

# Co-creation in Public Service Innovation

## A review of how to encourage employee engagement in co-creation

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### ABSTRACT

The public service sector in Norway needs to innovate itself to meet coming challenges, like globalization, automatization of work tasks, and the sharing economy. Still, there is resistance to innovation and change in public services. Some proposed solutions to these challenges are employee-driven innovation and co-creation. Co-creation is difficult, and we do not know a lot about how to utilize participants to their full potential or how to keep participants from stepping down. By reviewing theory about factors that can influence engagement in co-creation this article seeks to investigate how employees of public services can be encouraged and motivated to participate in co-creation. The conclusion is that opportunity, ownership, good collaboration, autonomy and experienced meaningfulness are all important parts of letting participants reach their full potential as creative co-creators.

### KEYWORDS

Co-creation, co-design, motivation, employee-driven innovation

## 1. INTRODUCTION

The public service sector in Norway needs to innovate itself to meet coming challenges like globalization, automatization of work tasks, and the sharing economy (NOU, 2016: 3). Furthermore, the public sector will need to be an important driving force for innovation (St.meld.nr.7, 2014-2015). Still, there is resistance to innovation and change in public services both in organizational structure and culture (Nilsen, Dugstad, Eide, Gullslett, & Eide, 2016).

Recently, user, stakeholder, and employee involvement has become more and more important to designers and innovators (Allforsk, Handelsdepartementet, IRIS, NTNU, & Fiskeridepartementet, 2011; Schneider, Stickdorn, Bisset, Andrews, & Lawrence, 2012). This is especially evident in the

emerging approach of service design, and co-creation (Fry, 2016). E. B. N. Sanders and Stappers (2008, p. 6) explain co-creation as “any act of collective creativity.” An important subcategory of co-creation is co-design. It is an approach to design with stakeholders to capture latent needs and dreams (E. B. N. Sanders & Stappers, 2008).

What makes co-design interesting in regards to innovation in public services is that stakeholders (including employees) are included in the process as equals (Visser, Stappers, van der Lugt, & Sanders, 2005). This creates an opportunity to inspire creativity and ideation among employees, and fosters a political force within a service with the self-belief to transform practice (Bowen, Dearden, Wolstenholme, & Cobb, 2011). Hasu, Saari, and Mattelmäki (2011) write that if innovation competence is limited to professionals and accessed only by managers, there is a danger

of paralyzing not only the creative potential but also the engagement and well-being of front-line service personnel in innovation endeavors. Moreover, one of the reported long term organizational benefits of co-design is more support and enthusiasm for innovation and change among employees (Steen, Manschot, & Koning, 2011). However, little is being written on people's incentives to join in co-creative endeavors, and their experiences and well-being as learners (Hasu et al., 2011).

I believe that by looking into what motivates people to be innovative, we can get closer to more engaging stakeholder involvement in co-creation processes in public services. This may in turn increase the willingness to improve public services from within. Therefore, the goal of this article is to investigate what motivates and engages employees in co-creation processes, and what implications this has for the co-design approach. The reason this is interesting for design theory and research is that co-design happens in a co-creation setting (E. B. N. Sanders & Stappers, 2008). It follows that if the co-creation setting is executed poorly, then so is the co-design.

'Employees', in this article, is used to refer to every coworker in a service, from front-line coworkers of the service, to leaders and managers. 'Stakeholders' is defined as any and all parties affected by the product or service. Individual differences between participants of co-creation projects are considered to be outside the scope of this article.

In this article, I will first review relevant literature on the topics of co-creation, employee-driven innovation, motivation, and collaboration. Then I will discuss what implications the literature about employee-driven innovation, motivation and collaboration has for a co-creative service innovation process. When searching for articles I used Oria - the search engine used by NTNU's library and Taylor & Francis Online. If I could not find a referenced article through those, I sometimes used Google Scholar. I specifically used CoDesign - International

Journal of CoCreation in Design and the Arts a lot. Articles were often chosen because other articles had referenced them, or they had many citations. Case studies have been chosen on the basis that they were defined as co-design, and included employees of a service. All articles referenced to are peer reviewed.

