Guiding Integrated Service Delivery: Synthesizing and Embedding Principles Using Role-Playing Games

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Abstract: Public agencies around the world are increasingly supplementing their service delivery channels with online services and continue to establish several policies and rules for improving service delivery. Such policies and rules are however based on customer oriented management paradigms without any consideration of complex customer interaction processes and staff experiences. Consequently, these policies and rules are deemed unrealistic and are often not picked up by employees. This paper reports on the synthesis of service delivery principles by employing a participative role playing game approach at a public agency. Service principles can be used to guide the design, implementation and execution of integrated service delivery. A role playing game refers to a research approach in which employees play a certain role and follow a script to simulate a range of customer interactions. Recognizing that customer experience is formed across several moments of contact with the agency through multiple channels, the game proved to be a useful instrument for both synthesizing principles and gaining bottom up commitment for embedding the principles within the public agency. We found that after the game, the employees that helped to synthesize the set of eight principles have also become active ambassadors for the principles within their respective departments.

Keywords: eGovernment, integrated service delivery, multi channel service delivery, gaming, role playing, principles

1. Introduction

The pressure to obtain better value from public administration information technology investments is growing and the debate as to how to achieve this is increasingly important (Bannister 2001). Consequently, many eGovernment initiatives and research focus on improving (online) service delivery (Klievink & Janssen 2009; Layne & Lee 2001). In many cases a central element of such improvement programs is the modernization of services through process redevelopment and the adoption of new information technologies and systems (Daniel & Ward 2006). As such, autonomous agencies are cooperating with each other to provide a single point of contact. In addition, they are creating new service delivery channels to serve their customers (i.e., constituents). Customers can nowadays use a variety of channels to communicate with the government and they are able to select their preferred channel given their needs and circumstances. While traditional channels such as front desks, telephone and mail remain in place, the Internet offers several opportunities for governments to expand and improve service delivery to their constituents (Chen, 2002). For example, a governmental service might be requested using a website, whereas status information is obtained via the telephone. In this way Integrated Service Delivery (ISD or "joined-up services" is created in order to remedy "the fragmented landscape of public administration" (Phythian & Taylor 2001, p. 579).

ISD is the process of bringing together and fitting together government services so that citizens can access these services in a seamless fashion based on their wants and needs (Kernaghan 2005). While multiple, often technical, solutions such as citizens shops (De Araújo 2001) and portals (Daniel & Ward 2006) have been suggested for facilitating ISD, there is a dearth of research on guiding the design, implementation and execution of ISD. The development of systems and executing ISD needs some guidance to make the various stakeholders in the development and execution process aware of what is expected by customers and realistic from the perspective of the staff. The range of stakeholders involved in ISD includes departmental administrative units, departments as a whole, entire governments and business firms. Service delivery principles are a means to guide the design and customer interaction choices of these stakeholders. Relatively simple and easy to understand service delivery principles can be used to guide behavior of architects, designers, system developers, programmers, administrative staff and so on. All staff can then use these principles as a basis to

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design and execute their business processes and during customer interactions. The use of principles for designing service systems are commonly used in the design of systems (Richardson, Jackson & Dickson 1990). As such, the goal of service delivery principles is to direct the behavior of employees using information technology within an organization. Ideally, principles should reflect the strategy in a manner that it is unrelated to the specific technology or persons (Perks & Beveridge 2002). Principles emphasize "doing the right thing" but they do not suggest what means should be given to accomplish this goal. In this way, the creativity of the employee is not ruled out as they have some freedom on what means should be used. Principles are intended to be useful over a pre-longed period of time and not dependent on the daily practices. Despite its significance, there is a lack of such principles for a lot of governmental organizations. Moreover, while the use of principles for addressing complex problems is not uncommon in literature, contributions have been silent on suitable methods for synthesizing principles. Research methods for synthesizing principles, without involving local knowledge and gaining commitment from employees, might not result in the desired adaption and acceptance of the principles. As such we propose an innovative research method based on participative role-playing.

