### Who will lead our culture change?

How informal leaders manifest themselves in a culture change process

Author: Michelle Veenis University of Twente P.O. Box 217, 7500AE Enschede The Netherlands

#### ABSTRACT,

Prior research has been conducted on the behavior of formal leaders in an organizational culture change process. But with the current need for Dutch municipalities to change drastically, the role of informal leaders becomes more and more important. To examine how informal leaders manifest themselves during a culture change process, a group session was organized following the design of Edgar H. Schein (2010), which provides a rapid way to identify drivers for culture change. During this session two candidates were identified as informal leaders. One scored high on both social and practical behavioral characteristics, and the other scored high mainly on practical behavioral characteristics. These two individuals take on slightly opposite roles in the culture change process: one can be characterized as an optimistic storyteller and the other as a pessimistic square shooter. It is believed that in big organizations like Dutch municipalities that are changing towards selfmanaging teams and multidisciplinary collaboration, the roles of these informal leaders will become more important. It is crucial to find out how the possible influence of informal leaders can be used best for the organizations to benefit from it. However, more research is needed to be able to conclude what the specific influence of informal leaders will be. Hence, a first next step for organizations as such, and possibly other kinds of, is to recognize the existence of informal leaders in their own organization, and to keep the eyes open for the possible influences they might have on a culture change process.

Graduation Committee members: Prof. C.P.M. Wilderom Dr. D.H. van Dun Dr. H. Doeleman

#### **Keywords**

informal leadership; organizational culture change process; behavior observation scheme; Dutch municipality; social behavioral characteristics; practical behavioral characteristics

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#### **1. INTRODUCTION**

Dutch municipalities are currently confronted with the implementation of a program developed by the Dutch Cabinet that will pragmatize several agreements stated in the national government coalition formed in 2017 (Rijksoverheid, 2018). This program (Interbestuurlijke Programma, IBP) states that the issues that the Netherlands is currently facing (e.g. climate change, and migration), can only be overcome when there is close collaboration on a local level, a national level, as well as on a global level. Municipalities that before were working in a hierarchical, centralized, and compartmentalized organizational design, now have to break the walls between departments and start working on project basis (Rijksoverheid, 2018). It is for this interesting U-turn Dutch municipalities are facing in their organizational management, why this paper was written. In this research "municipality" refers to a specific part within the Dutch local government system, namely the Civil Service (see Appendix A, Figure 1). It was chosen only to focus on this part of the local government, due to the political nature of the other parts, and therefore complication when viewing it from a business literature perspective. Next to that, another reason to only focus on this part is because in practice the Civil Service can be perceived as a separate organization, which supports the political parts of the local government. The Civil Service is the organization within the Dutch local government system that functions as the operational body that implements decisions made by the local council. The research for this paper was conducted at one Dutch Civil Service. Throughout this paper, when "municipality" is mentioned it is referred to the Civil Service.

The implementation of the program developed by the national government, confronts also the municipality studied during this research with a need for rapid change in the organizational structure, strategy, and culture. Studies have shown that these three factors are closely related (Zheng, Yang, & McLean, 2010, p. 770). Even to the extent that when changing one factor, the other two undergo changes too. For as culture can be defined as "the foundation of the social order that we live in and of the rule we abide by" (Schein, 2010, p. 3), this paper interprets the organizational culture to be the foundation for strategy and structure in their triangular relationship, and that it acts as an underlying facilitator, and motivator for these two. Moreover, it is important to recognize that with change comes a lot of anxiety amongst employees, as the scholar Lewin (1947) has made clear in his work some time ago. Especially changes in culture can be the cause of a lot of anxiety (Schein, 2010, p. 33). Literature furthermore states that anxious groups seek leaders, and when formal leaders cannot step up to solve the problems that cause the anxiety, other leaders will emerge (Schein, 2010, p. 232). Bales (1953) goes even further by stating that in leaderless groups, two informal leaders will often emerge; one of which will be focused on the task that needs to be achieved, and the other will be focused on the relational issues between people. However, leaders cannot by themselves fully clarify the organizational culture. It is difficult to define culture, but it manifests itself in the behavior of individuals (Schein, 1996, p. 229). Therefore, studying the behavior of individuals in an organization can help to explain the concept of culture. However, to reduce the anxiety associated with cultural change, individuals must become involved in the change process (Lewin, 1947).

A problem found after analyzing literature is the disagreement of scholars on how an organizational culture should be defined, clarified, and how to cope with a need for rapid organizational culture change (Bass & Bass, 2008; Schein, 2010). However, scholars do agree on the close relationship of

organizational culture and leadership (Bass & Bass, 2008; Hickman & Silva, 1984; Schein, 2010).

Schein, an eminent scholar mentioned widely when it comes to organizational culture and leadership, mentions that "culture is ultimately created, embedded, evolved, and ultimately manipulated by leaders" (Schein, 2010, p. 3), and he even calls leaders and culture "two sides of the same coin" (Schein, 2010, p. 3). To study culture, one must study the manifestation of behavior Schein (1996) mentioned. However, there are two different types of leaders: formal leaders and informal leaders (Carson, et al., 2007; Luria & Berson, 2013; Pielstick, 2000). In Dutch municipalities there are several formal leaders: the director being the most important one. However, the need for organizational change brings anxiety and therefore might assume the emergence of informal leader(s) (Bales, 1953). The impact on an organization as well as the impact of leadership on people of an organization, would differ from one type of leader to the another (Luria & Berson, 2013; Neubert & Taggar, 2004; Pielstick, 2000; Wheelan & Johnston, 1996). So, this would mean formal and informal leaders might have different impacts. The manifestation of the behavior of formal leaders in change processes has been studied before (Hunt & Dodge, 1997; Lord, 1977; Reynolds, 1984), but what about the informal leaders? In a process that includes a lot of anxiety amongst people, who therefore seek leadership, and who most likely will find this through informal leaders and not formal leaders, how do these informal leaders rise up to the task? This leads to the following research question:

"How does an informal leader manifest itself in a culture change process?"

## 2. RESEARCH AND THEORETICAL BACKGROUND

To design this research, literature has been studied on the topics of culture change process, formal versus informal leadership, and Dutch municipalities. The method used in this research was taken from the widely quoted research of organizational culture and leadership scholar Edgar H. Schein. He describes in chapter 18 of his book "Organisational Culture and Leadership" (Schein, 2012) how organizational culture change usually is a very lengthy process, which takes years to finish. However, when there is a need for rapid change due to external or internal forces in the organizational environment, Schein (2010) has come up with a method to define the organizational culture rapidly. People from within the organization would be able to define the elements of the organizational culture. Consequently, they would distinguish cultural elements that will drive the change, from the cultural elements that would interfere with the organizational change. The method would conclude with finding out how to strengthen the drivers, and how to minimize the influence of the interfering elements. Given the situation of Dutch municipalities, this method would fit, and provide the best chances to study the behavior of an informal leader in a culture change process.

In this paper, the definition of Schein (2010) is used for organizational culture. He defines culture as "the foundation of the social order that we live in and of the rule we abide by". Also, to provide a clearer definition for the participants during the method described by Schein, organizational culture is defined as "a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein, 2010, p. 18).

To explain the other terms used in this research, a formal leader is defined as an individual working in an organization that has formally been appointed to a position of leadership by an authority in the position of appointing people to this role (Carson, et al., 2007, p. 1221; Luria & Berson, 2013, p. 999; Pielstick, 2000, p. 99). As mentioned before, culture change will cause the anxiety level to rise eminently. This may lead to the emergence of one or more "informal leader(s)", this is defined here as a leader that is not formally appointed in the position of a leader, but nevertheless gets recognized as a leader by other people in the organization and engaged in leadership tasks. They tend to naturally surface in an anxious group of people, which faces an unsolved problem (Carson et al., 2007, p. 1221; Goktepe & Schneier, 1988; Luria & Berson, 2013, p. 999; Pielstick, 2000, p. 99; Wheelan & Johnston, 1996, p. 35).

The Dutch municipality where the research has been conducted had also done some prior research beforehand. They had written various reports on their ideas regarding the desired future state for structure and strategy as well as their culture (Advies projectgroep, 2017; Goed Beter Best, 2014; Van Beter naar Best, 2017). However, observations prior to this research give reason to assume that these plans were implemented entirely nor accepted by all people in the organization. To live up to the IBP of the government they implemented the United Nations Sustainable Development Goals (United Nations, 2015), as drivers for all tasks in their organization. Next to that, they came up with new working methods which would help them handle the changes ahead of them. Through observations it is concluded that not everyone fully understands how the organization desires to use these Goals. Prior observations furthermore point out that the municipality's prior research regarding culture, has mainly focused on aspects that need improvement. However, the group session method developed by Schein (2010, Chapter 18) focusses on the determination of cultural elements that will be able to help drive the municipality towards the achievement of the desired change goal.

This paper will take the group session as an organizational culture change process and will assume that with the exclusion of a formal organizational leader, informal leader(s) will arise in this anxious group in the process of change. During this group session, the researcher will observe the behavior of participants using a Behavior Observation Scheme (B.O.S.). All behavior characteristics that are used in this B.O.S. are found in different researches. Each characteristic in the B.O.S. is referenced to the research it was found in (see Table 1). The characteristics that refer to a same kind of behavior, like "Praising" and "Thanking" were ordered together in the B.O.S.. Furthermore, the characteristics can be categorized as social behavioral characteristics and practical behavioral characteristics, as derived by what Bales (1953) set clear before, because of the possibility of two informal leaders arising of which one is more concerned with people and the other with the task ahead. Social behavior has to do with "dealing with team interaction and/or development" (Pratoom, 2018), while practical behavior refers to performing tasks and being concerned with the final outcome of the session (Pratoom, 2018).

