

# BUREAUCRATS AS INNOVATORS? STATISTICAL ANALYSIS ON INNOVATIVE CAPACITY WITHIN THE HUNGARIAN CENTRAL CIVIL SERVICE

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## **Abstract**

What makes a public administration innovative if it is strongly legalistic and profoundly bureaucratic? Are there innovators in such a setting who would be able to elaborate strategies in accordance with public demands? If yes, who are the innovators and what are they like? Are they among the leaders?

The article offers an answer to these questions based on an empirical research conducted in Hungary where public administration is not only legalistic but has a strong culture of top-down domination. The current study targets the key element of innovativeness namely: managerial and cultural prerequisites of innovation within central public administration. The empirical research was carried out in the Hungarian central civil service. The article also discusses whether such an environment would have an impact on innovations.

According to the findings of the article, certain prerequisites of an innovative environment exist in the given strictly hierarchic, traditionally stiff setting; however, traits of innovativeness can be identified in innovators who are genuine bureaucrats at the same time.

**Keywords:** innovation, legalism, centralization, bureaucracy.



## 1. Introductory remarks

Hungarian public administration (PA) culture can be characterized as a mixture of Weberian, legalistic legacy – inherited from the Austro-Hungarian period (Hajnal, 2003; Hajnal, 2008, p. 132; Hajnal, 2013; Drechsler, 2009; Gál and Gellén, 2015; Newland, 1976), post-Soviet type authoritative style (Cameron and Orenstein, 2012) and recent politicization (Melyer-Sahling, 2006) that is in line with general Western mediatization and personification of party politics (Hjarvard, 2013, pp. 67-69). These are the three dominant legacies – highlighted by contemporary theorists – that have influenced the current status of Hungarian PA culture<sup>1</sup>.

In this article I focus on the prerequisites of innovation as potential sources of renewed leadership in a traditionally hierarchic and legalistic public administration culture whose traits are depicted by theorists as factors contrary to innovation.

## 2. Public sector innovation as a field of academic interest

Having a brief outlook on public sector innovativeness literature, a certain chunk of theory can be identified that is engaged in defining innovation and specifically defining innovation in the public sector. Another chunk of theory deals with certain characteristics of public sector innovation as particular aspects of academic inquiry. According to Moore and Hartley (2008) ‘innovations are new ideas and practices brought into practice’, while Osborne and Brown (2005) put emphasis on introducing new elements into public service while emphasizing discontinuity with the practices of the past. Van Wart distinguishes creativity from innovation stating that ‘Creativity is the ability to think nonroutine ways, while innovation is the adaptation of ideas or ways to a new setting’ (Van Wart, 2012, p. 222); Van Wart (2012) concludes that innovation is a managerial activity while creativity should be studied from both individual and organizational viewpoints but creativity is not necessarily a management trait. This approach divides Moore’s and Hartley’s compact definition to knowledge creation and knowledge uptake.

Regarding public sector innovation in Central and Eastern European context there are relatively few studies. Kobylińska and Biglieri (2015) have recently argued that public sector innovativeness can be compared based on international rankings; public sector innovativeness rankings provide a sufficient ground for measurement if adjusted properly to the given research aim.

In a politicized but still dominantly Weberian, hierarchic and legalistic public administration, the initiators for innovation are either at the top or at the bottom of the organizations. At the top we see sometimes real public entrepreneurs who are

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1 Further details of the Hungarian public administration culture are presented in Gál and Gellén (2015). The aforementioned book chapter connects the virtual non-existence of historic record of public sector leadership training in Hungary with the idea that the country’s strategies had been determined and led by (external) powers that used to be interested in domestic public sector management instead of leadership.

'tenacious and goal driven, working long hours, willing to take risks, confident and skilled in using political connections' (Osborne and Brown, 2013, p. 6). At the bottom we find ordinary field workers who are under everyday adaptation pressures inflicted by the tension of client demands and scarce resources. According to the contemporary mainstream understanding of innovation in public sector institutions we find that innovation is attributed to a certain sense of pluralism, dynamism and variability. According to Hartley (2005, p. 27) innovation in the public sector 'is usually not a physical artifact at all, but a change in the relationships between service providers and their users'. Thus innovation is primarily relational in the context of putting the 'service' aspect into the spotlight (Osborne, Radnor and Nasi, 2013). According to Borins (2006) there are five areas of innovation in the public sector:

- System approach: better integration and coordination of public organizations' activities, partnerships, forms of cooperation between units of the public sector;
- The use of new technologies in providing services;
- Improvement of processes;
- Involvement and participation of staff, citizens and local communities; and
- Cooperation with the commercial sector and NGOs (transfer of public tasks to the private sector).