The objective of this paper is to synthesize ISD principles by developing a research method based on a participative role-playing game. The role-playing game should ensure that participants in the game can feel free to think, hence employing their in-depth knowledge of service delivery processes for the development of service delivery principles. Furthermore, this participative approach enables the derived principles to immediately be inputted in the game to determine its implications and gain commitment under employees. The basic idea of pursuing a participative approach is that this approach should lead to more creative proposals and more commitment of the participants to the principles. First, we developed the role-playing game and tested the game with students and academic staff. After successfully passing the pretest, the role-playing game was hosted in a large governmental agency in the Netherlands. This agency is concerned with financing education for Dutch citizens and managing the related information.

This paper is structured in six sections. Section 2 discusses the complexities in achieving ISD and the need for service delivery principles. In the third section of this paper, we briefly elaborate on the use of role-playing games in research. Next, an overview is given of the research process of the role-playing game in section 4. Section 5 presents the results of the session at the public agency. Finally, several conclusions are drawn and recommendations for further research are given in section 6.

2. Theoretical background

2.1 Complexity of integrated service delivery

The introduction of ISD requires considerable transformations and new capabilities (Klievink & Janssen 2009). In the past, a wide variety of initiatives were undertaken to integrate services across fragmented departments and organizations. Furthermore, advances in Information and Communication Technologies (ICT) have resulted in an online presence of many government organizations. Examples include services over the Internet or via unstaffed kiosks. Alongside this online channel, traditional channels (such as the telephone and service desk) remain in place. As a result, citizens and businesses now use a variety of channels to contact a public agency. This multi-channel service delivery situation introduces a new set of challenges and questions for managers and service delivery staff. The situation is marked by a wide diversity of channels, departments, systems, processes and responsibilities which should operate in concert to ensure ISD. Separate development of different channels for a single service (multi-channel delivery) has resulted in inconsistencies such as different data formats or interfaces. To overcome the drawbacks of multiple-channel service delivery, the different channels should be integrated and coordinated. Creating ISD has advantages for both government and its clients. On the one hand, government organizations want clients to use the most efficient and effective channel available. On the other hand, governments have to keep all channels open to ensure equal access for all.

A key component of ISD is that new systems are needed, business processes need to be adapted and employees need to develop new skills One of the main problems in service delivery is the fragmentation in which each department works on their own without considering other departments. Furthermore information system development and user needs are often not aligned. Governments have to deal with the problem of fragmented and smaller agencies within constitutional, legal and jurisdictional limits (Scholl & Klischewski 2007). This fragmented and ‘siloed’ government structure

complicates the easy communication among persons in each silo, which might result in customer dissatisfaction. Service delivery channels might not be developed based on a shared vision and might have different objectives. For example, whereas one channel might focus on customer intimacy, another channel of the same organization might focus on efficiency. Furthermore, there might be a gap between strategy and operational processes. Strategies are high level and can be interpreted and implemented in many, sometimes even conflicting, ways. Also, strategies are often formulated by politicians and often express the political ambition without given attention to limiting factors like the scarce resources path dependencies, legacy systems and limited time of a public agency.

Due to the fragmented structure, organizations need to pursue several strategies to employ ISD effectively. However, there are often a large number of departments and persons involved that interact with each other. Each customer and employee has a specific mindset and, in most cases, no single actor has an overview of the total process. These characteristics complicate the creation of ISD. Coordination becomes particularly difficult in organizations that have to process millions of transactions a year while having a huge number of employees and systems involved. Coordination of channels is further complicated by the amount and diversity of services and the number of exceptions that need to be dealt with. As such, ISD refers to a complex situation in which many actors are involved, often looking primarily at their own concerns and disregarding the larger picture resulting in lower service level. Yet, there is a mounting need for coordinated management in which all parties carry out a joint effort as each person has its own perspective and interest.