To test the outcome of this B.O.S., informal leader(s) will be recognized through a process of voting (Goktepe, Schneier, 1988; Luria & Berson, 2013; Neubert & Taggar, 2004; Yoo & Alavi, 2004), and will be asked individually to answer several self-reflective questions on leader characteristics. This because an informal leader should be able to recognize themselves as a leader (Anderson & Wanberg, 1991; Hunt & Dodge, 1997; Lord & Alliger, 1985).

#### 3. METHODS

The method chosen for this research was taken from Schein (2010). Because of the constraining factor of time for this research, Schein's method provided a way to study the manifestation of one or more informal leader(s), when one would consider this session the cultural change process. This method describes an afternoon-long session, where five to fifteen municipality employees will have a conversation about their current culture, and its elements. They will define elements in all three layers (Schein, 2010, see Appendix A, Figure 2) of the culture, and find the change drivers among them. This is followed by a discussion on how to strengthen these drivers and apply them practically. This session will not only provide a culture change process, it will also provide the setting and ambience that brings people throughout the organization together. This would help the municipality in reaching their own change goal, namely to become flexible, and facilitate open conversation between former departments and people throughout the organization, as an extra benefit to this research. Also, people will be able to express their own visions on the culture, and differences might be discovered and settled.

To help the municipality become a network organization that is flexible, project-based, an organization where individuals show initiative, and are able to form project teams throughout the organization, the researcher proposed a method that formed a group of people from different former departments of the organization. A small group of people from the organization could try this out the first time. When they would find the method helpful, conversations like these could be recommended to be organized more often and repeated after the conductance of this study to help establish and retain their desired change goal, which is important in a change process (Lewin, 1947). However, these benefits are not the main goal of this research.

The selection of the meeting participants was not done by random selection (Marriott, 2002), but by the human resources manager of the organization, even though she stated to have selected participants at random. Despite mentioned constraints for this research, the used sample will consciously be assumed to be a random sample. This to draw conclusions on the research question in the end. Of the thirty participants invited by the organization director via email, seven people attended the afternoon session. They were set down in a meeting room and positioned in a circle, in a way that made it possible to look each other in the eve during conversation (see Figure 3). Ahead of

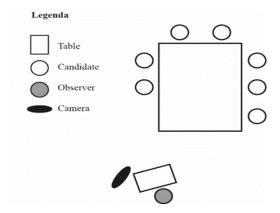


Figure 3. Seating arrangement during the conversation.