Gieske, van Buuren and Bekkers (2016) offer an integrated approach to innovative capacity. They combine earlier theories on individual, organizational and network level innovative capacity and they also use the notions of connective capacity, ambidextrous capacity and learning capacity. Connective capacity in this construct embraces linking of content and linking of actors by trust, social capital and reciprocity. At the organizational level Gieske, van Buuren and Bekkers (2016) state that connective capacity contains institutionalized provisions to create intra- and inter-organizational networks via trust-building and network-building. Additionally, the authors use the concept of capacity for actively pressing on innovation through exploration and exploitation of knowledge, based on the earlier works of March (1991), Andrioupolis and Lewis (2009), and Nooteboom and Stam (2008).

Gieske, van Buuren and Bekkers (2016) attribute high level of innovativeness to organizations that have ambidextrous capacity, signifying the ability to use both explorative and exploitative capacities in a balanced fashion through institutional boundaries, being able to favor autonomy to control and increase the efficiency, if necessary. Organizational level ambidextrous capacity is attributed to balanced strategies and policies that equally support innovation and efficiency while seriously dealing with the necessity of improving public value. The third element of innovative capacity in this model is learning capacity that on the individual level consists of reflective attitude, tolerance to ambiguity and change, and openness to experience and diversity. On the organizational level the authors identified organizational methods for stimulating creativity and sharing ideas while on the network level they identified innovative milieu and embedded learning processes into policies as learning capacity characteristics.

The aim of the research is to find empirical evidence on what prerequisites innovation might have in a centralized, legalistic public administration that has a strong Weberian legacy: who are the innovators and what they look like? It is somewhat counterintuitive that there are innovators in such a public administration culture? Still, it appears logical to assume that there are certain individuals who are more innovative than others with respect to their individual traits and to their perceptions on existing and desirable organizational behavior.

### **3. Source of analyzed data**

The current article is based on a part of a vast empirical research that originally consisted of three phases. The first phase of the research contained 40 stakeholder interviews (around 60 minutes each) within the high echelons of government (Ministry of Public Administration): division heads, directors and deputy state secretaries. The second phase of the research (conducted between 17 March and 4 April, 2014) embraced an online questionnaire within central civil service. 11,057 civil servants provided full response out of the 40,000 addressees of the entire central civil service of approx. 80,000 people (Central civil service embraces ministerial and territorial civil service) from 34 public institutions. Detailed breakdown of public institutions involved in the sample can be found in Annex I. Responses were given on a 1 to 5 scale, 1 meaning definite negation or extreme negative perception while 5 meaning definite consent or extreme positive perception.

Respondents answering 'don't know' to any of the questions involved in this research were excluded from the sample. As a result 8,233 responses were used out of the total. The third phase of the whole research was a brief questionnaire applied to 1,000 respondents, representative for the entire Hungarian population, on the topic of public sector reforms. The first two phases of the research contain information on the perceptions of the civil service trust, delegation, outsourcing, collaboration with social partners and competition – further detailed in this article. The content of the complete research would far exceed the limits of this article, therefore, I concentrate on elements that can be considered as prerequisites of innovation in the public sector from the first two phases of the research.

### **4. Results of the first phase of the research: stakeholder interviews in order to refine assumptions on Hungarian PA to create hypothesis**

Stakeholder interviews were carried out in order to support the elaboration of the online questionnaire applied in the second phase of the research. The interviews were based on a unified series of questions (guide) that the interviewers could use for open questions. The guide consisted of 6 blocks out of which two can be attributed to the content of innovativeness of public sector: 'cooperation and trust' and 'hierarchy and efficiency'. Questions relevant to innovativeness in the qualitative part of the research are displayed in Table 1.