2.2 Insights from literature on service delivery

In the field of improving customer interaction, there is a range of scientific contributions often based on a broad Customer Relationship Management (CRM) and service marketing literature. Given the purpose of this paper, we instead focus on abstracting some insights from previous work to help us shape some principles in the workshop discussed later. From literature, we found that two schools of thought dominate the service improvement landscape: customer orientation and employee orientation. Customer orientation scholars suggest that meeting the customer's expectations and reduce service delivery times are the most effective means of improving service delivery. The main philosophy here is that management must understand what consumers want and how they will evaluate the delivered service as an input to service delivery system design and quality control activities. Marketing research also puts much emphasis on customer centricity as culture within the department (Kotler et al. 2008). In addition, customer orientation studies advice to listen to the customer and include quality of service measures as part of employee job performance criteria.

Recent CRM studies (i.e., Bettencourt & Ulwick 2008; Plakoyiannaki et al. 2008) have moved away from only looking at what the customer wants to at what the employee needs (employee orientation), stressing the importance of tasks clarification, social appraisal and performance feedback as interventions from managers within departments. The idea behind employee orientation is that making staff feel more valued motivates them to pull out all the stops and provide a better service to customers outside. While previous work provides some useful insights for improving service delivery from a top down managerial intervention approach, we found very few studies contributing on improving ISD from via a bottom up approach. While the value of training is often underlined (Macaulay & Cook 2008), little insights are provided on how to develop and execute sessions that help employees in understanding and improving service delivery processes. Moreover, many of the insights discussed above suggest improvements on system or macro level (agency wide), often driven from a business efficiency perspective. When looking for principles that can guide employees in ISD and customer interaction processes, there is definitely a gap in existing literature.

2.3 Top-down versus bottom-up principle synthesis

When looking for ways to synthesize and implement principles within an organization, one can either follow a top-down or a bottom up approach. When following the top down approach, managers first derive policies and rules from theoretical paradigms or by consulting experts, and then demand that these are picked up by their staff. Although formulating principles based on such policies and rules might give direction to the behavior and actions of actors, a strategy is typically formulated on a high-level and refrains from providing practical guidance to actual activities that need to be performed by the people who actually have to execute the processes. Characteristics like variety and interdependence of actors seriously hamper such kind of top-down management strategies (Chisholm 1989; De Bruijn & Ten Heuvelhof 2000; Kenis & Schneider 1991; Powell 1990). Treating employees

as hierarchical subordinates, so that they need to obey commands and accept detailed controls of implementation, fails to respect the interdependencies between actors. In that sense, the quality of decisions often depends upon the knowledge and relations of all actors (Axelrod 2006; Hofstadter 1983). The subordinates would not have an incentive to work according to the derived principles and they might not change their behavior accordingly as a result. In addition, they might view the principles as unrelated to their work.

As an alternative approach, principles can be synthesized from bottom-up together with employees. In this way, the principles not only draw on insights from literature, but also on examples and best practices of employees in this process. This approach draws on the prove that front-line employees can accurately predict consumer service expectations (Schneider & Bowen 1985). In many cases because of their physical and psychological closeness to customers, service employees can more adequately identify customer preferences than management (Langeard et al. 1981). Consequently, a bottom up approach allows managers needs to actively solicit for the input of customer contact people and first-line managers through formal reports and face-to-face communication. In this way, principles foster both customer orientation and employee orientation. Principles synthesized in this was can be used as an instrument to give direction to the activities of the employees; they are particularly useful when guidance is needed for dealing with complex problems involving many parties. In the next section we elaborate on how we employed gaming as an instrument for the bottom-up synthesis of principles.