Starting a conversation from complete silence.         "Let us discuss our norms and values."           Starting a conversation from complete silence.         "Let us discuss our norms and values."           Starting the conversation towards a subdiversel.         "Let us discuss our norms and values."           Starting the conversation towards a subdiversel.         "Let 's look on the burght subdiversel."           Starting the conversation towards a subdiversel.         "Let's look on the burght subdiversel."           Starting the conversation towards a subdiversel.         "Let's look on the burght subdiversel."           Phasing other for from combinion.         "Cood that you mention the in the poortant is well."           Cood that you mention the subdiversel.         "Cood that you mention the interverse is 's not'."           Constraining approximation to the burght subdiversel.         "That and the contribution."           Constraining approximation to the poort.         "That the contribution."           Constraining approximation to the value is a poort.         "That the contribution."           Constraining approximation to the value is the contribution.         "That the contribution."           Constraining approximation the process, by other "this the method."         "The case of (than you method the following the, 'but' the case of (than you method the following the, 'but' the case of (than start.")           Constrained to the converse and the converse and the converse and the converse poort.         "The case	Сћа	Characteristic	Type of behavior Definition characteristic		Example	Reference
Stating cut fire out when a ser work a ser with a constraint or the cut when a ser work a ser with a cut with a set work a ser with a cut with a set with a cut with a cut with a set with a cut with a cut with a set with a cut with	г.	Initiating conversation	Practical	silence.		Manz & Sims, 1987; Yoo & Alavi, 2004
Stenting forwards new         Particial         Stenting forwards a new direction or it is this organization.         The second point of the world also black organization.         Description of the world also black organization.           Support and pointing         Social         Expressing points of the world should also black organization.         The second the world also black organization.           Thanking         Social         Expressing points of the world should also black organization.         Thanking the second the world should also black organization.           Thanking         Social         Thanking one more chance or anti-second the world should also black world that one organization.         Thanking the second should also black organization.         Thanking the second should also black world should the social should should the social should should the social should	ભં	Kicking-off topic	Practical		_	Manz & Sims, 1987
Storpest and positive         Descripting positive delarious and showing support to the method many apport to the method many apport to a consider upport to a differ weak-hour of the weak-hour of the method many apport to a constraint of their constrbution.         Thanking         Social         Praining constraint of their constrbution.         Coord dary you mention that           Thanking         Social         Praining offense and weak apport for their constrbution.         Thanking the weat constrbution.         Coord dary you mention that         Coord dary you mention that           Adding for optiming approximating approximation and print optic frame approximating approximation approximating approximation and print optic frame approximation approximating approximation approximating approximation approximating approximatin approximation approximation approxi and approxima	m	Steering towards new topic	Practical	ng the conversation towards a new direction or	"I recognize this, but I would also like to bring attention to the way we dress in this organization."	Luria & Berson, 2013
Praising         Social         Praising orders for their contribution.         "Coord that" you mention that,"           Thanking         Social         Thanking specifie for a contribution.         "Thanking the second static contribution.         "Thanking the static second static contribution.         "Thanking the static second static second static contribution.         "Thanking the static second static sec	4	Support and positivity	Social	Expressing positive behavior and showing support to others and being concerned of the well-being of others.	"Let's look on the bright side,"	Anderson & Wanberg, 1991; Lord, 1977; Wheelan & Johnston, 1996
Transities         Social         Charaking people for their contribution.         Transity on the starts data, well, and the starts data, well.           Integrating sides         Social         Charaking people for their contribution.         Thank you for mentioning this, 1 find it important as well.           Stormag interest         Social         Distributing tenses.         Jumerating and the starts data wells.           Athing for opinions         Social         Distributing tenses.         Jumerating.           Including         Practical         Social         Distributing tenses.         Jumerating.           Distributing task         Description and thing tenses.         Transity.         Transity.         Jumerating.           Distributing task         Distributing tenses.         Transity.         Transity.         Transity.         Jumerating.           Distributing task         Distributing tenses.         Transity.         Transity.         Transity.         Jumerating.           Distributing task         Distresting tenses.         Transity.	5.	Praising	Social	Praising others for their contribution.	"Good that you mention this."	Anderson & Wanberg, 1991; Lord, 1977; Manz & Sims, 1987; Pielstick, 2000
Integrating (ases)         Social         Considering variat order have mentioned before and "Structure gareement, nodeling (as someone else's store), "Um, yes insertenting"         Numering gareement, nodeling (as someone else's store), "Um, yes insertenting"           Social         Directly sating further.         Social         Numering gareement, nodeling (as someone else's store), "Um, yes innerenting"           Adding for opinioni         Social         Directly sating further.         Practical         Numering garee in include everyone in the process, by other "Including"         Practical         Numering agreement, nodeling (as someone else's store), "Um, yes innerenting"           Directly sating further.         Social         Nating use to include everyone in the process, by other "Including"         Practical         Numering agreement, nodeling (as someone else's store), "The access of plane), hard ad or this statement.           Directly sating further.         Practical         Directly sating further.         "You can go talk to you think about this mattee "The access" in statement.           Directly sating further.         Practical         Directly statement.         "You can go talk to you think about the actin statement.           Directly satisfies or informing power talks approved at a time statement.         "The access" of the access" and the following"           Directly statement or informing power talks approved at a time statement.         "The access" an about talk about do, ether access and the following"           Thor	<b>.</b>	Thanking	Social	Thanking people for their contribution.	"Thank you for mentioning this, I find it important as well."	Lord, 1977; Pielstick, 2000
Storeing interest.         Social         Mumurating agreement, nodding to someone else 's norw, or stating interest.         "Um, yes interesting"           Adding for opinions         Social         Desching adding to conserve else 's opinion on a matter. Including         "Iamel, what do you think about thin matter actually?"           Practical         Musing uneest.         "Sating an opinion and trying to convince people of the much of this instantement.         "To call amone of a lab."         "To call of the instantement.           Dividing tasks         Practical         Dividing tasks in the proteent, why oble is only do with the 'roo can go task 'ro your team members, and I can go by to convince the routh of this instantem.         "To call amone, is a faile of the convince option of the 'roo can go task' to your team members, and I can go by to convince the intervince."           Dividing tasks         Practical         Dividing task with proble about do, what with the opinion of task with proble and the following"           Dividing tasks         Practical         Dividing task with proble about do, what with the opinion of task with proble about do for the task with the opinion of task with the opinion of the opinion of the can about a for the opinion of task with the opinion of task with the opinion of the opinion of task with the opinion of task withe opinion of task w	Ŀ.	Integrating ideas	Social		states this, and she states that, but if we would take both together, and $\ldots^{n}$	Hunt & Dodge, 1997; Lord, 1977; Manz & Sims, 1987; Yoo & Alavi, 2004
Adding for optimions         Social         Directly safety for consense site § optime on a matter.         "Induction in the former," in the case of famel, he faces this issue daily."           Including         Poscial         Making uner value for optimons.         "The ellipsi true, I have used in successes by other "In the case of famel, he faces this issue daily."           Practical         Dividing task what people should do, eliber in the "The ellipsi true, I have used I can go try to convince the "The internet."         "The ellipsi true, I have used I can go try to convince the ellipsi true."           Input         Practical         Dividing task what people should do, eliber in the "Toru can go tark to your team members, and I can go try to convince the ellipsi true."           Input         Practical         Dividing task what people should do, eliber in the "Toru can go tark to your team members, and I can go try to convince the ellipsit.           Input         Practical         Dividing task are performed.         "If the intranet would be updated to a newer system, the overall can go tark to your team members, and I can go to convince the ellipsit.           Informing         Dividing task are performed.         "If the intranet would be updated to tark the conversion of the secon."           Informing         Practical         Providing undatt task."         "If the intranet would be updated to tark the overall can go tark to prove at well."           Informing         Practical         Providing undatt tastrenet."         "If the intranet would be update to tark		Showing interest	Social		°Chu, yes interesting,"	Bennis, 1989; Pielstick, 2000
Including         Social         Making struct in the current in the process, by other         "In the case of [name], he face thin issue dulp."           Persuading         Practical         means than asking them for opinions.         "It really is true, I have seen it myself"           Persuading         Practical         means than asking poor origine on dry process, by other         "It really is true, I have seen it myself"           Dividing tasks         Practical         Dividing task what people abould do, either in the current informating bout a function or tables goon a function.         "To true in the following"           Input         Practical         Dividing task what people abould do, either in the current informating bout a function or tables goon a function or tables goon a function.         "To the providing construct a bound for the current informating bout a function.           Informing         Practical         Dividing tables or anot tables are performed, or what         "The intraction would providing construct a bound for tables."           Informing         Practical         Practical         Dividing tables are performed, or what         "The intervin".           Informing         Practical         Practical         Dividing tables.         "Information or tables are performed, or what           Informing         Practical         Practical         Practical         Practical         Practical           Proposing gools         Practical	ō.	Asking for opinions	Social			Lord, 1977; Pielstick, 2000
Pertuating         Peratical         Stating an optimized and trying to convince people of the current situation or talking about a future situation.         "Toru can go talk to your team members, and I can go try to convince the current situation or talking about a future situation.         "You can go talk to your team members, and I can go try to convince the director."           Input         Practical         Dividing task was people should do, either in the current situation or talking about a future situation.         "You can go talk to your team members, and I can go try to convince the director."           Input         Practical         Providing technical contribution to the topic.         "On this topic I have to add the following"           Informing         Practical         Providing technical contribution to the topic.         "On this topic I have to add the following"           Informing         Practical         Providing technical solution in the organization counsit of, for help."         "If the intrace would be updated to a never system, the overall more statical would provide a solution for organization counsit of, for help."           Proposing gasts         Practical         Proposing take element activities to undertake that vould merice a swell."         "If the intrace would be updated to a never system, the overall more statical would provide a solution for organization counsit of, for help."           Proposing activities         Practical         Proposing take element activities to undertake that voltamescale         "If the following"           Proposing activities <td>10.</td> <td>Including</td> <td>Social</td> <td></td> <td>"In the case of [name], he faces this issue daily."</td> <td>Anderson &amp; Wanberg, 1991; Pielstick, 2000</td>	10.	Including	Social		"In the case of [name], he faces this issue daily."	Anderson & Wanberg, 1991; Pielstick, 2000
Dividing tasks         Dividing task         Dividing task         Task wat people should do, there ituation         "You can go talk to your team member, and I can go try to convince the current intuition or informing about a fiture situation           Input         Paactical         Poviding content affaure situation         "You can go talk to your team member, and I can go try to convince the current intuition of the top in the regulation should the top add the following"           Technical contribution         Paactical         Providing content team and the rough and the top."         "To the intranset would be updated to a newer system, the overall informing in the rough as relevant activities to undertake that and the rough and the following"           Proposing activities         Paactical         Providing content activities to undertake that and the rough and the rouge and the rough and the rough and there and the rough a	11.	Persuading	Practical		"It really is true, I have seen it myself?"	Goktepe & Schneier, 1988; Luria & Berson, 2013
Input         Practical         Derividing content related input obser than related to technicalities or informing how things must be done.         "On this topic I have to add the following"           Technical contribution         Parctical         Providing technical contribution to the topic.         "On this topic I have to add the following"           Informing         Practical         Providing technical contribution to the topic.         "This twould need to check the manual before I am able to ask my colleague is everything but technical subtribution consists of, would provide a solution for possible issues.         "In 2020 we should be thoreigh with the biggest part of this organizational boposing goals           Proposing goals         Derawing fast-relevant actions when necessary.         "The should go with this."         "No           Deciding         Practical         Drawing fast-relevant actions         "This would be through with the biggest part of this organizational consige."           Deciding         Practical         Drawing fast-relevant actions         "To 2020 we should be through with the biggest part of this organizational consige."           Deciding         Practical         Drawing fast future.         "To 2020 we should be through with the biggest part of this organizational consige."           Deciding         Practical         Drawing fast froute         "To 2020 we should be through with the biggest part of this organizational consige."           Deciding         Practical         Drawing fast frou	13.	Dividing tasks	Practical		go talk to your team members, and I can	Lord, 1977; Luria & Berson, 2013; Manz & Sims, 1987
Technical contribution         Practical         Providing technical contribution to the topic.         "If the intranet would be updated to a newer system, the overall informing           Informing         Practical         Informing others on how tasks are performed, or what "first would need to check the manual before I am able to ask my colleague by the part of this are performed, or what "first would need to check the manual before I am able to ask my colleague by the proposing activities           Proposing activities         Practical         Proposing task-relevant activities to undertake that "first would need to check the manual before I am able to ask my colleague by the proposing goals           Proposing goals         Practical         Proposing goals for in the future.         "In 2020 we should be through with the biggett part of this organizational change."           Deciding         Practical         Drawing final decisions when necessary.         "In 2020 we should go with this."           Deciding         Practical         Drawing final decisions when necessary.         "In 2020 we should be through with the biggett part of this organizational change."           Deciding         Practical         Drawing final decisions when necessary.         "In 2020 we should be through with the biggett part of this organizational change."           Deciding         Practical         Drawing final decisions when necessary.         "In 2020 we should be through with the biggett part of this organizational through with this."           Deciding         Practical <td< td=""><td>13.</td><td>Input</td><td>Practical</td><td>Providing content related input other than related to technicalities or informing how things must be done.</td><td>"On this topic I have to add the following"</td><td>Anderson &amp; Wanberg, 1991; Bales, 1950; Luria &amp; Berson, 2013; Wheelan &amp; Johnston, 1996; Yoo &amp; Alavi, 2004</td></td<>	13.	Input	Practical	Providing content related input other than related to technicalities or informing how things must be done.	"On this topic I have to add the following"	Anderson & Wanberg, 1991; Bales, 1950; Luria & Berson, 2013; Wheelan & Johnston, 1996; Yoo & Alavi, 2004
Informing         Practical         Informing others on how tasks are performed, or what his her own position in the organization consists of, his her own position in the organization consists of, his her own position in the organization consists of, his her own position in the organization consists of, his her own position in the organization consists of, his her own position in the organization consists of, his her own position in the organization consists of, her help."         Information and his her own position in the organization consists of, his her own position in the organization consists of, his her own position in the organization consist of his her own between a solution for possible issues.         Information a her own between a solution for possible issues.         Information a her own between a solution for possible issues.         Information a her own between a solution for possible issues.         Information a her own between a solution for possible issues.         Information a her own between a solution for possible issues.         Information a her own between a solution for possible issues.         Information a her own be not a not be a solution for the higgest part of this organizational constraint involvement practical         Information a her own be a solution for possible issues.         Information a her own be a solution for the higgest part of this organization a her own be a solution of process.         Information a her own be a solution for the higgest part of this organization a her own be a solution of process.         Information a her own be a solution for the higgest part of this organization a her own be a solution for the higgest part of this organization a her own be a solution of process.         Information a her own be a solution for the higgest part of this organization a solutis contreasion.	14.	Technical contribution	Practical	Providing technical contribution to the topic.	ver system, the overall	Manz & Sims, 1987; Yoo & Alavi, 2004
Proposing activitiesPracticalProposing task-relevant activities to undertake that would provide a solution for possible issues."Have you tried asking others for help?"Proposing goalsPracticalProposing goals for in the future."In 2020 we should be through with the biggest part of this organizational change."DecidingPracticalDrawing final decisions when necessary."We should go with this."Talking volumePracticalDrawing final decisions when necessary."We should go with this."Talking volumePracticalDrawing final decisions when necessary."Up use this." "No, this would notTalking volumePracticalConsistent involvement"I guess it should be like this." "No, this would notDecidingPracticalConsistent involvement"I guess it should be like this." "No, this would notDecidingPracticalConsistent involvement"I guess it should be like this." "No, this would notDecidingPracticalNot being silent for longer than 30 seconds relates to moder easier to"I guess it should be like this." "No, this would notDescretePracticalNot being silent for longer than 30 seconds relates to moder easier to"I guess it is not true like this" "No, this would notNo hesitancePracticalNot being silent for longer than 30 seconds relates to moder easier to"I guess that an 30 seconds relates to measure in a busy conversation.""I would say it is not true like this" No, this would not measure and the second support han 30 seconds relates to measure in a busy conversation.No hesitancePracticalAdress	15.	Informing	Practical		"I first would need to check the manual before I am able to ask my colleague for help."	
Proposing goalsPracticalProposing goals for in the future."In 2020 we should be through with the biggest part of this organizationalDecidingPracticalDrawing final decisions when necessary."We should go with this."DecidingDrawing final decisions when necessary."We should go with this."Talking volumePracticalDrawing final decisions when necessary."We should go with this."Talking volumePracticalDrawing final decisions when necessary."We should go with this."Consistent involvementPracticalDrawing final decisions when necessary."Talking most during the whole extent of the session."Consistent involvementPracticalThe amount of talking."No, this would not be possible"Consistent involvementPracticalNot being silent for longer than 30 seconds relates to informal solution.""I guess it should be like this." "I would say like this." "No, this would not informal leadership. Silences are however easier to informal solution.Long silence (neg. cort.)PracticalNot being silent for longer than 30 seconds relates to informal solution.No hesitancePracticalNot being addressed by others for his/her"I would say it is not true like this" No, this would not informal solution.Addressed for expertisePracticalNot being addressed by others for his/her"I would say it is not true like this" No, this the bestAddressed for expertisePracticalNot being addressed by others for his/her"I would say it is not true like this" No, this the best	16.	Proposing activities	Practical	Proposing task-relevant activities to undertake that would provide a solution for possible issues.	"Have you tried asking others for help?"	Lord, 1977; Yoo & Alavi, 2004
Deciding         Drawing final decisions when necessary.         "We should go with this."           Talking volume         Practical         The amount of talking.           Talking volume         Practical         The amount of talking.           Consistent involvement         Practical         The amount of talking.           Consistent involvement         Practical         The amount of talking.           Consistent involvement         Practical         Consistently involved in the conversation or process.           Consistent involvement         Practical         Consistently involved in the conversation or process.           Long silence (neg. cor.)         Practical         Not being silent for longer than 30 seconds relates to informal leadership. Silences are however easier to measure in a busy conversation.           No hasitance         Practical         Not being addressed by others for his/her           Addressed for expertise         Practical         Not being addressed by others for his/her           Addressed for expertise         Practical         Mot being addressed by others for his/her	17.	Proposing goals	Practical		"In 2020 we should be through with the biggest part of this organizational change."	Bennis, 1989; Lord, 1977; Luria & Berson, 2013; Manz & Sims, 1987
Talking volume       Practical       The amount of talking.       Talking most during the whole extent of the session.         Consistent involvement       Practical       Consistently involved in the conversation or process.       "I guess it should be like this." "I would say like this." "No, this would not be possible"         Long silence (neg. cor.)       Practical       Not being silent for longer than 30 seconds relates to informal leadership. Silences are however easier to measure in a busy conversation.       "I guess it is not true like this." "No, this would not be informal leadership. Silences are however easier to informal leadership. Silences are however easier to information.         No hasitance       Practical       Not being addressed by conversation.         Addressed for expertise       Practical       No thesing addressed by others for his/her         Addressed for expertise       Practical       Mot being addressed by others for his/her	18.	Deciding	Practical			Neubert & Taggar, 2004
Consistent involvement     Practical     Consistently involved in the conversation or process.     "I guess it should be like this." "I would say like this." "No, this would not be possible"       Long silence (neg. cor.)     Practical     Not being silent for longer than 30 seconds relates to informal leadership. Silences are however easier to measure in a busy conversation"     "I guess if and 30 seconds]"       No hesitance     Practical     Not being silent to speak-up during conversations.     "I would say it is not true like this"       No hesitance     Practical     Motesing addressed by others for his/her     "I would say it is not true like this"	19.	Talking volume	Practical			Anderson & Wanberg, 1991; Reynolds, 1984; Wheelan & Johnston, 1996; Yoo & Alavi, 2004
Long silence (neg. cor.)     Practical     Not being silent for longer than 30 seconds relates to     "[silence longer than 30 seconds]"       informal leadership. Silences are however easier to     ""T would say it is not true like this"       No hesitance     Practical     Not being hesitant to speak-up during conversations.       Addressed for expertise     Practical     A person is being addressed by others for his/her       Addressed for expertise     Practical     A person is being addressed by others for his/her	20.	Consistent involvement	Practical			Anderson & Wanberg, 1991; Reynolds, 1984; Wheelan & Johnston, 1996; Yoo & Alavi, 2004
No hesitance         Practical         Not being hesitant to speak-up during conversations.         "I would say it is not true like this"           Addressed for expertise         Practical         A person is being addressed by others for his/her         "[name], you come in contact a lot with these people, what is the best arrentise on a certain tonic"	21.	Long silence (neg. cor.)		Not being silent for longer than 30 seconds relates to informal leadership. Silences are however easier to measure in a busy conversation.	"[silence longer than 30 seconds]"	Neubert & Taggar, 2004; Reynolds, 1984
Addressed for expertise Practical A person is being addressed by others for his/her "[name], you come in contact a lot with these people, what is the best expertise on a certain tonic.	ä	No hesitance	Practical	conversations.	"I would say it is not true like this"	Anderson & Wanberg, 1991
	ġ	Addressed for expertise	Practical	for his/her	"(hame], you come in contact a lot with these people, what is the best approach?"	Yoo & Alavi, 2004

