

## A COMPARATIVE ANALYSIS OF THE CHANGES IN LOCAL SERVICE DELIVERY & THE USE OF INFORMATION TECHNOLOGY<sup>1</sup>.

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**Abstract:** *The development of information and communication technologies has accelerated public service delivery through the application of information technologies in the world. In addition to these improvements, as a consequence of the reform efforts in the 2000s, important changes have occurred in the quality and quantity of the duties of local governments. Owing to the usage of information technologies for public service provision is making important contribution to local governments to fulfill their duties and responsibilities. It is expressed that the usage of information technologies for public service provision is making important contribution to local governments to fulfill their duties and responsibilities. The aim of this study is to analyse the effects of information technologies on service provision of The Special Provincial Administrations of Konya, Kayseri, Kırşehir and Kırıkkale. The study based on a survey of employees and an interview with relevant managers of The Special Provincial Administration of Konya, Kayseri, Kırşehir and Kırıkkale. The results revealed that The Special Provincial Administrations of Konya, Kayseri, Kırşehir and Kırıkkale made a good progress in the usage of information technology during the local services but there are some insufficiencies and it can be seen that these institutions will continue working to achieve a better stage.*

**Key Words:** *Local Governments, The Special Provincial Administration, Local Service Delivery, Information Technologies.*

<sup>1</sup> In this study, surveys conducted in the provinces of Konya, Kayseri, Kırıkkale and Kırşehir at different times by using the same scale have been gathered and re-analyzed comparatively. Each study has previously been published separately in various academic journals and book chapters. For sample publications, see [Emini F. Tufan & Kocaoğlu M. \(2011\)](#), "Bilişim Teknolojileri Kullanımının Hizmet Sunumuna Etkileri: Konya İl Özel İdaresi Örneği", *Süleyman Demirel University, Faculty of Economic and Administrative Sciences Journal*, 16 (2), pp. 179-200. [Kocaoğlu M. & Emini F. Tufan \(2013\)](#), "Yerel Hizmet Sunumunda Bilgi Teknolojisi Kullanımı: Kayseri İl Özel İdaresi Örneği", *Kuramdan Uygulamaya Yerel Yönetimler ve Kentsel Politikalar*, (Ed.: Y. Bulut, V. Eren, S. Karakaya, A. Aydın), Pegem Akademi Publications, Ankara, pp. 24-35. [Kocaoğlu M. & Emini F. Tufan \(2014\)](#), "Yerel Hizmet Sunumunda Bilgi Teknolojisi Kullanımının Önemi Üzerine Uygulamalı Bir Çalışma: Kırşehir İl Özel İdaresi", *Çankırı Karatekin University, Faculty of Economic and Administrative Sciences Journal*, 4 (1), pp. 203-222. [Kocaoğlu M. & Emini F. Tufan \(2015\)](#), "Bilgi Teknolojisi Kullanımının Yerel Hizmet Sunumuna Katkılarına Yönelik Uygulamalı Bir Çözümleme: Kırıkkale İl Özel İdaresi", *21st Century Social Sciences Journal*, Number 8, June/July/August, pp. 139-156.

### Introduction

Developments in line with the transition to information society and changes in the expectations of people have also altered the classical understanding in bureaucratic public administration. This change involves not only the attempts towards qualitative developments in the quality and efficacy of rendering services so as to regain the legality of the state which has been lost in the eyes of people and thus restore trust, but also the provision of transparency, accountability and participation. In this process, policies to transfer public services to the electronic media have come to the fore as a result of the proliferation of information and communication technologies and the Internet in particular. The use of communication technologies in rendering services in local administrations has become a mandatory change and an absolute necessity.

As the application examples of information technologies in local governments in the institutional base begin to emerge, it can apparently be seen that certain problem areas have arisen. Particularly how great significance the use of Internet involves has been clearly realized. However, it has become clear that using Internet without solving certain problems regarding infrastructure and human resources will not yield effective and useful results. Furthermore, websites which are one of the most significant tools for institutions in delivery of services have not yet reached an efficient level. As a result, while using information technologies in the delivery of services, problems in infrastructure and human resources as well as in the efficient use of Internet are still continuing.