3. Research approach

3.1 Background on gaming as a research approach

Since the early 1980s, the concept of gaming is often suggested as an approach that allows researchers to capture interactions between actors and immediately demonstrate the effects of service principles. Greenblatt defines a game as “a system in which players can interact with and influence an open model” (Greenblatt 1981). Duke mentions that the purpose of simulation games is “to provide basis for organized communication about a complex topic” (Duke 1980). Similar to the action research methodology (Avison et al. 1999), gaming allows researchers and professionals to interact through several participative instruments such as brainstorming, collective debriefing and balloting sessions. Since coordinating several channels in large governmental agencies can be seen as a complex process, the use of a game to simplify this reality can result in a better understanding of the situation among the participants.

Janssen and Klievink (2010) identify three main methods based on a scale from high level of computer involvement to a high level of human involvement; simulation has a high level of computer, but a low level of human involvement, whereas this is the other way around for role-playing games. Serious games are in the middle of these two (Janssen and Klievink, 2010). These tools are becoming increasingly popular in government efforts to transform, because real-life experimenting is often too costly and risky. Collaboration and interaction can be facilitated by tools such as gaming and simulation. Modeling and simulation use abstractions of processes to analyze and assess the quantitative and qualitative impact of alternative policies and arrangements (Eldabi et al. 2002). Role playing gaming is one of a number of tools that can be used in various projects in government. The computerized version of a role-playing game has become a popular gaming genre; however, in this article we will discuss the traditional role-playing game enabling high levels of participation. Oomkes (1992) defines a role-playing game as a “replication of a work or learning situation”. A role-playing game can be performed as a play by several actors in which the work situation of a governmental agency is imitated. There are several other reasons for choosing a role-playing game as an appropriate intervention for deriving service delivery principles:

- A safe environment for testing service delivery principles without having to change the real situation;
- Building awareness among participants (Huizinga 1971): a role-playing game can make the target group aware of the service delivery problems;
- A fun way to interact with participants (Harteveld 2007)*:* a role-playing game is likely to cause more interaction with participants which can result in more understanding and acceptance of the service delivery principles;

- Mobilize tacit knowledge (De Bruijn & Ten Heuvelhof 2000). One of the expectations is that a role-playing game can be used to mobilize tacit knowledge (knowledge that cannot be transferred to another person by verbalizing or writing the knowledge down);
- Committing the participants to the outcomes of the role-playing game. Following the perspective of Salen and Zimmerman (2004), the ultimate goal of designing a game is that it has significant importance for the target group. That is why a role-playing game should contribute to a better understanding of the current situation and also to improving this situation with respect to service delivery.

Disadvantages of games is that they are time consuming (both for participants and facilitators) and require considerable human resources (Bajnath et al. 2010). Thanks to some negotiations with governmental agencies and the help of some colleagues we were able to pre-test and conduct our role playing game.

Figure 1 outlines the participative, game-based research approach for synthesizing service delivery principles. First, literature about ISD is analyzed for insights we could inductively draw upon for designing our game. The actual synthesis of principles is a creative stage where the problems are further elaborated by role-playing and refined in iterative cycles till the service principles are generated. This phase is executed using a workshop and is highly interactive and depends highly on the participants. To synthesize principles, we used two collective debriefing sessions followed by brainstorming sessions in which we triggered the staff to think about problems and opportunities regarding ISD. The combination of role-playing and brainstorming allows the participants to think freely and bring their in-depth (experience gained) knowledge on service delivery processes to the table. This approach also stimulated the staff to share examples of improper customer interactions and means for handling them. Once the principles were synthesized, they can be demonstrated by employing them in the second round of the role playing game. In this way the impact of the use of the principles can be demonstrated and discussed afterwards. The research was conducted with employees at a large Dutch governmental agency in the Netherlands. In total nine employees of this organization attend the workshop and five researchers observed and facilitated the session. In the next sub-section, the design of our role-playing game is discussed in more detail.