## 2. CO-CREATION

E. B. N. Sanders and Stappers (2008, p. 6) explain co-creation as "any act of collective creativity." They suggest that co-design is a subcategory of co-creation, and refers to "the creativity of designers and people not trained in design, working together in the design development process." It is only recently that co-creation and co-design have replaced *participatory design*, which had existed for years and is still used by some as a synonym. The difference is majorly their historical context and ideology. E. B. N. Sanders and Stappers (2008) distinguish co-design from the user-centered approach in the sense that user-centered sees the user as a subject, while co-design sees the user as a partner. According to them, there are many different ways users are included, both in who is picked to participate and at which stage the co-creation is practiced. Co-creation at the early front-end of the design process gives positive, long-range consequences (E. B. N. Sanders & Stappers, 2008).

In co-design, designers invite stakeholders or potential future users as partners and as *experts of their experience* (Visser et al., 2005). Although, in order for participants to take this role, they must be given the right tools to express themselves (E. B. N. Sanders & Stappers, 2008). For participants to take on the role as *co-designers*, they will need a high level of passion and knowledge in a certain domain (E. B. N. Sanders & Stappers, 2008). As opposed to the classical user-centered design process, where the designer is the sole creator, the designer's role is now to provide tools that facilitates ideation and expression (E. B. N. Sanders & Stappers, 2008).

## 2.1 Co-creation in service design

According to Sangiorgi and Prendiville (2017) in their book, *Designing for Service*, service design can be defined as ‘the activity of planning and organizing people, infrastructure, communication and material components of a service in order to improve its quality and the interaction between service provider and customers’. The service design process can simply put be described as three phases: Exploration, creation and reflection, and implementation (Schneider et al., 2012) p. 122/123. The goal of the exploration phase is to gather information about the service, about experiences and challenges. In the ‘creation and reflection’ phase, the goal is to come up with ideas for solutions and improve them iteratively. Lastly, the implementation phase seeks to successfully implement the solutions resulting from the previous stages.

Service design is an interdisciplinary approach and is fundamentally user centered. Schneider et al. (2012) list five principles of service design thinking:

- User-centered: Designing through the customer’s eyes.
- Co-creative: All stakeholders should be included in the process.
- Sequencing: The service should be visualized as a sequence of related actions.
- Evidencing: The service should be visualized in terms of physical artefacts.
- Holistic: The entire environment of a service should be considered.

According to Schneider et al. (2012), service design utilizes the service user’s language as a common language, as a way to create a common understanding. Facilitating idea generation and evaluation in heterogeneous groups representative of your stakeholders is fundamental to service design. They also state that integrating stakeholders as early as possible in the project development process is required for a successful service design project. Building on these principles, many

service design methods utilize co-creation (Schneider et al., 2012).

## 2.2 Tools for co-creation

As mentioned before, E. B. N. Sanders and Stappers (2008) write that in co-design the ‘researcher’ should support the participants in generating insights by providing tools for ideation and expression. ‘Tools and techniques support the user taking the role of an experienced expert.’ New tools are made and tailored to each project, and they state that design skills are very important in the development of the tools.

E. B.-N. Sanders (2000) explains what she calls ‘generative tools’ or toolkits, as tools to catalyze, capture and collect users dreams and aspirations. Generative toolkits describe a participatory design language that can be used by participators in the front-end of design, so that they can imagine and express their own ideas about how they want to live, work and play in the future (E. B. N. Sanders & Stappers, 2014). Latent needs are often difficult to express in words, and therefore the toolkits are mainly visual. The toolkits can be made up of two- or three-dimensional components, ranging from photos, to words to small scale models of buildings. They can be designed to result in artefacts or make expressions of stories, either with focus on emotions, or meaning and understanding (E. B.-N. Sanders, 2000). Generative toolkits are used in facilitated workshops, and the artefacts, their descriptions, and enactments of their use, can be analyzed to find underlying patterns (E. B. N. Sanders & Stappers, 2014). They also point out that making cannot be separated from telling and enacting.

Visser et al. (2005) give insights into the emergent field of contextmapping, which is a technique to map peoples’ contexts, and how they experience them. The technique consists of five steps: Preparation, sensitization, sessions, analysis and communication. The result of the sessions are collages the participants made about their contexts. The sensitization is done to prepare the

participants for the group sessions. 'Sensitizing is a process where participants are triggered, encouraged and motivated to think, reflect, wonder and explore aspects of their personal context in their own time and environment'. This is done through a sensitizing package, which consists of little activities or exercises the participants are to do in the period before the session. Sensitization over a longer period (one or more weeks), prepares participants to access their experiences and to express and discuss these in the group sessions. In the sessions, generative tools are utilized. According to Visser et al. (2005), the quality of the information you get from the sessions depends greatly on the depth and length of the sensitization.