**Table 1:** Questions asked in stakeholder interviews  
(a selection of questions relevant to innovation)

According to your opinion cooperative or competitive attitude is dominant among government civil servants?
To what extent do you feel that complex tasks that require larger independence and cooperative attitude can be delegated to civil servants?
According to your experience what motivation techniques are most efficient (instructions, bonuses, appreciation, competition, etc.)?
To what extent do you find it important to control government civil servants at work?
How would you evaluate the relationship between your peer public administration organizations? (cooperation, competition or passivity is more characteristic in their relationship?)
According to your experience: does public administration have an institutional vision on the future (strategy)?
What features do you consider decisive for work cooperation: civil servants' solidarity to each other, loyalty based on shared aims, personal contacts or political conviction (or other)?

**Source:** The author

Stakeholder interviews were made with public leaders, therefore it is natural that they felt that they had to protect their institutions and implicitly themselves. Thus they dominantly tended to recite a somewhat textbook-version of public administration values they thought were the attributes of well-functioning public institutions. The qualitative analysis highlighted certain characteristics that are known from the literature that Hungarian public administration belongs to the Weberian-legalistic European PA culture, having dominantly the following values: 1. loyalty; 2. professionalism; 3. devotion; 4. compliance to legal provisions and impartiality; 5. public good; and 6. cooperation.

The questions above enabled the analysis of the following elements: (1) internal cooperation vs. competitiveness, (2) trust in competence of civil servants, (3) motivational factors, (4) control, (5) interinstitutional relations, (6) strategic vision, and (7) values.

Regarding internal cooperation vs. internal competitiveness, I found that it is virtually unknown to increase institutional performance by any form of internal competition. Cooperation in the form of collegial reciprocity exists and has significant advantages in an otherwise stiffly organized system.

Trust in the competence of civil servants exists but leaders tend to orchestrate their teams in a way that their colleagues would not become too competent to threaten their positions. The level of competence in certain areas is higher than above but trusted competence cannot substitute for control.

Motivational factors are not managed holistically, as mostly remuneration and relative job security are considered.

Control is considered a decisive element of management, meaning single-centered, top-down, hierarchic control that in most cases vindicates (an at least informational) monopoly on cross-silo contacts, let alone contacts to the higher hierarchical echelons.

Interinstitutional relations tend to be more competitive than internal relations and apparently reflect the ambitions of the affected leaders.

Strategic vision as a public sector leadership asset hardly exists. Less than 10% of respondents had a meaningful answer to this question. In general terms strategy is

considered as a notion that is not among the duties of public sector leaders to deal with.

Values in terms of features that can connect and mobilize people were difficult to grasp. Political convictions and personal ties were unequivocally negated while loyalty and collegial solidarity were supported by respondents.

Public sector innovation literature (as presented above) primarily specifies relational (individual and/or organizational connective capacity) traits as ones that are supportive to innovation. In the current case one can observe a dominantly non-innovation friendly environment that puts emphasis on exploitation instead of exploration while separating organizational silos instead of integrating them. This offers a research opportunity to measure pro- and counter- innovation features as well.

According to the analysis of the stakeholder interviews it appears that Hungarian top public administrators – in line with the traditional Weberian image of public administration – do not observe innovation as a bottom-up phenomenon; instead, they depict innovation as change promoted by top leaders. On the questions on defining organizational success respondents tended to answer that success is measured by compliance and not by accomplishing new tasks or promoting any innovation. Still, certain organizational patterns of innovation could be identified in the qualitative research. Cooperation networks with clients or with partner institutions including public, private or civic organizations appear to be widely used but do not function very flexibly or in an ‘ambidextrous’ fashion. The leadership style is dominantly top-down, one-line leadership that has the image of professionalism. Non-innovative behavior is generalized on individual, organizational and network level. This might stem from pressure for compliance that is one of the major attributes of legalistic PA culture – that appears to be inherited from the past and preserved for the 21<sup>st</sup> century.