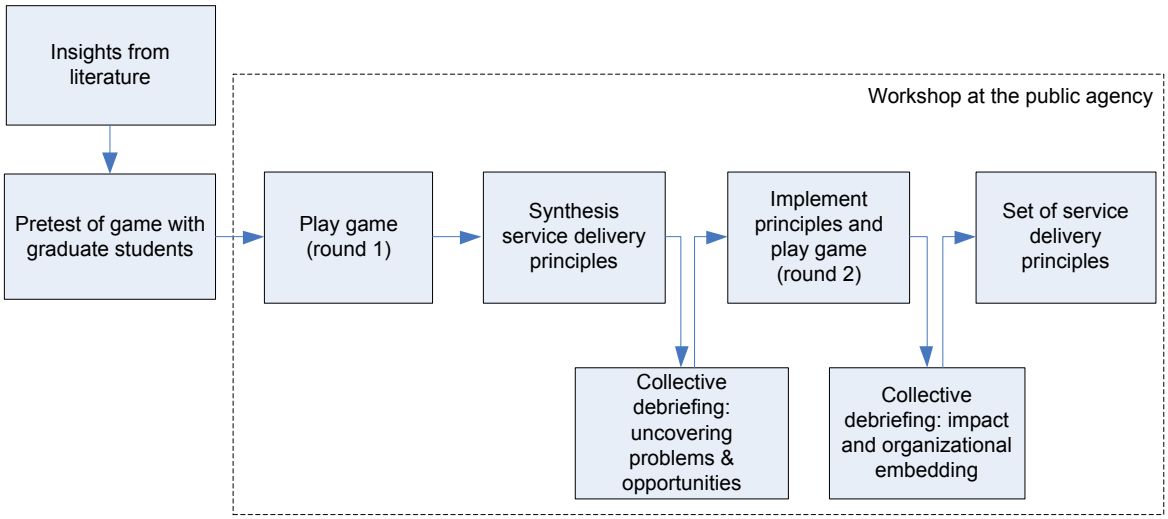

Figure 1: Overview of the research approach

3.2 Game design

The session has to be limited to four hours as the availability of the participants was limited, meaning that they had to return to their post as soon as possible. We also decided to limit the session as such to avoid that participants would not get distracted or tired of the. The session structure is as follows:

- *Introduction:* some background information on the project and on the role-playing game
- *Role-playing game 1:* the script including the flaws is executed.

- *Brainstorm session 1:* participants take part in a brainstorm session in which first the typical flaws are discussed and thereafter improvement points were defined. Each participant had to write down their improvement point on a Post-it and had to stick it on a flip-over.
- *Break*
- *Role-playing game 2:* A new game is executed, while taking the improvement points into account
- *Brainstorm session 2:* based on the game-playing experiences and evaluation of the suggested improvements in the second game a set of *service delivery principles* set of principles is derived. Each participant had to write down their service delivery principles on a Post-it and had to stick it on a flip-over. Thereafter a discussion followed in which overlapping principles were clustered and suitable names for the service delivery principles were determined.
- *Concluding remarks:* service delivery principles are presented and are being put forward as guidelines for possible policy measures.

Having elaborated as gaming as a reteach approach, the next section presents the game we hosted at a public agency in the Netherlands.

4. Game at a public service agency

In this section, we describe the set-up of a role-playing game for deriving a set of service delivery principles that can improve the service delivery of governmental agencies. The role-playing game consists of the roles played, the game scripts and an overview of the setting in which the role-playing game is hosted. In the next section the roles that are part of the role-playing game will be discussed.

4.1 Roles

The interaction between customers and employees is a key aspect as the aim of the game is to derive principles for improving service delivery. To mimic this interaction accordingly, the employee is allocated to the frontend or the backend. Ideally, in service systems, the frontend contains those people interacting with customers, whereas the backend involved those employees that have no direct interaction with customers. Whereas simple requests can be (directly) answered by the frontend, more complicated need the involvement of one or more backend departments. This difference illustrates that different types of employees often have to collaborate to serve the customer. In addition, the more detailed and in-depth expertise of backend employee is often needed in the service provisioning process. The interactions between front- and backend are key to the service provisioning.

Figure 2 below shows the overview of the various roles and the interactions between customer, frontend and backend.