Table 1. Defining the characteristics of informal leaders, with example and reference, as used to develop a Behavior Observation Scheme.

time, they had been informed in writing of the procedure of the afternoon session. In the introduction presentation of the session, the course of the session was again explained by the researcher. The researcher explained that she would observe the conversation during the session between the participants. They were going to talk about their organizational culture and which culture elements could help them reach their desired overall change goal. The introduction presentation, furthermore, gave a general definition on organizational culture, and the overall organizational change goal. This was meant to give the participants an equal starting point for discussion and make the chance for misconceptions from the beginning smaller. The organizational culture was going to be defined layer-for-layer, starting with the observational layer, continuing with the socalled norms and values layer, and concluding with the layer of underlying assumptions (Schein, 2010, and see Appendix A, Figure 2). After defining the organizational culture, the participants would talk about which of the defined elements could drive them towards their desired overall change goal, and which practical steps should be undertaken to achieve the change goal. The focus was put here on the driving elements, because of combination of first, the fact that interfering elements need a new session that explains how to work with them (Schein, 2010), and second, because the organization itself had conducted research on their culture before, where the focus was put on negative factors that needed change, and not positive factors (driving factors) (see Research and Theoretical Background). For it is usually the changing factors that face resistance from people in a change process, the emphasis in this session was put on strengthening the existing driver elements (Pardo del Val & Martínez Fuentes, 2004). Participants signed a form of consent and therewith agreed for the session to be taped on film, for postanalysis purposes.

Throughout this session, the researcher would observe the individuals using a pre-developed B.O.S. and making objective observations. The B.O.S. was developed by taking behavioral characteristics of informal leaders as found in literature and creating a mutually exclusive scheme of variables. During the session, the B.O.S. was filled out by the researcher in a way that every time a behavioral characteristic occurred, the observer would put in a "1" at that type of behavior per candidate. At the end of the session, every cell would show an overall score per behavioral characteristic per candidate. The researcher would only interfere during the session by steering the conversation back on topic if necessary and asked some kick-starting questions if conversation would fall still. However, the researcher would never actively interfere or participate in conversation herself.

After the session, participants were handed a short eighteenquestions survey. The survey was developed using formats for reflection on workshops (Scribd, 2018) and found out characteristics of informal leadership in literature. The survey was filled out individually, and participants needed to answer their agreeableness with different proposed statements. Answers could be given on a 5-point Likert scale, where scores 1 to 5 meant 1, "fully agree", to the range of 5, "fully disagree" (Yoo & Alavi, 2004). The first eleven questions were asking for the opinion of participants on the design of the session. The twelfth question asked the participants who they thought took the most initiative in conversation. This was done to be able to define informal leader(s) through the voting method (see theoretical background). Questions thirteen to eighteen made participants rate themselves on characteristics of informal leadership, to be able to define informal leader(s) on the self-report method (Anderson & Wanberg, 1991). This resulted in the following.

#### 4. RESULTS

The group of the seven participants consisted out of three women and four men. Their average age was about 40, and their occupancies ranged from working in the telephone team to being a strategist. Furthermore, some were working there for a few years, others already for several. The group session with the seven employees from the Dutch municipality led to the following results. Because of privacy reasons, the candidates' identities were made anonymous. They were numbered from 1 to 7. The course of events of the session will be shortly reflected on, followed by a reflection of the questionnaire, and concluded will be with the B.O.S. results. For the sake of a better overall understanding of the organization's change situation and to understand the context in which people showed behavior, the content of the group session will also be reflected on.

#### 4.1 The course of events

In observation of the group session, several things are noteworthy to mention. It started off with the low attendance of the session. While thirty people were invited per email on behalf of the director, in the end only seven showed up. The candidates present at the session described this as a first culture element, without the session even being started.

What participants remarked in the first layer was a poor reachability of colleagues, lack in communication, and a fear of taking on responsibility for decisions because "it might escalate, we would rather only show our good side. It is not in the people's habit to look beyond their own task description." Moreover, they mentioned a gap between the "old" and the "new" employees, referring to different approaches and working methods, and a gap between former departments. Nevertheless, participant expressed that they did have a curiosity for what other people are doing in the organization, and that there actually should be more contact between people. Yet, "the organization is so big and so diverse", that makes it hard to reach everyone. Lastly, one candidate stated it is "unstable and agitated" in the organization. "We might have broken with the former hierarchy but there is a need for structure and a point of call. We will need time and space to become self-managing."

For the second layer, candidates emphasized more than once that the well-being of the citizens is the organization's main driver. But then again "these citizens have a broad array of needs". The candidates stated themselves that this is why they need integral cooperation. Besides this, norms and values as certainty, clarity, equality, and being able to be yourself came up. However, not all norms and values mentioned were lived out quite as well as they should be in practice, was the opinion of the candidates. Some even were barely lived up to at all. And even the current vision and its motivation, was not clear to all people present.

Underlying assumptions that came up during the session were the fact that the organization needs to adjust to and follow the movements society makes to be able to keep serving their customers' (citizens') needs. Everyone in the organization should move as one. It is not possible to get left behind. However, without knowing what people could expect, they keep working along their old protocols. Without a praising culture, were people provide feedback to each other, there is no way for people to know if they are performing well. As is the opinion of a majority of the candidates.