## **5. Indicators of innovativeness**

Everyday practices of client management must be innovative even in strictly hierarchic organizations due to changeable client demand and to ensure prompt client feedback. Grassroots-relations have limited impact on a case by case basis but can have significant impact if a local innovation is able to spill over to the entire organization as a good practice. In a strictly hierarchic organization, though, there is a major chance – this happens in Hungary relatively often – that local grassroots innovators face retaliation and they are coerced to comply with ongoing organization habits. The current research however is directed to the internal innovative capacities of the Hungarian central public administration. Similar researches are extremely rare in the central public administration and this was the first time such a vast sample could be researched empirically. The research contained questions on connective capacity within civil service and with external players such as market players, social players and professional groups. Questions discussed in this article referred to the following elements: classical bureaucratic values as features that affect innovative capacities and the intra-institutional, inter-institutional and extra-institutional aspects of connective

capacity. The research contained questions on the respondents' convictions on reality as well as on their desires. The comparison between reality scores and desire scores offered an indication of what kind of reforms (innovations) would have support and what steps would not be supported in the sample.

The following categorization can be made to connect these questions to the notions applied by Gieske, van Buuren and Bekkers (2016):

- Counter-innovative, classical bureaucratic features (overemphasized exploitative features): hierarchy and sticking to the chain of command, compliance to internal bylaws and internal instructions, relying on the expertise of the government civil service.
- Individual level ambidextrous capacity: impartiality, unbiased attitude.
- Organization level ambidextrous capacity (explorative): establishing competition among civil servants.
- Organization level ambidextrous capacity (exploitative): precisely defining individual performance indicators.
- Network level connective capacity: outsourcing of tasks, cooperation with external professional institutions and with social partners, establishing occasional work connections with external institutions and with market players.
- Organizational level connective capacity: delegation of tasks, involving government civil servants into decision making, involving colleagues as partners in work processes.

The quantitative research tested contemporary understanding on innovativeness in Hungarian settings. The hypothesis of the research was that there must be at least one statistically characteristic group in the sample that can be labeled as innovators. In order to find an innovative group, cluster analysis was used (software version: IBM SPSS Statistics 22). The cluster analysis was dedicated to the following question: 'Who are the innovators (potential innovators) and what are their characteristics?'

In order to find the innovators the following clusters were established after reducing the number of questionnaires analyzed from 11,057 to 8,233 by removing responses containing 'I don't know'. Out of the remaining answers, five clusters were created according to the following categories:

- Innovative cluster: members of this cluster gave high scores to all questions. The innovative cluster in itself does not consist of innovators as having a clear theoretical profile, rather it is a statistical subgroup of people who tend to give high scores both to questions that characterize hierarchy and innovative environment.
- 'No competition, no outsourcing' cluster: members of this cluster gave high scores to all questions except to the ones on competition and outsourcing.
- 'No innovation' cluster: members of this cluster gave low scores to all questions. This cluster is a certain inverse of the Innovative cluster; low scores are low in a relative sense, their scores are around 3 since respondents generally gave relatively high scores overall.

- Average cluster: most of their responses are close to the mean of the entire sample. Average cluster is located at the middle of the five clusters.
- Competitive cluster: members of this cluster typically gave high scores to all questions with a characteristic openness to competition compared to other clusters. They tend to give second highest scores altogether however they are very resistant to the idea of outsourcing.

General statistics of the clusters are displayed in the following table. Cluster analysis was conducted in the realm of desires based on the idea that desire scores characterize subjective attitudes regarding innovativeness more than the evaluation of reality. Additionally, scores about the evaluation of one's workplace are evidently more prone to control bias than scores on what respondents would consider important according to their desires.

**Table 2:** Clusters of indicators of innovativeness (average scores by cluster and by question)

Cluster names	Innovative	No competition, no outsourcing	No innovation	Average	Competitive
Number of respondents in cluster	2,036	1,416	984	1,961	1,836
<b>How important would you consider the following:</b> hierarchy and sticking to chain of command?	4.49	<b>4</b>	3.08	3.93	<b>4.05</b>
(...) compliance to internal bylaws and internal instructions?	4.79	<b>4.52</b>	3.48	<b>4.53</b>	<b>4.55</b>
(...) relying on the expertise of the gov. civil service?	4.83	4.75	3.95	4.63	4.86
(...) impartiality, unbiased attitude?	<b>4.86</b>	<b>4.88</b>	4.16	<b>4.83</b>	4.91
(...) establishing competition among civil servants?	3.98	1.59	2.48	2.08	3.58
(...) precisely defining individual performance indicators?	4.69	3.89	3.21	4.19	4.49
(...) outsourcing of tasks?	4.17	1.42	2.64	3.75	1.83
(...) delegating tasks?	4.49	3.55	3.25	4.04	4.16
(...) involving gov. civil servants into decisions?	4.49	4.16	3.53	4.19	4.30
(...) involving colleagues as partners in work processes?	4.76	4.6	3.91	4.61	4.69
(...) cooperation with external professional institutions and with social partners?	4.58	4.01	3.33	4.35	4.43
(...) establishing occasional work connections with external institutions and with market players?	4.32	3.18	3.02	<b>3.87</b>	<b>3.92</b>