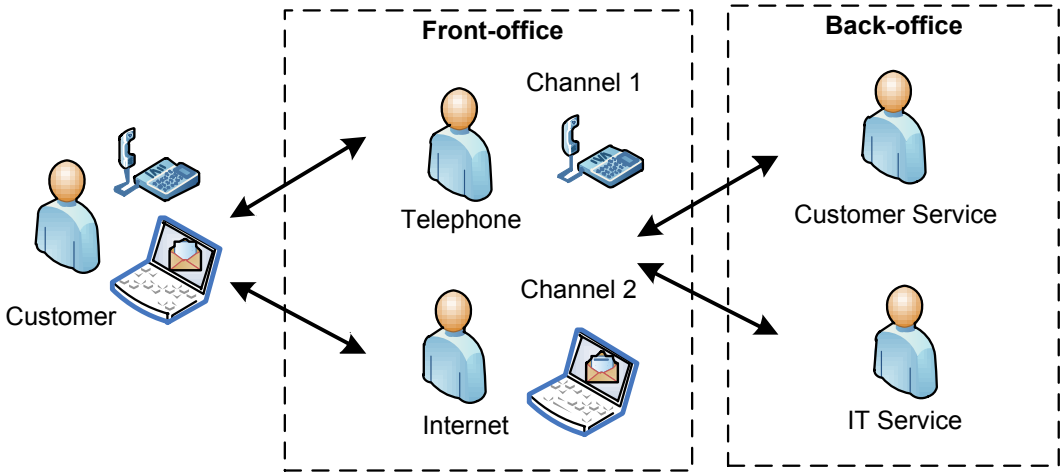

Figure 2: Overview of the roles and service delivery interactions

For each of the roles, the following descriptions were made:

- *Customer:* the customer of a public agency is either a citizen or a private organization. In this game, the role of customer will be played by a student who has a request for the agency.

- *Front-office (telephone):* this employee answers questions of customers who contact the public agency by phone. Whenever necessary, the frontend can consult the backend for answers to more difficult questions.
- *Front-office (Internet):* this frontend employee answers emails sent by customers. He/she can also check with all backend in case he/she cannot answer the question directly.
- *Back-office (customer service):* the backend employee on the customer service department has general knowledge on customer-related questions. He/she also has access to several information sources so that difficult questions can also be answered.
- *Back-office (IT service):* an IT service employee has detailed knowledge on the IT services this agency offers. Frontend employee can ask this role for detailed answers with respect to IT issues.

Each role can perform a number of tasks and all kinds of interactions are possible between roles. These tasks and interactions are captured by the scripts in the next section.

4.2 Scripts

Two separate scripts were designed in which the same work situation is imitated. The first script contains several flaws and inefficiencies in the service delivery of the governmental agency. These interaction flows and hurdles were determined by analyzing past email interactions between citizens, the frontend and backend. The organization under study kept records of email traffic which were used as an input. The main focus was on finding of examples in which problems arose. The problems were classified and it was decided to include the following flaws:

- A lot of repeated communication between customer and different frontends (i.e. the customer has to mail the frontend, does not get a reaction where after the customer decides to call);
- Inefficiencies in connecting the customer with the backend: the wrong backend is chosen by the frontend (i.e. backend IT service is chosen for changing the postal address). Frontend and backend do not know each other;
- The question of the customer is ignored by the frontend (the employee gives too much irrelevant information instead).

The next section will discuss the results of playing the game at the large governmental agency under study.

5. Results: Eight service delivery principles

The game was played at the location of a large government agency. After performing the first script, it was observed that all participants could relate themselves to the employees in the script, as the participants indicated that they encountered similar problems in their real-life work situations. During the session the participants were asked to propose service delivery principles. In the final part of the role-playing game a long list of principles was made by all participants. This list was reduced by integrating a number of principles and removing irrelevant principles Table 1 provides an overview of the principles. In accordance with the practices of The Open Group Architecture Forum, principles should be accompanied by a brief explanation of the rationale and implications of following the principle (TOGAF 2004). As such, the middle column of Table 1 contains an explanation of the problem the principle addresses and the rationale for using the principles, names, whereas the right column discusses its implications. The rational contains the benefits the use of the principles might bring to the governmental agency and its customers.