Nevertheless, a culture element that could drive the change process is the fact that one must take part in the change and that there is no way of being left behind. Participants mention that it is the first time that a reorganization has followed through. They believe that the Global Goals adopted will really help them if they become more practical and clearer. "With a leader in a coaching and stimulating role, this municipality can get there." The candidates are convinced that the municipality is in fact an organization that would like to develop. And the network that already exists between other municipalities in the Netherlands provides a great opportunity to learn from each other, a participant mentioned.

Ideas to make these drivers practical were to organize so called "networking days", to get to know colleagues from within the organization or people from other municipalities and learn "how they do it". Another idea was to provide more feedback and appraisal to colleagues if they do their job well. Communication should improve throughout the organization, and people should be made to feel safer and more certain to have them take "ownership" of certain problems, and act responsibly for them. A participant concluded the session with the following statement: "The movement towards the change goal is already there. Nevertheless, we just need more knowledge and time. We should never forget our overall goal: the well-being of our citizens."

#### 4.2 Questionnaire results

The first part of the questionnaire, about how the participants experienced the session, resulted in averages of either "agree" (2) or "agree nor disagree" (3). Three candidates were on average positive about the session, three were more neutral, and one was slightly negative. What was, furthermore, remarkable was that four people mentioned that they liked discussing and hearing others' opinions. However, the questionnaire does not show clear results that point towards the fact that people would recommend this session to others or would be interested in a follow-up session. The respondents were quite neutral on this. Lastly, all questions were answered very disparate, expect for the statement "this session has made me (more) enthusiastic to continue the organizational change process". Four people circled "agree" (2) to this statement, the other three checked "agree nor disagree" (3).

With question 12, three candidates voted for both Candidate 4 as Candidate 7, answering who they found taking the lead in conversation. This was remarkable because the question hinted more for an answer of one person than multiple. One candidate voted for Candidate 3, and three people did not fill out the question. A reason for not filling out the question could be because the candidates did not know how to answer because they did not understand the question, or because they did not know what answer to give due to the situation that the question asks more literally for one candidate and not two. The question could also have been overlooked by the three participants due to a bad lay-out of the questionnaire, or a cause of not filling out the question could be a lack of concentration at the end of the session. Nevertheless, the motive of these three participants for not filling out the questions remains unclear.

Questions 13 to 18 showed the self-evaluation of the seven candidates. From these questions, Candidate 4 can be clearly distinguished from the rest in terms of overall score with six points more than his runner-up. Candidate 4 scored 22 out of 30 points, where his runner-up (Candidate 7) scored 16 points. The questionnaire, and the score table of the answers of the seven candidates can be found in Appendix B, Figure 4 and Table 2.

As mentioned shortly before, there is no clear reason to repeat or to abrogate the session according to this questionnaire, for outcomes were mainly neutral or slightly positive. This survey gives reasons to believe Candidate 4 to be an informal leader with most certainty because he scored highest on the selfreport questions and was voted for most time together with Candidate 7. However, given that Candidate 7 also received as many votes as Candidate 4, he might as well be an informal leader.

#### 4.3 Behavior Observation Scheme (B.O.S.)

Due to no clear occurrence of the variables "Initiating conversation", "Thanking", "Dividing tasks", "Technical contribution", and "Talking volume", these are left out of the analysis below. Reasons for the none-occurrence will be discussed later. The complete filled out B.O.S. and derived tables from it can be found in Appendix B, Table 3 to 7.

The B.O.S. ratios were calculated, per variable, per candidate. To be able to draw general conclusions, the score of candidate per variable was taken and this was divided by the total score of that variable. Individuals were compared with each other. To get to a notable difference, the highest candidate's ratio was compared to that of the second highest. If the two ratios would differ more than 0.2, this difference is considered significant for this research. An example of this would be variable 9 in Table 4, where Candidate 4 scores more than 0.2 higher (a difference of 0.357) than the second highest scoring candidate, namely Candidate 5. Six variables show significant differences, of which five belong to Candidate 4.

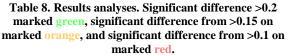
Practice has shown that "No hesitance" is hard to observe, for it is more a feeling of a person, rather than a visible occurring behavior. The variables "Praising", "Persuading", "Proposing goals", and "Addressed for expertise", did not occur often in this session, with an appearance of five and lower, however these are still taken into account in the overall analysis.

Overall, Candidate 4 scored highest in most of the variables except never on the variable "Addressed for expertise", even when not taking into account the runner up: Candidate 7. When Candidate 4 would be considered the only informal leader (because of his overall highest score), with most certainty it can be said that he scores highest on "Integrating ideas", "Asking for opinions", and "Including". This is when considering that the difference with the second highest scoring candidate is more than 0.2. These variables all have to do with social behavior. When a difference of more than 0.15 would be considered significant enough, one can add "Support and positivity" and "Praising". These are again characteristics that have to do with social behavior. And with a significant difference of more than 0.1, one could add "Proposing activities". This has to do with practical behavior.

When taking Candidate 7 out of the analysis if one assumes Candidate 7 to be another informal leader due to his overall score being second highest, one can compare Candidate 4 to the assumed non-informal leader candidates. In this case, Candidate 4 scores highest in all variables except for "Addressed for expertise". If considering a difference with the then second highest of more than 0.2, Candidate 4 scores highest on "Steering towards new topic", "Praising", "Integrating Ideas", "Asking for opinions", "Including", "Persuading", "Proposing activities", "Proposing goals", "Deciding", and "Consistent involvement", both social and practical behavioral characteristics. When considering a difference of more than 0.15, "Support and positivity", a social behavioral characteristic, can be included as well. And if a difference of 0.1 would be considered big enough, variables 8, 13 "Input", and 15 can be included as well. Continuing with taking Candidate 7 into account as a second informal leader because of his second highest overall score, a comparison can be made between him and the non-informal leader candidates. In this case he scores highest in all variables except for variables "Kicking-off topic", "Support and positivity", "Integrating Ideas", "Showing interest", "Asking for opinions", and "Addressed for expertise". In the case of Candidate 7 the differences between the then second highest are in all cases more than 0.2 or less than 0.1. With this information it is seen that Candidate 7 scores highest on variables "Steering towards new topic", "Including", "Persuading", "Input", "Proposing activities", "Proposing goals", "Deciding", and "Consistent involvement". What is noteworthy only the variable "Including", is a social behavior variable, and all the rest are practical behavior variables.

By comparing both candidate 4 and candidate 7 to the other candidates, other solutions can be derived. This comparison was made by calculating the differences in ratios between the second highest score and the third highest. After conducting this analysis, four variables stay put when assuming significance at a difference in ratio of more than 0.2. What is worth recognizing is that within these four variables, Candidate 4 scored better on the variable "Proposing activities", and Candidate 7 scored higher on the variable "Deciding". With both "Persuading" and "Proposing goals", the two candidates score equally. With a significance of difference of 0.1, one can include "Steering towards new topic", "Input", and "Consistent involvement" Nevertheless, with all variables except for "Addressed for expertise", either one of Candidate 4 or 7 scored highest. In the cases of the variables "Kicking-off topic", "Support and positivity", "Integrating ideas", "Showing interest", and "Asking for opinions", Candidate 4 scored highest, but Candidate 7 was not the second highest scorer. Except for the variable "Kicking-off topic", these were social behavioral characteristics. All results are summed up in Table 8.

				1
	Analysis	Analysis	Analysis	Analysis
	Candidate 4	Candidate 4	Candidate 7	Candidate 4
		compared to	compared to	& 7
		non-informal	non-informal	
		leaders	leaders	
		(excluding	(excluding	
		Candidate 7)	Candidate 4)	
	7	3	3	11
	9	5	10	16
	10	7	11	17
	4	9	13	18
	5	10	16	3
	16	11	17	13
		16	18	20
Γ		17	20	
Γ		18		
Γ		20		
		4		
Γ		8		
Γ		13		
Γ		15		
	Left out: 2,	Left out: 2, 21 &	Left out: 2, 4,	Left out: 2,
	3, 8, 11, 13,	23	5, 7, 8, 9, 15,	4, 5, 7, 8, 9,
	15, 17 18,		21 & 23	10, 15, 21 &
	20, 21 & 23			23
_				



When attaching scores to the differences (>0.2, >0.15, and >0.1) per variable of >0.2 times three, >0.15 times two, and >0.1 times one, for each variable an overall score can be calculated. The

Variable(s)	Score
16	10
10, 11, 17 & 18	9
3 & 20	7
7&9	6
5 & 13	5
4	4
15	1
2, 21 & 23	0

Table 9. Total scores per variable.

total scores of the variables can be found in Table 9. In the Recommendations part, a suggestion for a new B.O.S. is made were experiences from this research are applied.

#### 4.4 Other observations

Some noteworthy individual objective observations that were done during the session are described in the table below per candidate (see Table 10).

Candidate	Candidate 2	Candidate	Candidate 4	Candidate	Candidate 6	Candidate
1		3		5		7
Mumbles	Mainly	Actively	Often makes	When	Mainly	Often
agreement	silent	involved	small jokes	speaks,	silent	takes
with other				provides		opposing
candidates				content		view,
often				related		disagrees
				input		with what
						is said
						before
Tends to	Does not	Often	Often	Challenges	Once	Points out
repeat	contribute	defends	explains	stated	provides	relatable
others'		own		opinions	summarizing	
words	conversation	opinion		often	statement	people
			and life			
			stories			
		Tells a lot		Asks		Speaks
			monologues,			mind
			people listen	questions		often
		experience	interested			about
						problems
			Values			Starts
			other's			many
			opinions			sentences
						negatively

Table 10. Other objective observations per candidate.