Source: The author

It is important to emphasize that deviation between clusters is generally low. It is an overall characteristic of the research that – because of the large sample – relatively low deviations can be statistically significant. Maximum score (5) can be found at all questions and at each cluster. Incidence of minimum score (1) differs, however. The innovative cluster tends to give mark 2 at multiple questions. Minimum score (1) has not been given at many questions. At most of the questions there is a statistically significant deviation: this shows that clusters really differ from each other. There are certain relations however where there are no differences between clusters. These are highlighted with **bold** characters.

A failed assumption should also be mentioned. An attempt was made to detect whether respondents see any difference between external and internal forms of cooperation. It turned out that no characteristic subgroup of respondents can be identified on the basis of differentiating connections with social partners and market players (the latter two questions in Table 2) to standard public sector work connections.

## 6. Attributes of the clusters that were identified

In the following I examined whether there are statistically significant connections between innovativeness and: leadership position, level of education, gender, place of work and, as a fifth element of tests, I measured the distance between answers related to the experienced reality and desired state of matters.

### 6.1. Assumed connection between innovativeness and leadership position

It appears to be a logical assumption that there would be a measurable connection between innovativeness and occupying leadership positions. It appears that leaders are characteristically overrepresented – above expected count – in Competitive cluster while underrepresented in the non-innovation and average groups but also in the innovative group. Still – although competitive cluster appears to be very innovative in the leader group, the no competition, no outsourcing group is also characteristically present among the leaders, thus it appears that the element of competition is a matter of disagreement among Hungarian central civil service leaders.

**Table 3:** Cluster number of case crosstabulation: position and innovativeness

What is your current position?		Cluster Number of Case					Total
		Innovative	No competition, no outsourcing	No innovation	Average	Competitive	Leaders
Leader	Count	233 (11.44%)	<b>281 (19.84%)</b>	114 (11.58%)	207 (10.55%)	<b>426 (23.2%)</b>	1,261 (15.31%)
	Expected Count	311.8	216.9	150.7	300.4	281.2	1,261
Non-leader	Count	<b>1,780</b>	1,102	<b>836</b>	<b>1,720</b>	1,369	6,807
	Expected Count	1,683.4	1,170.7	813.6	1,621.3	1,518	6,807
n. a.	Count	23	33	34	34	41	165
	Expected Count	40.8	28.4	19.7	39.3	36.8	165
Total sample	Count	2,036	1,416	984	1,961	1,836	8,233
	Expected Count	2,036	1,416	984	1,961	1,836	8,233

**Note:** Higher than expected count is indicated by figures in **bolds**.  
Percentage figures indicate proportion of leaders within the cluster.

**Source:** The author

By measuring the strength of the connection between innovativeness and leadership position, we see that there is a statistically significant connection but a

very weak one as projected by Cramer’s V: 0.111. It can be concluded that leadership position is only slightly connected to answers given regarding innovativeness. Cramer’s V is measurable but at a very low value.

### 6.2. Assumed connection between innovativeness and level of education

In the following crosstabulation it appears that there is a statistically relevant connection between the level of the highest education programme graduated by civil servants and innovativeness, but the connection is very weak. According to Borrás and Edquist (2014) individual competence building – including training, education and skills – contribute to successful innovations on the policy level. Hartley (2014) argues that ‘human energy’ including ‘intellectual energy’, individual knowledge level and learning capability are essential for institutional innovation capacity in the public sector. Still, in the given case it is somewhat counterintuitive that the innovative cluster contains significantly higher proportion of relatively lower educated civil servants (vocational secondary school, secondary grammar school or BA) – with the remark that in the innovative cluster, general scores are high. MA graduates’ presence is more balanced in the sample, they are somewhat underrepresented in innovative and average clusters. Civil servants with doctoral degrees are more against innovation, competition and outsourcing than expected but their proportion is very low, thus this finding is not really relevant.