Schneider et al. (2012) present a range of tools to carry out a service design process, one of which is customer journey mapping. Customer journey maps show touchpoints between the customer and the service, on multiple channels and over time. It provides an overview of the total customer experience, and identifies both problem-areas and areas of opportunities. The way journey maps are made vary. They can, for example, be made by designers (Steen et al., 2011), or by participants (Bowen et al., 2011). It is also possible to add several layers of information onto the map, like adding emotions related to the different touchpoints (Bowen et al., 2011).

Experience-Based Design suggests to capture stories in the preparation for the collaborative workshops, and then have participants create 'emotional maps' from the stories. These stories and emotional maps are then shared in groups and fused to make a complete journey map with emotions (Bowen et al., 2011). Blomkvist and Holmlid (2009) note that stories play a significant role in the early stages of co-creation, for example in building a shared concept of the service. Bowen et al. (2011) writes that sharing stories created openness, helped build trust, empathy, and cohesion between participants, and alleviated tension (Bowen et al., 2013).

## 2.3 Employees' co-creation experience

*For some – it's an empowerment tool, for others it might be a source of stress if they are reluctant to any change.*

*Liene Kupca, Founder of Riga Colloco, on service design (Mager & SDN, 2016)*

There are many challenges in involving both users and employees, but little has been written about the outcomes of co-creation and the experiences of participants (Bowen et al., 2013; Hasu et al., 2011). Bowen et al. (2013) did a series of interviews after a co-design project done with the UK National Health Service. They investigated how the participants experienced the process. It was revealed that in general, participants began with mostly negative attitudes and expectations. This was due to disappointing experiences with previous projects, and an uncertainty of value vs cost. Another issue mentioned was time. Even though funding was provided for replacements, some employees felt like they could not justify the time spent on the co-design sessions. In public services, and especially hospitals, this can be a challenge. Culture and attitudes in the business also affects participation. The article reports that non-participating coworkers complained about the participants' absence from their regular work, resulting in a pressure to step down from the project.

From looking at several case studies about co-design, it appears that the main reason employees participate in co-creation sessions is that they were told to do so. The second, seems to be a desire to improve own work situation and quality of the service. Bowen et al. (2013) state that participants initially saw their roles as reporting problems in 'the hope that the researchers would do something about it'. In another case study, Steen et al. (2011) made the employees feel a sense of urgency to improve their service by giving them a 'teaser' before the workshop. In the way they communicated with the employees,

they made them experience how their customers felt in their current service.

Hasu et al. (2011) writes that one lesson learned from their case study was that service employees were eager to act as innovators of their own services when given the permission, time, space and tools to create innovations. However, they also note the challenge that different employees experienced the process very differently.

Lastly, there is the issue of whether the participants feel like they are participating, or just being consulted. According to Bowen et al. (2013), most participants experienced having a role of a consultant, rather than a designer or innovator. Although, in another article about the same project (Bowen et al., 2011), they write that some of the participants saw their role change from reporting problems to taking ownership of issues and potential changes.

### **3. EMPLOYEE DRIVEN INNOVATION**

Innovation is defined by Innoco and SINTEF (2017) as something that is new, useful and used, and that creates value. It can be new products, services, processes or business models etc.

Employee-driven innovation (EDI) is used as a common term for employees' active participation in development of new solutions (Allforsk et al., 2011). The Handbook in Employee-Driven Innovation (Allforsk et al., 2011) highlights success factors for employee-driven innovation. The most important themes mentioned are ownership to one's work, good teamwork, and good handling of proposed ideas. They write that what characterizes businesses that succeed with EDI is that they have engaged employees, are teamwork and development oriented, show trust, and are safe, autonomous, tolerant, and open.

#### **3.1 Good idea handling and decision making**

In the Handbook in Employee-Driven Innovation, they describe 'good idea handling' as being aware that different ideas require a different amount of effort to implement. Smaller suggestions for improvement does not necessarily need to be processed by the leaders, and bigger more complex ideas need more people involved. They suggest enabling the person who came up with the idea to participate in the development of it, if they wish to. Sometimes, the employees just want the problem to go away without them having to fix it themselves. Good idea handling also means that employees should not expect that every idea is developed, but it should be easy to suggest, talk about and consider ideas.

Johnson and Johnson (2014) state that you should match the method of decision making with the availability of time and resources, the size and seriousness of the decision, and the amount of member commitment needed to implement the decision. Still, the most effective way of making a decision is usually consensus (Johnson & Johnson, 2014). In an innovation process where decisions need to be made, the people who can make the decisions need to be involved and engaged. Bowen et al. (2013) writes as a result of their study they recommend placing a stronger emphasis on proactively engaging key decision makers.

