually be to make participation in these less directly managed activities non-mandatory. The successes or failures of these kind of activities will eventually speak for themselves within an organization consisting of humans participating in social situations resulting in sharing of experiences, and thus even those parts of the workforce that do not initially wish to take part in these activities might still eventually feel otherwise inclined without any need for organizational active pressuring.

We will present next an example of implementing the methodology being proposed in practice in a step-by-step fashion. This example will at the same time function as a self-referencing definition for the methodology itself with the example acting as an incarnation of the core concepts for enabling gainful experimentation in an occupational context.

Firstly it is recommended that the employee is specifically allowed to allocate time for self-posed experimental projects. The allocated amount of time will have to be decided on a case-by-case basis by any given organization as the plausible amount of time will depend heavily on the concrete activities and work requirements specific the organization itself. Some guidelines could be having the allocated amount of time being equal for all members of staff, the amount should be specified as an upper limit without forced requirement for utilizing it entirely, and if possible it might prove easier in practice to have the timeslots for experimental projects overlap between the employees so that there should not manifest undesired problems for usual work-related tasks requiring simultaneous collaboration within the workforce.

Secondly depending on the nature of the organization, it should be considered if there should be a clearly limited pool of resources for enabling experimentation in addition to the required time allocations. Clearly limited pool of resources in this case stands for a collection of resources differing from nonexistent so that the employees should not be driven away from experimentation in fear of needing to allocate the resources from their personal reserves as private individuals. At this point at the latest it should be clear that enabling this level of experimentation within any organization requires dedication from the part of the organization as in addition to salaries for the time of experimentation there might be additional expenses. Therefore this kind of changes in the work culture should be announced as limited time trials for evaluating the feasibility of this kind of changes in the way that the organization functions.

Thirdly although the topics of the experimental projects should be coming from the employees themselves for themselves, from the viewpoint of the organization it is beneficial to encourage dissemination of the insights learned from the employees' experiments and additionally there should be a seed pool of initial project topics for anyone to work on designed by the organization so that the possible lack of project topics should not function as an obstruction for getting the organizational culture change started. This also presents an opportunity for the organization to softly direct the experiments in a way that might funnel multiple separate projects into a more coherent whole from the get-go. Having a centralized knowledge base for the employees to post their findings and experiences on will also facilitate further interaction between the employees as a group and between the employees and the organization on other levels. This interaction is capable of leading into exchange of ideas about interesting and gainful further experimental project topics and will enable finding results and experimental undertakings that could be integrated into the organization as official projects driven by the organization's usual process managerial functions to further the goals of the organization in a more traditional sense.

Fourthly from the managerial side of things, the employee contracts should clearly state what is the copyright status for the findings acquired during experimental projects performed during time allocated by the organization for employees' experiments. This is adept at directing the experimentation to proceed in a direction that can be felt as being related to activities pursuant to the goals of the organization on a wider level. These kind of contractual stipulations can also function as opportunities for encouraging lucrative experiments by giving an opportunity to specifically dictate what kind of concrete benefits the employee could acquire by successful experiment results.

Fifthly it is important to assign some organizational body to observe in a non-supervisory capability the findings and progressing of the experimental projects based on the data submitted to the knowledge base of the third step above. This enables the organization to get a bird's-eye view from which it is possible to perceive opportunities for involving the organization already in earlier points in the experiment culture for co-designing paths that drive to lead to applications to be implemented as actual official organizational processes to benefit the goals of the organization in alignment with its mission.

This also provides the employees having done the basis experiments ample opportunities for engaging in occupational activities that can be perceived as functioning as source for authorship boosting motivation and drive springing forth from within the employees themselves. The organization should also consider in what ways it will be presenting the outcomes of these matured experiments to the employees and also to parties outside the organization. In some cases demonstrations of organizational openness and encouragement for employee-driven experimentation can be interpreted as a sign of desirable working atmosphere that can attract new skillful recruits in an environment of possibly scarce pool of possible individuals for hiring.

2.6 Clear paths for occupational advancement and growth within organization

One of the possible challenges facing specialist organizations from the side of process conflicts is workforce migration to different employers, which often entails costly procedures to replace workers and their accumulated workplace specific domain knowledge along with long-term need for training to acquaint the replacements to the task at hand. These recruitment problems may sometimes cause significant delays within any given organization's schedules and may even signify need for training that can take years for the most complex organization specific tasks – this training itself may carry a risk of failure resulting in uncertain outcomes for organization's schedule complications. It is a given, that any organization should meticulously prepare for this kind of workforce irreplaceability issues by for example always having at least two specialists capable of carrying out any organization's required process, but more often than not this might be impossible due to e.g. cost prohibitions, insufficient employee candidate pools or restricting physical work environment or cultural circumstances involving the work to be done. Of course employees switching organizations is not the only reason to have backup personnel procedures in place, since any workforce is susceptible to naturally occurring maladies and forces majeures.