**Table 4:** Cluster number of case crosstabulation: innovativeness and level of education

What is your highest educational degree?		Cluster Number of Case					Total
		Innovative	No competition, no outsourcing	No innovation	Average	Competitive	
Vocational secondary school	Count	<b>242</b>	60	69	<b>200</b>	67	638
	Expected Count	157.8	109.7	76.3	152	142.3	638
Secondary grammar school	Count	268	87	73	235	84	747
	Expected Count	184.7	128.5	89.3	177.9	166.6	747
BA or equivalent	Count	<b>939</b>	<b>680</b>	425	899	<b>846</b>	3,789
	Expected Count	937	651.7	452.9	902.5	845	3,789
MA or equivalent	Count	494	<b>512</b>	<b>343</b>	539	<b>747</b>	2,635
	Expected Count	651.6	453.2	314.9	627.6	587.6	2,635
Ph.D. or equivalent	Count	34	<b>30</b>	<b>24</b>	26	<b>49</b>	163
	Expected Count	40.3	28	19.5	38.8	36.3	163
I don't intend to respond	Count	59	47	50	62	43	261
	Expected Count	64.5	44.9	31.2	62.2	58.2	261
Total	Count	2,036	1,416	984	1,961	1,836	8,233
	Expected Count	2,036	1,416	984	1,961	1,836	8,233

**Note:** Figures higher than expected count are indicated in **bolds**.

**Source:** The author

Similarly to the previous assumption, Cramer’s V (0.106) indicates that there is statistically significant connection between innovativeness and level of education but this connection is very weak.

### 6.3. Assumed connection between innovativeness and gender

There is a statistically significant connection between gender and innovativeness but this connection is not really strong. Females are relatively overrepresented in the innovative and in the average cluster while males are overrepresented in no competition, no outsourcing cluster, in the no innovation cluster and in the competitive cluster. Gender and innovation crosstabulation is displayed in Table 5. The connection between innovativeness and gender (Cramer’s V: 0.186) is somewhat higher than the connection between innovativeness and leadership position or innovativeness and level of education, but still very weak.

**Table 5:** Cluster number of case crosstabulation: innovativeness and gender

Gender		Cluster Number of Case					Total
		Innovative	No competition, no outsourcing	No innovation	Average	Competitive	
Male	Count	455	<b>522</b>	<b>370</b>	409	742	2,498
	Expected Count	617.7	429.6	298.6	595	557.1	2,498
Female	Count	<b>1,581</b>	894	614	<b>1,552</b>	1,094	5,735
	Expected Count	1,418.3	986.4	685.4	1,366	1,278.9	5,735
Total	Count	2,036	1,416	984	1,961	1,836	8,233
	Expected Count	2,036	1,416	984	1,961	1,836	8,233

**Note:** Figures higher than expected count are printed in **bolds**.

**Source:** The author

### 6.4. Assumption on the connection between innovativeness and the place of work

It might be assumed that the location of a given public administrative organ has an impact on the innovative attitude of its personnel. Respondents are categorized as ‘employees of Ministries or central offices’ or ‘employees of county government offices’. The legal status of civil servants for both cases is dominantly ‘government civil servants’.

There is weak connection between place of work and innovativeness (see Table 6). Civil servants at ministries or central offices appear to belong more to the ‘no competition, no outsourcing’ and to the ‘competitive’ cluster while those who are employed at county government offices are more represented in the ‘innovative’, ‘no innovation’ and in the ‘average’ clusters.