In this study, the current status of the use of information technologies in local governments and provincial special administrations will be discussed in detail. In this respect, primarily a theoretical introduction towards the change in the quality of the local services and what this change means for special provincial administrations will be presented. In the second chapter, by again theoretically stating the significance of information technologies in the delivery of local services, what contributions the use of information technologies will provide for the delivery of local services will be studied thoroughly. Following the first two chapters in which a theoretical basis has been established, the use of information technologies in Kayseri, Konya, Kırıkkale and Kırşehir Special Provincial Administrations will be analyzed. In this context, a survey has been conducted on the directors and personnel of the provincial administrations of the towns stated above and statistical methods have been used in the evaluation process. On the other hand, general secretaries of each of these four institutions and their information technologies directors have attended a semi-structured interviewed. Finally, strategic plans of each of these four institutions, their annual activity reports and performance programs have been exploited, and thus the consolidation of the issue and its evaluation from different perspectives has been aimed.

### 1. Changes in the Quality of the Local Services and the Position of Special Provincial Administrations in This Change

The importance of local administrations which has come to light as a result of the reasons and necessities such as the differences in local conditions in general, the growth of local governments and the spatial difference in the delivery

of services, ensuring public participation in administration, the establishment and improvement of democracy and offering better services to public (Eryılmaz, 1998:115) becomes increasingly significant with the globalization process which has penetrated into all areas in the world, the higher efficiency of the international organizations and rapid developments in information technologies (Coşkun & Uzun, 1999:1).

In fact, within the studies of reconstruction that has lately been actualized, countless regulations have been made in the areas of the service, authority and responsibility of local administrations. In this context, the duties and authorities of the local administrations in question have been revised and stated in Special Provincial Administration Act no 5302, Municipalities Act no 5393 and Metropolitan Municipalities Act no 5216. Finally, with the Act no 6360 dated 12 November 2012, regarding the Establishment of Metropolitan Municipalities in Fourteen Cities and the Establishment of Twenty-Seven Townships, the legal entity status of special provincial administrations have been terminated in metropolitan cities. With this regulation to go fully in effect following the first local elections (30 March 2014), it is inevitable that certain changes will occur in the service quality and mentality as a result of the changes that have taken place in the service areas of special provincial administrations.

In addition to these developments, it can be seen that the foundations of transition to information technologies have been laid throughout the world and information production by using information technologies has become more significant (Öğüt, 2003:38). As a result of this process, substantial developments have been made in information and communication technologies and this has forced the institutions providing public service to restructure their units in parallel with the latest global improvements (Akgün, 2003:65-66). At this point, besides their increasing burdens, special provincial administrations are also faced with the multi-faceted aspect of services as a result of the developments in information and communication technologies and the growing demands and expectations of people hoping to catch up with the trends of change and globalization in the world.

As a result, it is of utmost importance for the special provincial administrations and other local administrative units to integrate themselves with the changing world and construct a modern administrative structure based on information technologies in order to attain the speed of change in the world and to directly interact with people, do their duties more easily, quickly, punctually, accurately and safely and thus meet the needs faster and assess the expectations, demands and complaints of people more comfortably.

## **2. The Importance of the Use of Information Technologies in the Delivery of Local Services and Its Advantages to Delivery of Local Services**

Information technologies which embodies all the components that provide the collection, processing, storing and distribution of data that have been gathered to support local decision making processes (Laudon & Laudon, 1996:9) have gained great importance in the betterment and

modernization process of public administration which became bulky and overgrown in the previous century and began to yield less fruit at a higher cost (Aktan, 2003:242). The fundamental points of modernization efforts in public administration make public services to be more transparent and accountable, offering people-oriented service. Electronic delivery of services may provide significant advantages in terms of transparency and accountability as well as offering people-oriented service (Griffin & Halpin, 2005:13). Moreover, the power of information and communication technologies can be broadly exploited so that delivery of public services, gaining access to these services, increasing the efficiency in public administration and the actualization of progress can be fulfilled (UNDP, 2004:iv).