In order to lessen the risk of specialists migrating to different employers,

there are many steps that may be taken ranging from the usual and generic of having a positive working atmosphere and well suited compensation to utilizing binding contracts, nondisclosure agreements and non-competes. In the case of making use of co-design methodologies, we are interested in applying capabilities inherent in the workforce itself to mitigate the dangers of having employees leaving the organization to be managed. An example of such a manner of an approach is taking the investigation to the level of an individual employee and aiming to activate the employee himself in such a way that an opportunity arises for having the staff member construct an occupation that enables him to continue working within his current working environment and workforce-critical organizational processes without mandating him leaving to pursue other venues. For this occupation (re)design task to succeed in a scope that takes into account organization's own needs in a suitable manner in addition to the requirements and needs posed by the employee in question, the design process should be constructed as a mutually involving undertaking where all relevant parties can voice their insight into what opportunities there are to construct this refined occupation. Thus our concern next is evaluating some possible ways in proceeding on a practical level with this process of occupation (re)design.

We will present a stepwise procedure for occupation construction that is suitable for both designing new employee assignments and modifying existing occupations. The outcome of this procedure will be an occupation that should be a beneficial win-win situation for both the organization and the employee as a member of staff.

Firstly it is convenient to build a founding for the occupation design task by identifying the undesired pressure points that drive the employee's desire to search for employment elsewhere. Already at this stage it should become apparent that one should pay close attention for recognizing whether there are any process design oversights or unmeaningful tasks that have crept into the employee's perceived understanding of his current job as a whole and that might be with relative ease reassigned to other parts of the organization or improved into a form that is more manageable and meaningful from the viewpoints of the significant parties involved. This step of the procedure should also be used as an opportunity for pinpointing any and all chances for enhancing organization's processes for better performance and efficacy.

Secondly it is pertinent to look for what occupational yearnings the employee has when it comes to incorporating novel task amalgamations to his workflow as work extensions or subtask replacements. These could be something that the employee has perchance observed in the exterior job market or has considered as plausible new applications of his own skillset individually or as a part of a taskforce in his current organization or in some relevantly conceivable setting. It should be borne in mind, that we are presently in the process of considering these proceedings in collaboration with an individual employee, the cost of whose complete replacement would be highly undesirable both in time and other resources – not to mention the possible loss in competitive edge, if the employee were to migrate to a rival organization. Within a scenario like this, it might even be cost-effective to actually hire one or more new employees that might undertake those parts of the employee's tasks that are more easily supplanted to other possibly new recruits or existing other employees. As a by-product of transferring some of the employee's burdens to other individuals, it might be within reach to lessen the employee's irreplaceability in the long run when sufficient time has passed for the new subtask bearers to accustomize themselves to the new demands simultaneously in the meantime preventing critical organizational process failure that might have resulted from the employee in focus having switched organizations.

Thirdly based on what was found about the employee's felt undesirabilities in the first step and about the desirabilities in the second step, the occupation redesign process should naturally proceed with identifying the mayhap preexisting suitable job opportunities within the organization itself. But here we should go further than just to limit ourselves to those job opportunities that might exist as-is in the current organization, and instead look for ways to produce positive growth for the employee as well as the organization being affected. To accomplish this goal that benefits both parties in a shared manner, we proceed onto the fourth step.

Fourthly comes what can be considered the actual objective for the man-

ifestation of co-design in action for the occupation (re)design procedure in question. As part of this procedural step, there is a need for an in-depth review with the employee into the ways with which one can go ahead with finding those parts within the organization's mission, where it is possible to grow the organization along with the employee in such a way that results in a net-positive outcome for the employee and the organization. In practice this might be realized for instance by extending the organization's mission and strategy into a direction that is synergistically aligned with those values that the organization keeps in high regard already in status quo and coincidentally answers the desires for the employee's future outlook. Another alternative might be to fuse other workers into carrying out the processes that the current employee is taking care of irreplaceably in a style where the employee under consideration for occupational redesign is charged with a position of higher privileges and oversight responsibilities by appointing him as a supervisory process manager whose task is limited to enabling others in his workgroup to manually produce the goods (physical or otherwise) that he has been the only one to manufacture – coincidently this achieves the subgoal of improving backup personnel procedures for the future. And yet a third way as an illustration might be to redesign the processes themselves that the employee is handling, instead of redesigning the occupation as such – here e.g. the work process outcomes could remain the same as before, but just the methods for achieving them are altered to better satisfy the employee's ideals.