According to the symmetric measures, there is a significant connection between place of work and innovativeness (Cramer’s V: 0.145) but the connection is really weak. Still, there is an interesting difference in the attitudes of the two groups of place of work, as ministerial and central office civil servants tend to be more competitive

**Table 6:** Cluster number of case crosstabulation: innovativeness and place of work

Place of work		Cluster Number of Case					Total
		Innovative	No competition, no outsourcing	No innovation	Average	Competitive	
Ministries or central offices	Count	243	<b>273</b>	158	260	<b>478</b>	1,412
	Expected Count	350.7	242.6	167.9	337.6	313.1	1,412
County government offices	Count	<b>1,776</b>	1,124	<b>809</b>	<b>1,684</b>	1,325	6,718
	Expected Count	1,668.3	1,154.4	799.1	1,606.4	1,489.9	6,718
Total	Count	2,019	1,397	967	1,944	1,803	8,130
	Expected Count	2,019	1,397	967	1,944	1,803	8,130

**Note:** Figures higher than expected count are printed in **bolds**.

**Source:** The author

and generally more active. This can be connected to the different attitude of residents of the capital area and residents of the rest of the country.

## 7. GAP analysis of satisfaction or dissatisfaction

The research database contains parallel data on perceptions on facts and on desires. Based on this asset of the research database it is possible to determine which components of public administration have support in civil service and which ones should be reduced or downgraded according to the respondents. In the following, I will present an analysis of gaps within clusters.

The aim of the research at this point is to define areas as follows:

- areas for development: where scores of desires are higher than the scores of sensed reality; and
- areas for reduction: where scores given on sensed reality are higher than scores of desires.

In the following, I analyze the gaps between sensed reality and desire in certain clusters, concentrating on TOP3 gaps regarding the responses to the questions involved in the research. There is univocal consent in all clusters that 'professionalism', 'involving civil servants into decisions' and 'colleagues to be treated as partners' should be increased; these are areas of development. In areas for reduction there is no such consensus. According to the majority of respondents, reducing hierarchy, reducing outsourcing and reducing competition appear as dominant; still there is a large difference among clusters despite consensus regarding certain factors.

It is interesting to observe that the Innovative cluster has an intense supportive attitude to practically all factors including those that could be evaluated as counter-innovative such as hierarchy, compliance and professionalism (professionalism in this case shall be understood in the Weberian sense as an entail of the cohort of public administrators). Therefore responses that are pro-innovative and responses that are counter-innovative are not necessarily supported and rejected in a theoretically clear selection in the corresponding clusters.

**Table 7:** GAP analysis in clusters

Desires - Reality scores	Top 3 factors	Innovative cluster	No competition, no outsourcing	No innovation	Average	Competitive
Desire scores higher than reality scores (area for development)	TOP1	Involving civil servants into decision-making (0.79)	Involving civil servants into decision-making (1.13)	Civil servants as partners (0.64)	Civil servants as partners (0.83)	Professionalism (1.16)
	TOP2	Professionalism (0.76)	Professionalism (1.11)	Involving civil servants into decision-making (0.63)	Involving civil servants into decision-making (0.83)	Involving civil servants into decision-making (1.06)
	TOP3	Civil servants as partners (0.72)	Civil servants as partners (1.06)	Professionalism (0.58)	Professionalism (0.82)	Civil servants as partners (0.98)
Desire scores lower than reality scores: these factors should be reduced	TOP1		Competition (-0.65)	Hierarchy (-0.78)	Competition (-0.511)	Outsourcing (-0.5)
	TOP2	No result	Outsourcing (-0.61)	Bylaws and instructions (-0.37)	Hierarchy (-0.37)	Hierarchy (-0.29)
	TOP3		Hierarchy (-0.33)	Outsourcing (-0.13)	No result	No result
Conclusions			This cluster has a definite image on areas for development. Apart from this, desire for impartiality is characteristically high. They have definite position in areas for reduction too. The latter is in line with the result of cluster analysis.	Low difference between scores of desire and scores of reality. Members of this cluster tended to give low scores to all questions. They tend to reject hierarchy as a main principle of work organization. This characteristic is dominant.	This cluster gave scores around the overall average. However, here they tend to reject both hierarchy and competition.	The competitive cluster has the biggest difference between desires and reality.
		Innovative cluster: desire scores are higher than reality scores at almost all factors.				

**Source:** The author

The 'no innovation' cluster tends to reject hierarchy and the importance of internal bylaws while supporting soft cooperation in managing public administration such as 'civil servants as partners' and 'involving civil servants in decisions'. If we take both rejected and supported traits into consideration at the same time, it appears that a decisive proportion of the sample would reduce the importance of hierarchy, competition and outsourcing while cooperation is looked as a factor that should be increased in order to increase civil service influence instead of a factor that should be increased to boost citizens' influence on civil service.