Information and communication technologies have a strong influence on the social architecture (Tanaka et al., 2005:38). For the realization of e-transformation, the transformation of individuals, operations, trade, institutions and the state has to be materialized (Arifoğlu, 2004:6). This transformation will also alter the functioning of public administration both in qualitative and quantitative terms (Yıldız, 2003:307). The most significant implication of this transformation is that all the services can be offered en masse via e-state medium while in the classical state concept, people have to go to a different government office for each and every single operation (Kuran, 2005:64). Besides, information and communication technologies also facilitate an easier way of transferring and sharing data (Tanaka et al., 2005:38-39). Within the e-state system, the new medium that Internet provides in the communication between both state and citizen and citizen among themselves makes it a new communication tool worldwide (Tosun, 2004:413). By the same token, web design and its management has become one of the leading principles and basis of public administration (Torres et al., 2005:217-238).

In this context, the basic goal of the e-transformation reform in public administration is to raise the efficiency of public affairs, ensure transparency and provide better and multifaceted service (Flak et al., 2005:42). In this respect, e-state is an approach that takes the citizen to the forefront and places him/her at a central location, holds public employees accountable for the quality of service they have provided and evaluates their performance, and incorporates the private sector and non-governmental institutions into this process without confining the public service process only to the opportunities of public organizations (Yıldız, 2003: 307). In this sense, e-state is the locomotive engine of the modernization of public services and local administrations (Emini & Kocaoğlu, quoting from Enticott, 2011a:184).

From the administrative point of view, the opportunity of ensuring effectiveness, collecting, restoring and organizing information relevant to internal functioning and managing it easily (Balcı, 2003:267) and making the most appropriate decision in the soonest time possible (İnceler Sarıhan, 1998:195) can be achieved through the use of information technologies. Besides, it facilitates the administration to contact citizens, other public organizations and business circles (Balcı, 2003:267-268), increases people's participation to administrative decision making processes thanks to high-level information sharing and accessibility which has been attained through the elimination of

communication problems (Bulut, 2003:338) and makes significant contributions to democratic functioning and people's trust to state (Kırçova, 2003:23). Moreover, through the use of information technologies, it is expected that the workload of employees will be decreased, time and distance limitations will be eliminated in the delivery of services, people's expectations, demands and complaints will more easily be learned through the surveys that will be conducted on the Internet and the establishment of a transparent, citizen-centered, participative and effective organization structure will become possible.

With the use of information technologies, communication and coordination among the units within an organization and their personnel is ensured, delays resulting from the bureaucratic tradition can be minimized and savings in terms of time, resources and labor can be achieved. On the other hand, the use of information technologies enables an accurate and rapid information transfer not only between the units of an organization but also between any organization and other organizations. Accordingly, information technologies are expected to facilitate the relations not only between the administration and the citizen, but also the relations between the administration and other organizations.

### **3. The Use of Information Technologies in the Special Provincial Administrations of Konya, Kayseri, Kırıkkale and Kırşehir in Delivery of Services**

Under this heading, a number of field studies which were conducted in the Special Provincial Administrations of Konya, Kayseri, Kırıkkale and Kırşehir at different time periods and which aimed at the evaluation of the use of information technologies in these institutions have been gathered, and the goal of these studies, the methods used, the data collected and the analysis of the data have all been comparatively and comprehensively presented below.

#### **3.1. Objectives, Hypotheses, Methods and Target Population of the Research**

This study aims to consider in detail the tools of information technologies used during local service delivery in the abovementioned special provincial administrations in terms of the requirements of the service that has been delivered, and in this context research extensively the level of computerization and automation in organizations, technical, financial and technological infrastructure as well as the infrastructure of human resources and security opportunities. It also aims to probe into the computer literacy level among personnel and thus figure out the present condition of enterprises of these organizations by presenting corporate on-the-job training activities aspiring to raise the computer literacy level among personnel.

To this end, according to the evaluation criteria under consideration in this study, these organizations should have attained "a high computerization level", "established computer automation", "improved people's ability to use computers and their computer literacy level", "set up a website of their own" and "transferred management on to the Internet medium."