Table 1 outlines eight principles for ISD. These principles balance both customer orientation and employee orientation and were synthesized together with the staff of a public agency. The brainstorming sessions helped to further sculpture these principles into ‘easy to understand and remember’ guidelines. By abstracting from reality, the role-playing game provided insights into the problems the staff faced in their day-to-day work. The role-playing game was regarded as a fun and interactive way in which typical service delivery problems were clarified and used to synthesize service principles. Because the role-playing game did not *directly* criticize the performance and work situation of the participants, it was easier for them to share their positive and negative experiences and suggest possible improvements. The participants were satisfied with formulating service delivery principles instead of formulating detailed work prescriptions. The level of abstraction enables employees to interpret the principles and give meaning to these principles in their own way. This gives them the freedom to have their own working practices and at the same time have a clear direction.

The comments of the participants confirmed our starting point that an approach based on a role-playing game would lead to more creative proposals and improved commitment to the principles of the participants. The service delivery principles serve as a prescriptive guide for other employees in the governmental agency. The idea is even to create a small leaflet with the principles on it and distribute this leaflet to all employees. Also the service delivery principles will become part of the training of new employees. The employees who helped synthesize these principles also become the ambassadors of these principles in their own department. Finally, role playing games are now also considered as an option for the training of new employees.

Table 1: Overview of principles synthesized using the role-playing game

Principle	Explanation and rationale	Implications
(1) Minimize the number of contacts per customer	The number of employees that a customer needs to interact with to achieve their goal needs to be kept to a minimum. The rationale here is that when customers contact an agency, they are more satisfied when the first person they speak (telephone) or interact (email) with is able to solve their problem. In many instances, more than one contact is too many. To the customer these can be very stressful situations.	Following this principle will reduce the efforts required of customers, the need to repeat the story over and over again, and the possibility of getting conflicting messages or instructions.
(2) Strive for the full service experience	Multiple steps might need to be taken by the customer to get an answer. These steps should be anticipated in this way providing full and complete answers to the customers. Customers might get frustrated when they have to ask for certain information again. In addition, repeating questions are expensive and it is better to give more information than is asked for than having another question.	By thoroughly mapping the goal a customer is trying to achieve, a employee can discover opportunities for helping the customers to achieve their goals.
(3) Provide a helping hand	The participants agreed that in many cases, the wrong backend department was involved as frontend service employee did not know which department could answer which questions. More mutual contact between colleagues is desirable so that everyone knows who he/she can approach for which question and they start sharing knowledge.	Following this principle will result in more questions that can be directly answered by the frontend.
(4) The customer is innocent, until proven otherwise	Nobody benefits from 'the blame game' and even though the customer is not always right, the service delivery process benefits from an 'innocent until proven guilty' approach towards customers.	Following this principle will make the customer feel more valued and avoid going into the realm of blaming.
(5) Direct to the website first	The advantage of the Internet is the 4hrs, 7days a week access and can provide an immediate answer without having to wait. Email and phone calls are expensive and generate a lot of work, whereas many simple questions can be answered by going to the website and logging on in a secure environment.	Following this principle will reduce the load on the other (more expensive) service delivery channels. By making customers aware of this services, they can choose the appropriate communication channel based on their situation.
(6) Plan ahead	Engage with customers and help them proactively. Customers might come up with a question, which does not reflect the real need they have. If the problem is analyzed by asking some key questions, the real customer request can be answered.	Following this principle will please customers more and has also the benefit that no costly repeating interactions are necessary.
(7) Tailor information to the customer's situation	A customer might be given all kind of information which (s)he is not looking for. Only provide a tailor-made response to the given question of the customer.	Following this principle will make the customer feel more confident and avoids that customers are wondering why certain information is needed.
(8) Avoid business jargon	The use of terms and procedures that are well knows amongst employee often do not land in the mind of customers. Acknowledging varying levels of customers request sophistication, a service employees should adapt to the terms and procedures used by the customer in question.	Following this principle will reduce the changes of misinterpretation and misunderstanding in the customer interaction process. Customer may also feel less embarrassed and annoyed than when confronted with jargon that do not understand.