#### **3.2 Resistance to innovation**

In their article, Nilsen et al. (2016) write about resistance to technological innovation in municipal health-care services. They list many different types of resistance, some of which influence an employee's motivation to participate. For example, there may be resistance in the management to participatory processes and changes, usually in the form of passiveness. Language barriers and cultural differences between the fields (developers and healthcare providers) lead to poor communication and willingness to understand. Finally, in the project, co-creation was perceived by the participants as something foreign, and to some degree as a threat to their professional identity. Hasu et al. (2011)

notes that including employees untrained in innovation in an intensive innovation process can represent a learning challenge and a significant well-being challenge to workers.

#### 4. 'CO-' FOR COLLABORATION

The core of co-creation and co-design is that people work together in new collaborations. Employees, users and designers that potentially have never met are expected to work together on creating something new (E. B. N. Sanders & Stappers, 2008). There are several issues in collaborating with others. The new relations are often fragile, not all participants feel safe, and as has been mentioned earlier there may be an issue of communication barriers (Hasu et al., 2011; Nilsen et al., 2016). The Handbook of EDI writes that teamwork is important because of the conversations, exchange of information, and consequently building of trust that happens when people work together (Allforsk et al., 2011).

Johnson and Johnson (Johnson & Johnson, 2014) have written a lot about the dynamics of teamwork and how it can be facilitated. According to them, effective groups need among other things clear, relevant goals. Goals are guides for actions; they motivate behavior, provide a basis for resolving conflicts, and are a prerequisite for assessment and evaluation. The majority of the members should feel ownership to the goals, and the goals should create positive interdependence. Positive interdependence is the belief that the success of one person is dependent on the success of the group, and cooperation does not exist without it.

Effective groups are characterized by, among other things, cohesion. It is advanced through inclusion, affection, acceptance, support and trust, while individuality is endorsed. Furthermore, there needs to be established two-way communication in the group, where the members communicate their ideas and feelings clearly and accurately. Conflicts of interest should be managed with problem-solving negotiations (Johnson & Johnson,

2014). Groups go through different stages of development, and it is the coordinator's responsibility to facilitate the groups through these stages.

Google did a huge study on teams that went over two years. They concluded that the 'who' mattered less than 'how' the teams worked together, and they identified five key dynamics for successful teams (Rozovsky, 2015):

- Psychological safety: Can the member take risks on the team without feeling insecure or embarrassed?
- Dependability: Can the members count on each other to do high quality work on time?
- Structure and clarity: Are goals, roles, and execution plans on the team clear?
- Meaning of work: Are the members working on something that is personally important for each of them?
- Impact of work: Do the members fundamentally believe that the work they are doing matters?

Out of these, psychological safety is the most important one, underpinning the others.

The study done by Bowen et al. (2013) concludes that Experience-Based Design (EBD) is effective in building collaborations between service users and service providers. EBD recommends sharing emotional maps to establish shared understanding between the participants (Bowen et al., 2011). This activity needs to be facilitated to promote understanding, and defuse defensiveness, as some might feel criticized and a need to defend themselves. According to Bowen et al. (2011), sharing stories created openness, cohesion, helped build trust, and someone later referred to there being a 'comradery' between the groups.

#### 5. MOTIVATION

##### 4.1 Self-determination theory

To be motivated is said to be moved to do something (Ryan & Deci, 2000a). Most theories about motivation views motivation as a unitary phenomenon, but it varies both in amount and in type. Self-determination theory (SDT) has provided empirical support for the idea that all humans have three universal psychological needs: Competence, autonomy and relatedness. These must be continually satisfied for people to maintain optimal performance and well-being, and has been showed to extend to workplaces as well (Deci & Ryan, 1985).

STD states that there are two types of motivation: Intrinsic and extrinsic. Intrinsic motivation is doing an activity for its inherent satisfaction, rather than a reward. It is the inherent tendency to seek out novelty and challenges, to explore, and to learn. Satisfying the basic psychological needs facilitates intrinsic motivation (Ryan & Deci, 2000a). A sub theory of SDT is Cognitive Evaluation Theory (CET). It specifies that unless a sense of autonomy is present, feelings of competence will not enhance intrinsic motivation (Ryan & Deci, 2000a).