Within the scope of this study, "field research" has been adopted in order to be able to test these hypotheses from a scientific and objective point of view. Accordingly, "survey

method", which is one of the written, systematic, primary and reliable data collection tools, has been used in data collection process (Aziz, 2008:82; Altunışık et al., 2005:68). In addition, some of the employees who are in charge of using information technologies and commissioned in related units of the organization in the abovementioned special provincial administrations have also been interviewed. For this purpose, "semi-structured" interview method has been applied. The reason for the adoption of this technique is that survey questions previously developed in basic fields can be used and questions the guidelines of which have been previously identified can be modified (additions or removals) while the interview is still in progress (Balci, 2009:165; Al, 2010: 18). Finally, frequency distribution, arithmetic mean, standard deviation and error statistics are the other techniques statistically used during the evaluation process.

During the evaluation of hypotheses and questions found on the survey, "5 point Likert scale", which is one of the multi-item and ordinal scales, has been used. Questions and hypotheses have been formed by researchers through academic literature survey and exploitation of relevant resources. In addition to the evaluation of survey results, strategic plans of the organizations, their 2011 and 2012 annual activity reports, performance programs and investment program texts have also been scrutinized.

SPSS 15.0 has been used in data analysis process. In testing the reliability of the study, Cronbach Alpha coefficient, which is one of the methods most commonly used in Likert-type scales, has been adopted. When the coefficient is close to 0, this means that variables are not internally consistent. When it is over 0.60, it shows that internal consistency level is high (Bryman & Cramer, 2005:77-79). The reliability coefficient degrees of the scales used in the surveys that were conducted in the special provincial administrations of these four cities vary between 0.61 and 0.80. Therefore, all the scales are internally consistent.

Finally, target population of this study is the Special Provincial Administrations of Konya, Kayseri, Kırıkkale and Kırşehir. The sample of the study consists of directors who are working in these organizations and people working under civil servant status, who perform their duties through information technology tools. Questionnaire forms have been personally delivered and collected. In Konya Special Provincial Administration, 197 people were presently working at the time when this survey was conducted there. 144 of these people (73 %) were given questionnaire forms, all of which eventually returned. Presently, 133 people are working in Kayseri Special Provincial Administration. The number of questionnaire forms that has been evaluated for this city is 102 (77 %). In Kırşehir Special Provincial Administration, 65 people are working. At the end of the survey conducted in this city, 60 forms (92 %) which were considered valid were evaluated. 92 people are working in the organization in Kırıkkale where the survey was conducted. Of all the questionnaire forms, 82 forms which were considered valid were evaluated.

#### **3.2. Findings of the Study and Their Evaluation**

The primary challenge that public corporations have to face as regards the use of information technologies in local service delivery is equipment and infrastructure. Although

this problem may arise from a myriad of reasons, the primary cause is the failure in the transfer of sufficient funds. Şahin's (2007:535) survey results also confirm this estimation. For this reason, it was considered essential to ask the question "do you have a personal computer in your workplace which has an Internet connection?" To this question, 89.6 % of people working in Konya Special Provincial Administration responded by saying "yes", while 10.4 said "no". 90.2 % of the people in Kayseri Special Provincial Administration responded "yes", while 7.8 % said "no". To the same question, 95 % of the personnel in Kırşehir Special Provincial Administration said "yes", while the answer of 5 % of them was "no". Finally in Kırıkkale Special Provincial Administration, 89 % of the attendants said "yes" to the question, while 7.3 % said "no". By the way, computers in all these organizations have local network connections.

Percentages of the responses given to the question, "Do you have a personal computer in your workplace which has an Internet connection?" are presented in Table 1. According to it, the answers given by the people working in Konya, Kırıkkale and Kırşehir Special Provincial Administrations have parallels with each other and 70 % of people in these organizations responded by saying "more than enough" and "enough" to the questions. However, in Kayseri Special Provincial Administration, the situation is a bit different and the ratio of those who responded by saying "more than enough" and "enough" has remained around 60 % (63.8 %). In contrast, the ratio of those who responded by saying "totally insufficient" and "insufficient" has been over 25 % (28.4 %).