Especially the difference between Candidate 4 and 7 considering the variables about positive and supporting behavior are supported here. Candidate 4 shows signs of a storyteller, using monologues with metaphors, and people interested in what he tells. Candidate 7 can be characterised as a person not afraid to bring up problems who people seem to share. In a most extreme suggestion Candidate 4 can be characterised as the person people relate to through positivity (jokes, stories, people's opinion seeming to be valued), whereas Candidate 7 is the one bringing up negativity people relate to by being able to point out the problems others also experience. Overall, these observations seem to support the other derived results.

#### 5. DISCUSSION

Apart from the low attendance, the group session itself can be seen as successful, as the candidates were in conversation a lot and came up with some new insights. They mostly shared the opinion that people throughout the organization were not in touch with each other enough, and that communication between the people should improve. However, drivers they shared throughout the organization were the well-being of the citizens, the fact that there is a strong awareness that nobody in the organization can get left behind, the adopted Global Goals, and the fact that there already is an existing network with other municipalities. Strengthening and integrating these further would help them reach and maintain the change goal.

The group session itself was perceived slightly positive to neutral, as one can conclude from the questionnaire. Overall answers regarding the session were very dispersed. In the end there is an argument against arranging a session like this again, nor is there an argument in favor of doing it again, in the opinion most of the candidates. From the voting method for identifying informal leaders, the most votes went to both Candidate 4 and 7. The self-report method pointed strongly towards Candidate 4 as being an informal leader. These findings are in line with what is found during the analysis. This is described in more detail below. During that analysis was also found that Candidate 4 is the most convincing informal leader, scoring highest overall in both social practical behavioral characteristics and behavioral characteristics. Candidate 7 however, still distinguishes himself from the candidates not perceived as informal leaders in a convincing way. In nine out of seventeen analyzed behavioral characteristics, he scores more than 0.2 higher compared to the thereafter highest scoring candidate. However, of these nine behavioral characteristics, eight are practical and only one is social.

"Initiating conversation", "Thanking", "Dividing tasks", "Technical contribution", and "Talking volume" did not occur at all in the two-and-a-half session. Reasons for these variables not occurring could be the design of the group session, where for example conversation was initiated through the session itself. Other reasons might be that the culture (either national or organizational) itself does not include expressing thankfulness much. Why the characteristic "Dividing tasks" did not occur is hard to find a logical answer to. It might just be that is was not necessary in this particular session to divide tasks, or that it never fits to the behavior of an informal leader. The lack of "Technical contribution", could be related to the non-technical organization or the nature of the conversation that was mainly about culture. Why "Talking volume" did not occur during this conversation might had to do with the non-mutually exclusiveness after all with the sub variables. "Talking volume" and "Consistent involvement" turned out to be very much alike in practice. After conducting this research, it can be stated strongly debatable to include variables as well as sub variables. One would be better off not making any distinction between this. Nevertheless, with the results for this research, these five behavioral characteristics are concluded to be not how an informal leader manifests itself in a culture change process.

A reason why "Praising" showed a low appearance in the session can be linked to what was said during the session "that there is a lack of feedback and appraisal of colleagues in this culture. "Persuading" did not occur much possibly because the session was more a conversation than a discussion, and there was no clear persuasion occurring. Because of the form of the session being a conversation more than a discussion, "Deciding" also did not occur enough. Neither did "Addressed for expertise" occur often, for a municipality might not really hold clear experts as for example a technical project-based organization would. Additionally, "No hesitance" turned out to be more of a feeling than a behavior and was difficult to observe. Results out of the questionnaire hinted towards informal leaders not being hesitant to speak, but it is hard to draw clear conclusions from it.

For the variables that were included in the final analysis, the variables "Kicking-off topic", "Long silence" and "Addressed for expertise" did occur as behavior, but not as differing enough (more than 0.1) from the non-informal leader candidates or not as highest with one of the assumed informal leaders. The other variables did. The variable "Kicking-off topic" was occurring

also often with candidates that are assumed in this research as non-informal leaders. "Long silence" was in practice hard to test for, because the observer is more focused on behavior that occurs, whereas a long silence is behavior that is observable as something not occurring (in this case speaking). This makes it hard to rate while filling out a B.O.S.. "Addressed for expertise" occurred most often with Candidate 1, who furthermore did not score high on other characteristics expect for variable 5 "Praising", however both variables are also discussed as not occurring often. This makes any sharp conclusion tough to make.

When only this research is considered, it is concluded that an informal leader will manifest itself by the following behavioral characteristics (in range of most frequent to least frequent): proposing task-relevant activities to undertake; making sure to include everyone in the process; persuading other people to join the same opinion of the person itself; proposing goals to achieve in the future; drawing final decisions; steering towards a new direction or topic; being consistently involved in conversation; integrating others' ideas; asking for other opinions; praising people for their contribution; providing content related input; expressing positive behavior and support; informing others on non-technical subjects.

Further observation could add a less objective overall interpretation to the conclusion. If one would put the conclusion in a more visional and opposing perspective, the two assumed informal leaders could be characterized as an optimistic storyteller and a pessimistic square shooter. An optimistic storyteller, because the informal leader jokes around now and then, tells stories from experience, uses metaphors, seems to value others' opinions, and shows both social and practical behavioral characteristics. Whereas the pessimistic square shooter relates to people by not being afraid of stating problems and things that go wrong. An informal leader who expresses people's frustrations, and who scores high in mostly practical behavioral characteristics. These are somewhat contrasting characters, but they clearly sketch the conclusion in one picture. Interestingly it matches well with a statement Bales (1953) made a long time ago that in leaderless groups two informal leaders will emerge. One focused on social issues, and the other on task that needs to be achieved. The question now raises what the informal leaders' specific impact is on the culture change process, and how organizations can use this impact for the benefit of the organization. This because the informal leaders are particularly important considering the anxiety a culture change process comes with. It will make people to search for leadership, and from observations became clear that people from the municipality were already in search of leadership. In a large organization like a municipality, which is dispersed in a lot of small self-managing teams where roles are not divided in advance (Van Beter naar Best, 2017), and only few formal leaders exist, informal leaders might become very influential. Maybe on even more fields that just culture. Their possible impact is in the name: they are leaders. However, more research must be conducted to be able to draw any conclusion on this topic. This research pleads for the first step to be the realization by organizations that informal leaders do exist. Then to recognize them in their own organization, and to keep their eyes open to the possible impact of informal leaders. Especially on organization culture change, but maybe even on more processes in the organization.

Nevertheless, the image of an optimistic storyteller and a pessimistic square shooter, who appeal to two sides of a human mind, sketch a cartoon-like image of two figures. One on each shoulder of the organization, whispering to its conscious which way to pursue.

#### 6. CONCLUSION

Two informal leaders arose in a culture change process, taking on two types of roles. One scored high on both social behavioral characteristics that involve being concerned with other people's opinions and well-being, and practical characteristics that relate to contributing to the task that needs to be achieved. To sketch the conclusion in on picture, this informal leader can be characterized as an optimistic storyteller that explains opinions by sharing own life experiences that are relatable to others, using metaphors when speaking, and expressing value towards another people's contribution. This behavioral set probably appeals to others through the positivity and an engaging way of talking. The second informal leader can be seen as a pessimistic square shooter, not afraid of stating opinions and pointing out problems that others recognize. This informal leader scores high on practical behavioral characteristics mostly and appeals to people because he is able to articulate the frustrations they share. Both might have a great influence in an organizational change process, or even beyond that, be it positive or negative.



Figure 4. The informal leaders and their organization.

## 7. LIMITATIONS AND RECOMMENDATIONS

This research has faced multiple limitations concerning the design and execution. Limitations in time (given short timeframe of fifteen weeks) and other resources (like only one observer) caused that only one session was conducted for this research at one Dutch municipality. Additionally, the selection method for the thirty selected participants for this research cannot be taken as a random sample (Marriott, 2002). Selection of the meeting participants was not done by random selection, but by the human resources manager of the organization, even though she stated to have selected participants at random. When research would be repeated in the same way, a recommendation is to have more than one observer. This would make the overall observations more reliable, because it will decrease the risk of non-objectivity (for there can be taken an average). The observants could be other more researchers in the field, or even people from inside the organization that are already familiar with the participants. In that way, an average of those people could give an indication of not only the session, but also the behavior of the participants in their daily operations. Another recommendation is to have multiple shorter session with the same group, to be able to test if observations per individual are reliable over time. Multiple sessions could be organized with different groups. The sessions could be organized keeping the same people in the same groups, or people can be mixed per session to research if the same informal leaders will emerge, and what the effects on their behaviors are when confronted with other people.

Other recommendations for future research would be to extend this research beyond Dutch municipalities. Research could be done in other type of organizations. It would be expected that the overall behavioral patterns of informal leaders would be similar, i.e. if the setting of the research would still be happening during a culture change process. If this research would be conducted in different countries, it is expected that the specific behavior might differ significantly due to differences in national culture, where leadership would be perceived differently or expressed in a different way. Other characteristics may then need to be researched. Other interesting topics to explore would be what the longitudinal effects of informal leaders is on others, non-leaders, in the process of culture change.

After having carried out this research and its limitations, the following recommendations can be made regarding its execution. Below, a table can be found (see Table 11 on the next page) that provides characteristics to take into account in a B.O.S. when research like this will be repeated. The characteristics that are included are the ones that were proven in this research to occur with informal leaders in a culture change process at a municipality. The first thirteen characteristics are ordered on the basis of how often they are expected to occur. The last four characteristics are added based on this research. It is not tested yet how often they are expected to occur. A good addition for the group session would be to include an assignment were people will not only be having a conversation, but also need to carry out a small task related to culture change. A part where possible leaders would need to take on the lead of the assignment, divide tasks clearer, make final decisions, and give them the opportunity to propose future goals. The group session as it was now, was merely a conversation, and did not test some of the characteristics as well as they could be tested. This because of the lack of "doing", more than just "talking" in the session. Almost all leadership literature that was studied for this research based their research on observing leaders in the position of leading projects or assignments, not leaders in a conversation. Therefore, it is debatable if the group session carried out as it was in this research, would indeed be the best way to test the manifestation of informal leaders in a culture change process. A method that would not organize a special session, but just observe informal leaders in an everyday working environment might give better results regarding informal leader behavior. However, the lengthiness of a culture change process, and the fact that it is a process that is happening mostly in the background of organizational operations, will complicate observations regarding informal leadership behavior in the day-to-day operations of organizations. Another way of observing this could be to conduct a series of observations, over a long stretch of time, with gaps between the observations of several months or even vears.