Extrinsic motivation is doing an activity to obtain a goal that is separated from the activity itself. Extrinsic motivation can vary in terms of internalization and integration (Table 1). Internalization is the process of taking in a value or regulation, and integration is the process when individuals transform the

regulation into their own so that it comes from their sense of self (Ryan & Deci, 2000a).

The different types of motivation ranges from amotivation to intrinsic motivation, with extrinsic as a spectrum in between, as shown in Table 1 (Ryan & Deci, 2000a). External regulation and introjection involve more external influence and are considered forms of controlled regulation. Autonomous regulation has been demonstrated to lead to higher levels of performance, persistence, initiative, and creativity (Ryan & Deci, 2000b). According to SDT, contexts that support autonomy, competence, and relatedness have been found to facilitate greater internalization and integration than contexts that do not satisfy these needs (Ryan & Deci, 2000b).

STD proposes that internalization is more likely to happen when feelings of relatedness are present. You feel relatedness if you feel connected to, and cared for by significant others. Perceived competence also affects internalization. A feeling of mastery, or feeling capable of producing a desired effect, makes people more likely to adopt an activity. Feedback on positive performance has been showed to enhance intrinsic motivation (Ryan & Deci, 2000a). Finally, autonomy is a critical element for a regulation to be integrated. For people to feel autonomous they must grasp the activity's meaning, and align that meaning with their own goals and values, thus making

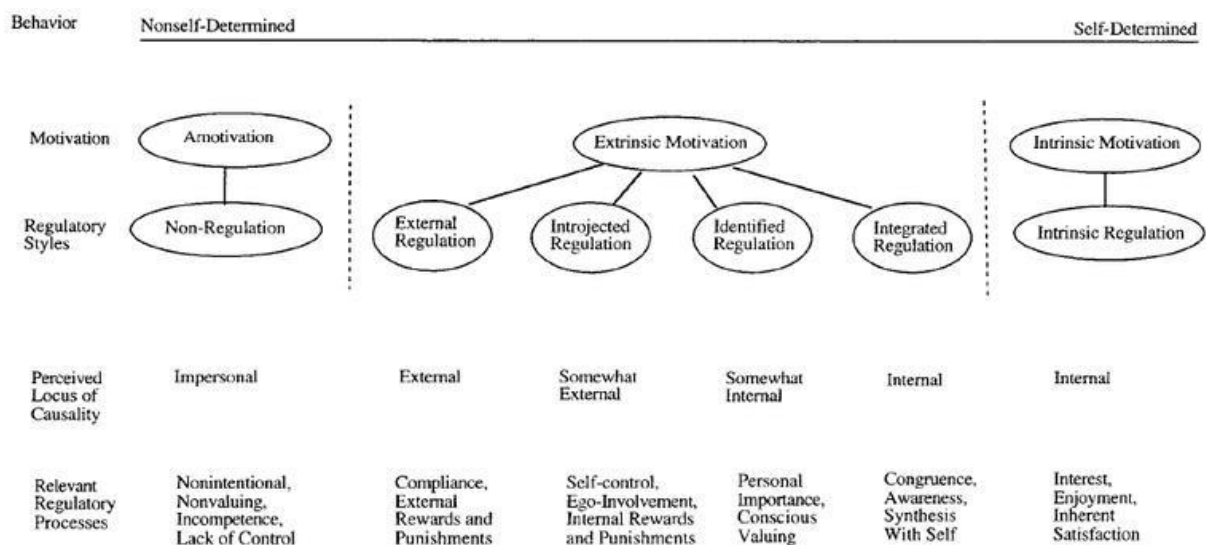


Table 1 (Ryan & Deci, 2000a, p. 61)

the activity feel meaningful. This is facilitated by a feeling of choice, and freedom.

## 4.2 SDT and work motivation

Research done on the work setting and organizations have found that the self-determination theory applies to that setting as well.

In the workplace, autonomous motivation has been shown to facilitate effective performance and well-being, whereas controlled motivation can diminish those outcomes, especially if the task requires creativity, cognitive flexibility, or deep processing of information (Gagne & Deci, 2005). Managerial autonomy support, defined as managers' acknowledging their subordinates' perspectives, providing relevant information in a non-controlling way, offering choice, and encouraging self-initiation rather than pressuring subordinates to behave in specified ways, has been found to be associated with employees' being more satisfied with their jobs, having a higher level of trust in corporate management, and displaying other positive work-related attitudes (Deci, Connell, & Ryan, 1989). Giving employees choices about task engagements, and providing meaningful rationales tend to enhance feelings of autonomy and facilitate internalization and integration. Giving people an overview over their own work in relation to the whole gives a greater sense of the importance of their work because they can see how the various parts of the jobs fit together into a meaningful unit. Research has shown that extrinsic factors such as competition and evaluations can be harmful to outcomes like creativity, cognitive flexibility, and problem solving (Gagne & Deci, 2005).