Fifthly, and possibly the most importantly, due consideration should be given to decide if the whole organization or selected parts of it should be made aware of the organization's desire to be ready and willing to accommodate occupational redesign procedures for its employees. The importance of this is partly dictated by the practicalities of job markets, where the employer might become aware of the employee's plans for changing employer only at the very end via a received resignation letter. At this overdue point it would be more probable that it is too late to keep the employee within the organization by redesigning his occupation – thus increased organizational awareness of chances for dynamic work reshaping might act as a preventive

method for achieving increased workforce loyalty and trust in the organization's willingness to look after its employees' evolving situations.

3 Conclusion and opportunities for further study

Based on the performed literature review for the introductory part of this work and the resulting meta-analysis given within this article, we can conclude that co-design methods do possess direct potential for alleviating conflicts within specialist organizations. However the reasons for different types of conflicts should be strongly taken into account for achieving maximal benefit from using co-design methods by emphasizing those aspect of co-design that are directly relevant for conflict alleviation.

Further research would be advised for studying the impact of multicultural effects on the effectiveness of co-design methods in conflict alleviation and how multicultural issues in themselves might introduce both new reasons and reliefs for conflicts. Another important topic would be the study of situations in which conflict is actually beneficial for efficient organizational functioning. It would also be of great importance to gather empirical data from a long time period when co-design has been taken into use in practice on a larger organizational scale.

Concerning Section 2 "Methodologies for alleviating conflicts within specialist organizations", the emphasis was placed on practical implementation of different types of methods based on ideas drawn from the references of Section 1, the ponderings of Section 1 itself, and the author's personal experiences and analytical discussions carried out through decades in working environments. One natural way to extend the studies of practical conflict alleviation within specialist organizations, would be to conduct a more in-depth literature review and summarizing meta-analysis related to each individual method considered from the practical side during the methodologies section. Another continuation for the work within this article could be an overview of e.g. local specialist organizations in their capacity of having taken into action similar methods as were presented within this article. The same avenues of further research as were suggested for the introductory Section 1 above, could also be applied to the aspects presented in the more practical methodologies Section 2, including gathering of long-term data about results of practical

application. For example in Finland the recent years as of 2018 have seen the rise of numerous successful Finnish software consultancy companies that have gone global and that have just recently passed from the size of small companies to larger enterprise level, which could allow for interesting look-throughs into how the companies have succeeded in effectively harnessing the potential inherent in their specialist workforces and to what extent co-design methods for mutual engagement have been applied.

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References

- [AB96] P. S. Adler and B. Borys, Two types of bureaucracy: Enabling and coercive, Administrative Science Quarterly 41 (1996), no. 1, 61–89.
- [Bar02] S. G. Barsade, The ripple effect: Emotional contagion and its influence on group behavior, Administrative Science Quarterly 47 (2002), no. 4.
- [Cum04] J. N. Cummings, Work groups, structural diversity, and knowledge sharing in a global organization, Management Science **50** (2004), no. 3, 352–364.
- [DDVV01] C. K. W. De Dreu and A. E. M. Van Vianen, Managing relationship conflict and the effectiveness of organizational teams, Journal of Organizational Behavior 22 (2001), 309–328.
- [DDW03] C. K. De Dreu and L. R. Weingart, Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis, Journal of Applied Psychology 88 (2003), no. 4, 741–749.
- [F⁺13] J. Finch et al., Managing in conflict: How actors distribute conflict in an industrial network, Industrial Marketing Management **42** (2013), 1063–1073.
- [G⁺10] J. A. Goncalo et al., Can confidence come too soon? collective efficacy, conflict and group performance over time, Organizational Behavior and Human Decision Processes **113** (2010), 13–24.
- [IE14] J. Iorio and Taylor J. E., Boundary object efficacy: The mediating role of boundary objects on task conflict in global virtual project networks, International Journal of Project Management 32 (2014), 7–17.

- [Jeh97] K. A. Jehn, A qualitative analysis of conflict types and dimensions in organizational groups, Administrative Science Quarterly 42 (1997), no. 3, 530–557.
- [Mel11] C. Mele, Conflicts and value co-creation in project networks, Industrial Marketing Management 40 (2011), 1377–1385.
- [PB03] R. S. Peterson and K. J. Behfar, The dynamic relationship between performance feedback, trust, and conflict in groups: A longitudinal study, Organizational Behavior and Human Decision Processes 92 (2003), 102–112.
- [PS05] N. Panteli and S. Sockalingam, Trust and conflict within virtual inter-organizational alliances: a framework for facilitating knowledge sharing, Decision Support Systems **39** (2005), 599–617.
- [Wal95] J. A. Wall, Jr., Conflict and its management, Journal of Management **21** (1995), no. 3, 515–558.
- [X⁺09] D. Xanthopoulou et al., Reciprocal relationships between job resources, personal resources, and work engagement, Journal of Vocational Behavior **74** (2009), 235–255.