#### 8. ACKNOWLEDGMENTS

A special thank you goes to the people without whom this research would not have been possible. First, I would like to thank Prof. dr. C. P. M. Wilderom, who supervised this research and paper, and provided feedback generously. Also, thank you to Dr. H. Doeleman, who built a bridge between the municipality and the university, and who provided the opportunity to study the municipality and to conduct research there. Thank you also to the municipality for its time and patience to provide a research opportunity, and I especially would like to thank the people who participated in the afternoon session. Thank you to Dr. D. Van Dun. And finally, a thank you to the people that helped and supported me in executing this research.

Characteristic	Definition	Example	Reference
1. Proposing activities	Proposing task-relevant activities to undertake that would provide a solution for possible issues	"Have you tried asking others for help?"	Lord, 1977; Yoo & Alavi, 2004
2. Including	Making sure to include everyone in the process, by other means than asking them for opinions.	"In the case of [name], he faces this issue daily."	Anderson & Wanberg, 1991; Pielstick, 2000
3. Persuading	Stating an opinion and trying to convince people of the truth of this statement.	"It really is true, I have seen it myself!"	Goktepe & Schneier, 1988; Luria & Berson, 2013
4. Proposing goals	Proposing goals for in the future.	"In 2020 we should be through with the biggest part of this organizational change."	Bennis, 1989; Lord, 1977; Luria & Berson, 2013; Manz & Sims, 1987
5. Deciding	Drawing final decisions when necessary.	"We should go with this."	Neubert & Taggar, 2004
6. Steering towards new topic	Steering the conversation towards a new direction or topic.	"I recognize this, but I would also like to bring attention to the way we dress in this organization."	Luria & Berson, 2013
7. Consistent involvement	Consistently involved in the conversation or process.	"I guess it should be like this." "I would say like this." "No,	Anderson & Wanberg, 1991;
		this would not be possible"	Reynolds, 1984; Wheelan & Johnston, 1996;
			Y oo & Alavı, 2004
8. Integrating ideas	Considering what others have mentioned before and bringing one or more ideas together.	"He states this, and she states that, but if we would take both together, and say"	Hunt & Dodge, 1997; Lord, 1977; Manz & Sims, 1987; Yoo & Alavi. 2004
<ol><li>Asking for opinions</li></ol>	Directly asking for someone else's opinion on a matter.	"[name], what do you think about this matter actually?"	Lord, 1977; Pielstick, 2000
10. Praising	Praising others for their contribution.	"Good that you mention this."	Anderson & Wanberg, 1991;
			Lord, 1977; Manz & Sims, 1987; Pielstick, 2000
11. Input	Providing content related input other than related to	"On this topic I have to add the following"	Anderson & Wanberg, 1991;
	technicalities or informing how things must be done.		Bales, 1950; Luria & Berson,
			2015; Wheelan & Johnston, 1996; Yoo & Alavi, 2004
12. Support and positivity	Expressing positive behavior and showing support to others and being concerned of the well-being of others.	"Let's look on the bright side,"	Anderson & Wanberg, 1991; Lord, 1977; Wheelan & Tohwson, 1006
13 Informing	Informing others on hour tasks are nerformed, or what his/her	"I first would need to check the manual hefore I am shie to	Anderson & Wanherg 1901-
Summorry .ct	own position in the organization consists of, everything but technical subjects.	ask my colleague for help."	Neubert & Taggar, 2004; Pielstick, 2000
14. Telling stories	Explaining own statements by telling stories from own experience or using metaphors in speech.	"I can make my statement clearer by this following story"	This research, Veenis, 2018.
15. Joking	Making small jokes related to the topic.	"Related to what you said, [joke]"	This research, Veenis, 2018.
16. Emphasizing problems	Emphasizing problems that currently exist and could develop, instead of emphasizing thing that go well.	"Our problem is that our communication is lacking."	This research, Veenis, 2018.
17. Disagreeing	Expressing disagreement to what others just have stated.	"I do not agree with what you just stated."	This research, Veenis, 2018.

Table 11. Recommendations of behavioral characteristics for B.O.S., for further research.

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#### **APPENDIX** A

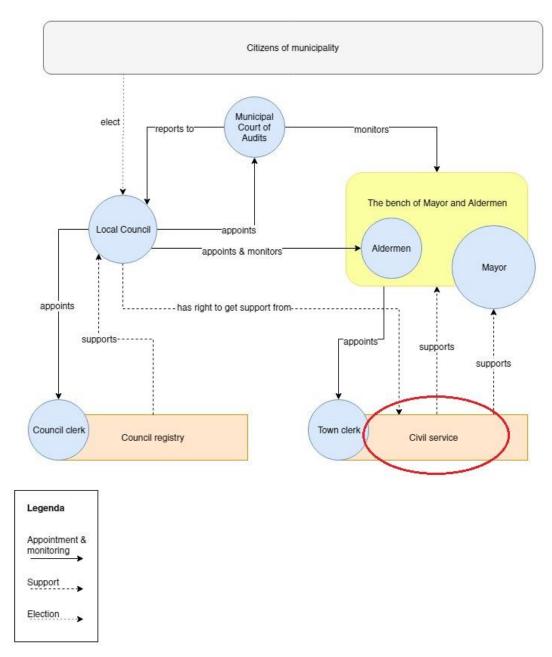


Figure 1. Schematic overview of the Dutch local government system.

# Schein's 3 layers of organisational culture

Artifacts visible cultural elements

**Espoused Values** strategies, goals, norms and values

2

R

Basic Underlying Assumptions unconscious, taken for granted believes and perceptions

Figure 2. Iceberg model illustrating Schein (2010)'s three layers of organizational culture.

#### **APPENDIX B**

	oneens. Naderhand weer teruggeven aan de wo	пкаторое	generust	er (inni	uenej.	
		Helemaa mee een				elemaal e oneens
1.	Deze workshop heeft mij geholpen de organisatiecultuur beter te begrijpen	1	2	3	4	5
2.	Ik vond deze workshop goed georganiseerd	1	2	3	4	5
3.	De workshopbegeleidster wist veel van het onderwerp	1	2	3	4	5
4.	Ik vond deze workshop nuttig	1	2	3	4	5
5.	Dit gesprek heeft mij enthousiast(er) gemaakt om de organisatieverandering door te zetten	1	2	3	4	5
б.	Ik denk dat een workshop als deze positief kan bijdragen aan de toekomst van de organisatie	1	2	3	4	5
7.	Ik zou deze workshop aanbevelen aan collega's	1	2	3	4	5
8.	Ik zou geinteresseerd zijn in een vervolg workshop, die dieper op het onderwerp in zal gaan	1	2	3	4	5
9.	Naar mijn gevoel was deze workshop: 🛛 🗖 a. Te kort	🖬 b. Ji	uiste ler	igte 🗆	c. Te	lang
10.	Wat vond jij het beste aan de workshop? En waar zie jij rui	inte voor v	erbeteri	ng?		
11.	Heb je verder nog opmerkingen?					

#### Tijdens het gesprek

12. Wie nam volgens jou het voortouw in het gesprek?

(Naam of namen die hier genoemd worden zullen strikt anoniem worden verwerkt en zullen NIET worden gedeeld met andere buiten het onderzoek)

#### De volgende vragen gaan over hoe jij jouw eigen deelname in de workshop zou beoordelen

	Helemaal mee eens				elemaal e oneens
13. Ik nam actief deel aan het gesprek	1	2	3	4	5
14. Ik ben vaak aan het woord geweest tijdens het gesprek	1	2	3	4	5
<ol> <li>15. Ik heb iemand tijdens de workshop of in de pauze gecomplimenteerd op zijn of haar inbreng</li> </ol>	1	2	3	4	5
16. Ik heb anderen naar hun mening gevraag	1	2	3	4	5
17. Ik aarzelde om mijn mening te delen	1	2	3	4	5
18. Ik heb anderen proberen te overtuigen van mijn mening	1	2	3	4	5

Hartelijk dank voor het invullen van dit evaluatieformulier! Gelieve dit formulier terug te geven aan de workshopbegeleidster (Michelle)

Figure 3. Empty questionnaire used in research.

ques-	topic	code	score	score	score	score	score	score	score	
tion 1	understanding	UC	Candidate 1 2	Candidate 2 3	Candidate 3 2	Candidate 4 4	Candidate 5 3	Candidate 6 2	Candidate 7 3	
	of organizational culture									
2	organization of workshop	OW	2	4	2	3	2	1	2	
3	knowledge facilitator	KF	1	4	3	3	3	1	2	
4	usefulness workshop	UW	1	4	1	3	4	1	3	
5	enthusiasm on organizational change	EC	2	3	2	2	3	2	3	
6	workshop can positively contribute	PC	2	4	2	4	3	1	2	
7	recommending to colleagues	RC	2	4	1	4	3	1	3	
8	interested in follow-up	IF	2	3	3	1	4	1	3	
9	length workshop	LW	b	с	с	с	с	b	b	
10	best and feedback	BF	clearance, further developing / watching others.	Talking with colleagues, hearing other perspective s and seeing more awareness // took too long.	I do not know the knowledge of the facilitator. What she did do well was asking further, summarizin g and creating clearance. My compliment s.	Interesting to share opinions, my not many facts. This makes it hard to give it a future.	A whole afternoon asks a lot from the agenda and as a participant it is not clear what the result will be for me.	There was room for discussion. Would be nice if there would be more people.	[empty]	
11	other comments	OC	N.A.	[empty]	[empty]	N.A.	N.A.	With a bit more steering, you get a clearer outcome.	[empty]	
12	lead in conversation	LC	Candidate 4 & 7	Candidate 4 & 7	[empty]	Candidate 3	[empty]	[empty]	Candidate 4 & 7	
13	active participation	AP	2	4	2	1	2	4	2	
14	often spoke	OS	3	4	2	1	4	4	2	
15	complemented someone	CS	4	5	4	2	4	2	3	
16	asked other's opinions	AO	4	5	3	1	2	3	3	
17	(neg.) hesitance to speak	HS	2	2	5	5	2	3	4	
18	convincing others	СО	2	5	4	3	3	4	3	
total s	core q12		0	0	0.143	0.423	0	0	0.42857142 9	
total sc	core q13-18		12	4	15	22	12	11	16	

Table 2. Score table of questionnaire answers.