Optimally challenging activities have been shown to be highly intrinsically motivating (Danner & Lonky, 1981). Positive feedback facilitates intrinsic motivation when people feel responsible for their successful performance, by promoting a sense of

competence (Fisher, 1978). Negative feedback that decreased perceived competence was found to undermine both intrinsic and extrinsic motivation, leaving people unmotivated (Deci & Ryan, 1985). Structuring work to allow interdependence among employees and identification with work groups, as well as being respectful and concerned about each employee, may have a positive effect on internalization of autonomous motivation and work outcomes. SDT also suggests that the interpersonal style of supervisors and managers is important (Gagne & Deci, 2005).

## 4.3 Ownership

*By involving citizens and the service providers it ensures that both the provider and the user will have ownership over the service and that adoption of the new service is more likely.*

*Paul Thurston, Head of Innovation at PDR International Centre for Design & Research (Mager & SDN, 2016)p 80.*

Pierce et al. (2001) defines ownership as the feeling of possessiveness and of being psychologically tied to an object. They identify three routes to the feeling of ownership as being in control of, have intimate knowledge of, and having invested oneself into something. Investment of the self comes in many forms, like investing one's time, ideas, skills, and physical, psychological, and intellectual energies (Pierce, Kostova, & Dirks, 2001). Still, according to Rochberg-Halton (1984), it's not enough to just invest yourself in something, you also need to feel your own presence in its existence. To create ownership, people need to feel like their contributions are included in the outcome.

Ownership in turn gives an expectation of rights, and presumed responsibility. In short, it makes someone care about something, either



because they feel a responsibility, or because they feel a need to be in control of it. It can promote the willingness to change, if the change is self-initiated, evolutionary or additive, but it can also have negative effects. Under certain conditions (e.g. high need for personal control or ownership gained through control versus knowing), ownership can give negative outcomes, like failing to delegate authority and share information, which leads to poor teamwork, and cooperation (Pierce et al., 2001).

In the Handbook in EDI they explain ownership as the result of knowledge and responsibility. This means knowledge about the company, awareness of one's responsibility to improve one's workplace, and the knowledge that one's contributions matter.

## 6. DISCUSSION

In this section, I will discuss how the issues of employee-driven innovation, collaboration and motivation relate to each other and to co-creation in service design. The theories about employee-driven innovation, good collaboration and motivation are intertwined, and describe many of the same factors from different standpoints and with different terms.

Primarily, it seems like they agree: Autonomy, ownership, cohesion in groups, and experience of meaningfulness all lead to more well-being and better performance among employees. Not only are these vital parts of an engaging co-creation setting, but co-creation is also an excellent setting to generate these experiences. It is important, however, to emphasize that these are not something that can be given; they can only be facilitated and nurtured.

Based on the theories cited in this article, one way of describing participants' experiences can be to divide them into three levels of increasing experienced participation: Involved, engaged and internally motivated. To

illustrate these levels of experienced participation I have made a figure (Figure 1). The figure was constructed by considering the factors of possibility to participate, ownership, collaboration, and internal motivation, and realizing that some were prerequisites for others. Based on articles about co-design cases I saw that not all factors needed to be present to complete a co-design project. Still, from employee-driven innovation, motivation, and collaboration theory we have that engagement, work outcome, and well-being increases with internal motivation, ownership and good collaboration.

In Figure 1, the levels build on one another. 'Involved', here, describes participants that have been involved in the co-creation of a project in every practical sense, but not anything more. At this level, they may feel like they are simply reporting problems in the hopes that something will be done about them. 'Engaged' is meant to describe participants' behavior that is participative, collaborative, constructive, and open. 'Internally motivated' is meant to describe behavior that is self-initiating and curious, and that participants experience the project as inherently meaningful.

Figure 1 is a hypothesis based on the theory in this article and some personal experiences, and is a simplification of very complex relationships. I suggest that the figure should be understood in such a way that if participants are to stay engaged and motivated for a prolonged period, they need to be at the top of the pyramid, at least some of the time.