Compared to other interventions, such as presentations or training sessions, a role-playing game has much more interaction with the participants, resulting in more creative and acceptable solutions for employees. The game was perceived as more fun and entertaining than a presentation or a training guide. The strength of the game was that the employees derived the service delivery principles themselves and they committed themselves to work according these principles. Another way for defining principles would be to consult experts in the service delivery field. However, these principles are likely to be less accepted by the employees as they did not have a say in defining the principles themselves. This commitment to outcomes that are the result of a game is a positive effect of participative tools such as this role playing game and is also found in other research (Klievink & Janssen 2010).

6. Conclusions and recommendations

Generally, public agencies depend on inquiry methods (i.e., customer satisfaction questionnaires) to realize what is right with their service delivery process. Based on the results of such inquiry methods, managers usually synthesize new policies and rules which need to be followed by the employees in future customer interactions. This top-down approach however does not leverage the most promising ideas or exhaustive sets of principles for improving integrated service delivery (ISD). The policies and rules resulting from such approaches are often more customer oriented than employee oriented. In addition, the dictated policies and rules may not even be picked up since their impact in the total service delivery process is not understood by the employee. To systematically uncover problems in ISD and synthesize more innovative principles that are easy to understand and memorize, we propose the use of role playing games. Using this approach, we helped employees to uncover problems in service delivery and synthesize eight service delivery principles. The names of the eight principles are: (1) minimize contacts, (2) full service, (3) helping hand, (4) Internet First!, (5) customer is innocent, (6) think ahead and (7) tailor information (8) avoid jargon. The principles are detailed by describing the problem they tackled and the implications that the use of it will bring within the public agency. Since the staff of the public agency actively contributed in the principle synthesis process, the suggested principles balance both customer orientation and employee orientation based on in-depth (experience gained) knowledge of customer interaction processes. The eight service delivery principles can be viewed as generalizations of the solutions and can likely be used in a broader context.

The role-playing game makes sure that the designed principles are derived in collaboration with the participants, instead of hierarchically imposing a set of predefined principles. Therefore, it is likely that principles developed in the role-playing game are more easily accepted by participants and that the participants become a kind of ‘ambassadors’ of these principles by disseminating them. The principles are formulated in such a way to enable easy communication and to keep them generic to ensure all employees are able to use them in their own situations. The strength of the principles is that they are synthesized together with the people who will use them and that the benefits of following the principles are well understood.

Based on our experience with the staff of the public agency, we recommend the use of role-playing games as an interactive approach for the synthesis and demonstration of usable and acceptable principles. A role-playing game can possibly be used as a way to mobilize tacit knowledge gained from many years of experience and as a change management instrument. Also, there is limited literature available on service delivery principles, whereas these principles can provide general knowledge about dealing with ISD. In future research, a more comprehensive set of principles can be derived which would enhance our knowledge on ISD and can be a way to capture best-practices and tacit knowledge.

Extension of the role-playing game to other situations is possible, but each game needs careful preparation and execution which is resource intensive. Ideally, role-playing games should be tailor-made for each organization or department who wants to make use of it. This is necessary because a role-playing needs to reflect the reality in such a way that participants can identify themselves in the actors. The learning effect for participants can drop if they cannot recognize the situation that is simulated in the role-play. Nevertheless, the main concept (synthesizing service delivery principles by means of a participatory role-playing game) and the overview of the workshop can remain the same.

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