	Variable	subvariables	code	C1	C2	C3	C4	C5	C6	C7	total	total excl. C7	total excl. C4
1.	Initiating conversatio n		IN								-		
2.		Kicking-off topic	КО	2	1	3	7	6		2	21	19	14
3.		Steering towards new topic	SC	1		7	12	1		15	36	21	24
4.	Support and positivity		EP	1	1	5	8			2	17	15	9
5.		Praising	PP	1		1	2			1	5	4	3
6.		Thanking	TH								-	-	-
7.		Integrating ideas	II				17	2		1	20	19	3
8.		Showing interest	SI	15	4	20	24	2	1	3	69	66	45
9.		Asking for opinions	AO		1	2	24	9		6	42	36	18
10		Including	IE			1	13	1		2	17	15	4
11	Persuading		JO				2			2	4	2	2
12	Dividing tasks		DT								-	-	-
13	Input		CI	18	7	30	49	23	3	52	182	130	133
14		Technical contribution	TI								-	-	-
15		Informing	NT	14		5	21	9		17	66	49	45
16		Proposing activities	TA	1	1	3	20			15	40	25	20
17		Proposing goals	DG				1			1	2	1	1
18		Deciding	FD	2		6	21	4	1	30	64	34	43
19	Talking volume		TV				<u>~1</u>		1	50	-	-	-
20		Consistent involvement	IC	25	7	38	82	32	2	76	262	186	180
21		Long silence (neg. cor.)	LS	10	50	6	1	7	58	3	135	132	134
. 22		No hesitance	HS	_	50	2	4	1	- 1	2	8	6	4
23	Addressed for		AO	2		2	1	1	1	2	4	4	3
•	expertise			2			1				4	4	5

Table 3. Filled out Behavior Observation Scheme.

Legenda
: informal leader(s) not the highest score in this category
: highest score, and more than 0.2 difference
: highest score, and more than 0.15 difference
: highest score, and more than 0.1 difference
: highest score, but not significantly different
: informal leader(s) not only one with highest score
:highest score per variable

Analysis									
Candidate 4	4 as								
informal le	ader								
variable	code	1	2	3	4	5	6	7	difference
									highest two
2	KO	0.095	0.048	0.143	0.333	0.286	0.000	0.095	0.048
3	SC	0.028	0.000	0.194	0.333	0.028	0.000	0.417	0.083
4	EP	0.059	0.059	0.294	0.471	0.000	0.000	0.118	0.176
5	PP	0.200	0.000	0.200	0.400	0.000	0.000	0.200	0.200
7	II	0.000	0.000	0.000	0.850	0.100	0.000	0.050	0.800
8	SI	0.217	0.058	0.290	0.348	0.029	0.014	0.043	0.058
9	AO	0.000	0.024	0.048	0.571	0.214	0.000	0.143	0.357
10	IE	0.000	0.000	0.059	0.765	0.059	0.000	0.118	0.647
11	JO	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.000
13	CI	0.099	0.038	0.165	0.269	0.126	0.016	0.286	0.016
15	NT	0.212	0.000	0.076	0.318	0.136	0.000	0.258	0.061
16	TA	0.025	0.025	0.075	0.500	0.000	0.000	0.375	0.125
17	DG	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.000
18	FD	0.031	0.000	0.094	0.328	0.063	0.016	0.469	0.141
20	IC	0.095	0.027	0.145	0.313	0.122	0.008	0.290	0.023
21	LS	0.074	0.370	0.044	0.007	0.052	0.430	0.022	0.015
23	AO	0.500	0.000	0.000	0.250	0.250	0.000	0.000	0.250
sum		1.636	0.649	1.827	7.057	1.465	0.484	3.883	

Table 4. Analysis when taking that Candidate 4 is the informal leader.

Analysis ( leader exc								
variable	code	1	2	3	4	5	6	difference highest two
2	KO	0.105	0.053	0.158	0.368	0.316	0.000	0.053
3	SC	0.048	0.000	0.333	0.571	0.048	0.000	0.238
4	EP	0.067	0.067	0.333	0.533	0.000	0.000	0.200
5	PP	0.250	0.000	0.250	0.500	0.000	0.000	0.250
7	II	0.000	0.000	0.000	0.895	0.105	0.000	0.789
8	SI	0.227	0.061	0.303	0.364	0.030	0.015	0.136
9	AO	0.000	0.028	0.056	0.667	0.250	0.000	0.417
10	IE	0.000	0.000	0.067	0.867	0.067	0.000	0.800
11	JO	0.000	0.000	0.000	1.000	0.000	0.000	1.000
13	CI	0.138	0.054	0.231	0.377	0.177	0.023	0.146
15	NT	0.286	0.000	0.102	0.429	0.184	0.000	0.143
16	TA	0.040	0.040	0.120	0.800	0.000	0.000	0.680
17	DG	0.000	0.000	0.000	1.000	0.000	0.000	1.000
18	FD	0.059	0.000	0.176	0.618	0.118	0.029	0.441
20	IC	0.134	0.038	0.204	0.441	0.172	0.011	0.269
21	LS	0.076	0.379	0.045	0.008	0.053	0.439	0.038
23	AO	0.500	0.000	0.000	0.250	0.250	0.000	0.250
sum		1.930	0.718	2.379	9.686	1.769	0.518	

 Table 5. Analysis when taking that Candidate 4 is the informal leader excluding Candidate 7.

Analysis C leader exc								
variable	code	1	2	3	5	6	7	difference highest two
2	KO	0.143	0.071	0.214	0.429	0.000	0.143	0.214
3	SC	0.042	0.000	0.292	0.042	0.000	0.625	0.333
4	EP	0.111	0.111	0.556	0.000	0.000	0.222	0.333
5	PP	0.333	0.000	0.333	0.000	0.000	0.333	0.333
7	II	0.000	0.000	0.000	0.667	0.000	0.333	0.333
8	SI	0.333	0.089	0.444	0.044	0.022	0.067	0.111
9	AO	0.000	0.056	0.111	0.500	0.000	0.333	0.167
10	IE	0.000	0.000	0.250	0.250	0.000	0.500	0.250
11	JO	0.000	0.000	0.000	0.000	0.000	1.000	1.000
13	CI	0.000	0.000	0.000	0.173	0.023	0.391	0.218
15	NT	0.311	0.000	0.111	0.200	0.000	0.378	0.067
16	TA	0.050	0.050	0.150	0.000	0.000	0.750	0.600
17	DG	0.000	0.000	0.000	0.000	0.000	1.000	1.000
18	FD	0.047	0.000	0.140	0.093	0.023	0.698	0.558
20	IC	0.139	0.039	0.211	0.178	0.011	0.422	0.244
21	LS	0.075	0.373	0.045	0.178	0.433	0.022	0.022
23	AO	0.667	0.000	0.000	0.333	0.000	0.000	0.333
sum		2.250	0.789	2.857	3.086	0.512	7.218	

 Table 6. Analysis when taking that Candidate 7 is the informal leader excluding Candidate 4.

Analysis Candidate 4 & 7 as both informal leaders									
variable	code	1	2	3	4	5	6	7	difference highest two
2	KO	0.095	0.048	0.143	0.333	0.286	0.000	0.095	0.143
3	SC	0.028	0.000	0.194	0.333	0.028	0.000	0.417	0.139
4	EP	0.059	0.059	0.294	0.471	0.000	0.000	0.118	0.176
5	PP	0.200	0.000	0.200	0.400	0.000	0.000	0.200	0.200
7	II	0.000	0.000	0.000	0.850	0.100	0.000	0.050	0.050
8	SI	0.217	0.058	0.290	0.348	0.029	0.014	0.043	0.072
9	AO	0.000	0.024	0.048	0.571	0.214	0.000	0.143	0.071
10	IE	0.000	0.000	0.059	0.765	0.059	0.000	0.118	0.059
11	JO	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.500
13	CI	0.099	0.038	0.165	0.269	0.126	0.016	0.286	0.104
15	NT	0.212	0.000	0.076	0.318	0.136	0.000	0.258	0.045
16	TA	0.025	0.025	0.075	0.500	0.000	0.000	0.375	0.300
17	DG	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.500
18	FD	0.031	0.000	0.094	0.328	0.063	0.016	0.469	0.234
20	IC	0.095	0.027	0.145	0.313	0.122	0.008	0.290	0.145
21	LS	0.074	0.370	0.044	0.007	0.052	0.430	0.022	0.022
23	AO	0.500	0.000	0.000	0.250	0.250	0.000	0.000	0.250
sum		1.636	0.649	1.827	7.057	1.465	0.484	3.883	

Table 7. Analysis when taking both Candidate 4 and Candidate 7as informal leaders.