Figure 1 – made by Astrid K. Mogstad (2017)

Involving participants and enabling them to participate is fundamental to co-creation. Hasu et al. (2011) describe an enabling environment as to consist of time, permission, space and tools. Bowen et al. (2013) found that ‘time’ is both actually having time and feeling as if you can justify the time usage. Justifying the time spent is a balance between the felt importance of your own work vs. perceived importance of your presence in the co-creation project.

Maybe even more important than time is permission. Bowen et al. (2013) note in their conclusion that they would place a stronger emphasis on proactively engaging key decision makers. Nilsen et al. (2016) described managers’ passivity as one barrier to change. Decision makers and stakeholders need to be involved in a project for it to succeed. This involvement is referred to as ‘anchoring’ by Innoco and SINTEF (2017), and according to them nothing will change without it. You also need anchoring with employees if you are to change a service. That is partly why co-creation is an important principle of service design, because it gives anchoring with employees as stakeholders.

Still, time, permission, space, and tools alone will not necessarily make employees engaged in a project, so for the next level in the pyramid I have placed good collaboration and ownership to the project. When collaboration is required, as it is in co-creation, good collaboration is as much about minimizing

process losses as it is about maximizing process gains. Ownership gives a feeling of responsibility towards something, and ownership facilitates anchoring (Innoco & SINTEF, 2017; Pierce et al., 2001).

Co-creation usually requires collaboration between people who have never worked together before (Schneider et al., 2012), which can pose a challenge. As stated by Johnson and Johnson (2014) and Rozovsky (2015), a team’s efficiency is dependent on the team members’ well-being, in terms of cohesion and psychological safety, among other things. Important characterizations of efficient teams are clear goals, ownership to the goals, positive interdependence, common understanding, and two-way communication. Goals, common understanding and communication are all important to make the team pull in the same direction, and spend less time and frustration on misunderstandings. Goals should be optimally challenging to facilitate for experienced competence. Good collaboration is one way to facilitate for relatedness, and ownership to the goals facilitates experienced autonomy, both central to our internal motivation (Ryan & Deci, 2000a).

The third level in the pyramid describes participants that are more or less internally motivated to work on the project. The reasoning behind this level is a combination of SDT, having participants taking the role of co-designers (E. B. N. Sanders & Stappers, 2008), and Google’s description of efficient teams. E. B. N. Sanders and Stappers (2008) write that participants who have passion and knowledge in a certain domain can certainly become co-designers. Rozovsky (2015) reports that in efficient teams, members feel like they are working on something that is personally important to them, and believe that the work they are doing will have an impact. Self-determination theory states the same about autonomy and internal motivation. Internal motivation is reliant on a feeling of autonomy, and autonomy is partly facilitated by experienced meaningfulness and experienced impact of work. Other things that facilitate

autonomy is experienced choice, freedom, and self-initiation. Employees that have ownership to their job can be skeptical to change, but if it feels self-initiated and additive they may be more willing to welcome change (Pierce et al., 2001). Internal motivation is also reliant on experienced competence, so the co-creation sessions should facilitate for this as well.

## 6.1 Challenges

It follows that creating an optimally engaging co-creation setting requires many things to succeed, and is not necessarily straightforward. We now have an idea about what we want to achieve, but how to get there will be hard to manage, and expensive in the form of time, money and other resources. It is dependent on involving the right people at the right time, both in terms of power and skills, while still making sure that progress is being made.

As noted by E. B. N. Sanders and Stappers (2008), co-design threatens the existing power structures by requiring that control is given to end users and stakeholders. It can be difficult for those who are successful while being in control to give it up or imagine that a new way of doing business can also be successful. E. B. N. Sanders and Stappers (2008) claim that new generations have an easier time in distributing and sharing control and ownership, largely because of the internet which has democratized as well as globalized the world by giving a voice to people who were previously not part of the conversations. Still, it will take some time before the majority accepts that everyone can be involved in idea sharing.

Then there is the issue of avoiding disappointment. In the front-end of design and early innovation processes, one can never truly know if the project will result in a desired outcome. If a project delivers less than what was hoped for, participants can experience disappointment. We are colored by our earlier experiences, and having been disappointed tends to lead to cynicism and amotivation

(Bowen et al., 2013; Henriksen, 2017). As an attempt to lessen the possibility of disappointment, Bowen et al. (2013) suggests to manage expectations, but managing expectations might negatively affect the felt impact of the work, which leads to less felt autonomy and motivation (Rozovsky, 2015; Ryan & Deci, 2000b). The challenge of avoiding potential disappointment while still maintaining motivation will be important to investigate in the future.