## 8. Conclusions

Overall, the average scores on pro- and con- factors of innovativeness offer empirical evidence on how contemporary Western concepts might be applicable in the Central and Eastern European contexts. It appears that individuals who can be characterized with receptiveness to certain aspects of organizational innovativeness are present in the entire sample. Their traits, however, are not as clearly concentrated in the identified clusters as it could be expected, but this does not signify that there is no innovation in such public administration cultures that are strongly legalistic, proceduralistic and hierarchic.

There is innovation and there are innovators in such public administration cultures but the phenomenon of public sector innovation is embedded in the Weberian legacy or – to be framed differently – there are innovators but they are still bureaucrats. Ideas of innovation – especially on connective capacity – go together with the remains of classical Weberian values such as hierarchy, chain of command and professionalism. On the other hand, the same traditional values are slightly rejected by many respondents but not to replace these values with any willingness for more cooperation between civil service and civil society. On the contrary: it appears that civil servants tend to reject hierarchy and compliance to internal bylaws in order to increase influence of civil service itself so that civil service could act more freely.

It appears that no factors or forms of external cooperation have any particular support or rejection except outsourcing that appears to be categorically rejected. It can be concluded that innovators can be found in a hierarchic, traditional PA system but their ambition is a classical bureaucratic one: to increase their own bureaucratic influence. Top-down innovation is acknowledged and feared while outside-in innovations are not really accepted.

The major findings of the research, in short, are the following:

- Leadership position has a statistically significant role in innovativeness although the connection is very weak. Leaders however tend to support competitiveness in a higher proportion than expected.
- Regarding the connection between innovativeness and level of education the research threw light on an interesting counterintuitive phenomenon, namely that people having lower education appear to support innovativeness more than civil servants having university degrees. This might be surprising, but on

the other hand, university degree holders tend to support competition unlike their colleagues with lower levels of education. It might be that people at the lower echelons of the Hungarian central public administrations tend to identify innovation with change that would be desirable for them in any case. On the other hand, they characteristically reject competition knowing that they do not have a good position for any competition.

- There is a slight but statistically significant difference regarding innovativeness in connection with gender. Female respondents tend to be slightly overrepresented in the innovative cluster while males tend to support competitiveness.
- Regarding the connection of innovation with the place of work it appears that the Ministry level is less supportive to innovation while more supportive to competitiveness.

Desire scores and reality scores were compared in GAP analysis by clusters. This provided an opportunity to identify what elements are factually lower than desired (areas for development) and what elements have more factual scores than desired (areas for reduction or correction).

It appears that Hungarian central (non-municipal) civil servants tend to support a pro-bureaucratic approach for further development including higher involvement of civil servants in decisions, treating civil servants as partners and higher level of professionalism. On the other hand – with slight differences according to various clusters – they tend to reject factors that might limit mid-level bureaucrats such as competition, outsourcing and hierarchy.

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## Annex I: Detailed breakdown of the research sample

Central Statistical Office	573
Bács-Kiskun County Government Office	596
Baranya County Government Office	367
Budapest Capital Government Office	928
Csongrád County Government Office	465
Fejér Megye County Government Office	301
Győr-Moson-Sopron County Government Office	396
Hajdú-Bihar Megyei County Government Office	481
Heves County Government Office	492
Jász_Nagykun-Szolnok County Government Office	293
Nógrád County Government Office	200
Pest County Government Office	288
Somogy County Government Office	631
Vas County Government Office	259
Veszprém County Government Office	660
Borsod-Abaúj-Zemplén County Government Office	682
Békés County Government Office	504
Szabolcs Szatmár Bereg County Government Office	839
Tolna Megyei County Government Office	396
Zala County Government Office	331
Balassi Institute	21
Central Office for Administrative and Electronic Public Services	110
Institute for Public Policy Research	24
Budapest Municipal Local Government Office	142
National Atomic Energy Agency	22
National Office of Intellectual Property	47
Ministry of Human Resources	40
Ministry of Public Administration and Justice	106
Ministry of Foreign Affairs	416
Ministry of Economy	156
Ministry of National Development	92
Ministry of Rural Development	69
Ministry of Interior	55
Office of Public Administration and Justice	75