In this article, employees have been addressed as a homogenous group. However, the truth is that different people experience the same things differently (Hasu et al., 2011). We do not know a lot about how they respond differently, why, or what can be done about it, making this an area for future studies. It seems, either way, that to successfully optimize a co-creation session, good tools and facilitators will be vital (Fry, 2016).

## 6.2 Thoughts on how to advance in the levels of participation

In this section, I will restate some of the principles discussed in this article, and provide some ideas as to how one could try to achieve the desired outcomes. Unless stated otherwise these ideas have not been tried out and are merely suggestions based in theory and personal experiences.

Ownership comes in three ways: Being in control of, having intimate knowledge of, and having invested oneself into something. Early involvement of employees as stakeholders can result in ownership to the project, because being involved in the project from the beginning will make it possible for them to get ownership through all of the three routes. Since knowledge gives ownership, one idea could be to inform the participants about the project as a whole and about their part in it. Co-creation inherently facilitates ownership in the way that the participants invest time and effort into the sessions. It is also possible to provide knowledge and having the participants invest effort before the sessions have even started, for example by providing

information through mail and using sensitization packages or other types of 'homework'.

As mentioned, ownership to goals is important for felt autonomy and positive interdependence (Johnson & Johnson, 2014). One way of giving ownership to the goals is to let participants participate in making the goals.

It has been shown that providing verbal positive feedback facilitates feelings of competence when people feel responsible for their successful performance (Gagne & Deci, 2005). Negative feedback decreased perceived competence. Tangible rewards based on performance, competition, and evaluations generally have negative impact on intrinsic motivation. We do not know whether acknowledging participants as experts of their own experiences promotes feelings of competence, but it could be interesting to investigate if there is a relationship there.

To facilitate for autonomy, firstly the participants should feel like they are choosing to join the co-creation project. If they cannot choose themselves, it can be constructive to give them a rationale as to why they should. Autonomy supportive management is described as understanding coworkers' perspectives, providing choice, encourage their initiative, and provide feedback in an autonomy-supportive rather than controlling way, which could also be utilized in a co-creation setting (Gagne & Deci, 2005). One example of how to provide choice can be taken from Bowen et al. (2011). After identifying several areas for improvement in the exploration phase, they divided the participants into groups that each had responsibility for one of the areas and let the participants choose which group they wanted to be in (Bowen et al., 2011). Other things that promote autonomy is feeling like the goals match personal goals and values, and believing the work will have an impact. One idea, if participants are skeptical to the format of the project, could be to give the participants examples of what earlier projects

like these have achieved to illustrate the possibilities. Acknowledging participants as experts of their experience should also facilitate autonomy.

Good collaboration is good not only for the teams' efficiency but also for felt relatedness. Gagne and Deci (2005) write that relatedness is facilitated by identification with a work group, positive interdependence, and feeling cared for. In the review of the NHS project, they found that sharing stories made the participants recognize commonalities and increased cohesion in the groups (Bowen et al., 2013). Story sharing was also found to give a common understanding, which is important for good collaboration. Schneider et al. (2012) write that they, through user journey maps, utilized the users' language as a common language to create a common understanding. They also note more generally that using visual tools can make ideas more tangible, less complex and support communication in the group.

While doing sessions, it will be necessary to facilitate, both to keep the conversation on topic and to facilitate for psychological safety. There is one example of this mentioned in the NHS project. The participants were doing an exercise where they shared their experiences with the current service. One of the participating employees felt criticized and got defensive. The facilitators defused the situation by restating the aim to understand how it feels to be a patient or member of staff and not to apportion blame.

## **CONCLUSION**

This article has investigated the relationship between co-creation and co-design, employee-driven innovation, collaboration, and motivation to try to find out how co-creation project in service design can be made more engaging and successful.

The theories cited in this article seems to be in agreement as to what facilitates internal motivation and good teamwork, and that this encourages engagement, creativity and well-being. Providing time, place, permission and

tools makes it possible for employees to be involved in co-creation projects. Ownership and good teamwork increases engagement, makes the project more efficient and increases the chances of having the solution implemented. Still, to have employees be internally motivated to work on the project they need three psychological needs satisfied, which is competence, autonomy and relatedness. Internal motivation will only occur in autonomy supportive contexts, and one way to facilitate a sense of autonomy is to align the goal of the project with the personal goals and values of the participants.

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