Certain statements that can provide insight into this issue can be seen even in the strategic plans, annual activity reports and performance programs of these organizations. For instance, while current status analysis of 2010-2014 Strategic Plan was being made in Kırıkkale Special Provincial Administration, it was reported that there were 123 desktop and 5 laptop computers in the organization. Again in 2012 Performance Program of the same organization, it was reported that there were 137 desktop and 9 laptop computers. Thus, a remarkable progress seems to have taken place during the time elapsed (Kırıkkale Special Provincial Administration, 2012a: 15 & Kırıkkale Special Provincial Administration, 2012b: 37).

In all the other special provincial administrations that are in the scope of this survey, the situation is the same. Another criterion to be taken into account to see whether computers are efficient enough for service delivery is the amount of the fund allocated for the required computer hardware. All the data in 2012 performance program show that there has been an increase in the course of time. However, it is explicitly clear that funds which have been allocated so far will not be enough for a costly field like information technologies. The position of other special provincial administrations in the scope of this survey is much better. For instance, according to the 2012 Performance Program of Kırşehir Special Provincial Administration, a fund of 20.000 TL has been allocated to this organization for this purpose (Kırşehir Special Provincial Administration, 2012a:36 and 58).

As a result, it can be said that the primary criterion that is used in determining the sufficiency of the use of information technologies in local service delivery is "degree of computerization" (quoting from www.yerelnet.org.tr, Emini & Kocaoğlu, 2011b: 171). In the context of this criterion, considering the strategic plans and performance programs of the organizations as well as the data gathered as a result of the responses given to each of these two questions, it can easily be said that essential computer hardware and software and Internet infrastructure have already been provided and positive steps have been made in all the special provincial administrations within the scope of this survey. That is, personnel who are expected to deliver service with the help of computers do have computers of their own and all these computers have Internet connection (Emini & Kocaoğlu, 2011a:188-189; Kocaoğlu & Emini, 2014:210; Kocaoğlu & Emini, 2015:147). Yet, there is an exception in terms of the sufficiency of computers. In Kayseri Special Provincial Administration, although more than half of the participants found the computers sufficient for service delivery, the resulting rate is still not quite satisfactory. As a matter of fact, when the total rate of those who found computers insufficient or totally insufficient as well as the insufficient amount of funds allocated for the infrastructure of computers are taken into consideration, it is crystal clear that there exists some deficiencies and it is necessary that a number of studies be carried out so as to get rid of these deficiencies.

**Table 1 – Sufficiency of Computers**

	Konya		Kayseri		Kırşehir		Kırıkkale	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
More Than Enough	10	6,9	2	2,0	3	5,0	24	29,3
Enough	97	67,4	63	61,8	46	76,7	42	51,2
No Idea	8	5,6	5	4,9	-	-	7	8,5
Insufficient	20	13,9	25	24,5	11	18,3	7	8,5
Very Insufficient	6	4,2	4	3,9	-	-	2	2,4
Unanswered	3	2,1	3	2,9	-	-	-	-
Total	144	100,0	102	100,0	60	100,0	82	100,0

Second criterion in the evaluation of the use of information technologies in local services is about the "establishment of automation infrastructure." (quoting from www.yerelnet.org.tr, Emini & Kocaoğlu, 2011b: 171). In order to assess the condition

of automation infrastructure in the special provincial administrations which are in the scope of this study, certain questions were directed to people in charge of the relevant position. In this context, questions like “What are the practices for ensuring security in your organization?” and “Are certain programs being used in your organization that are special to service delivery?” have been asked. In all the special provincial administrations within the scope of this study, common answers as below have been received:

*Such was this common answer: “Antivirus program has been installed into all the computers in the organization and restriction programs have effectively been used. In addition to this, there is a firewall application which is used as an integrated security system throughout the management and a spyware protection program. On the other hand, analytical budget, payroll and accounting program (Oska) and programs such as accounting, inventory and e-signature, which have been offered as part of the “e-ministry project” by the Ministry of the Interior, have been used.” (Interview with Abdüssettar Yazar and Fevzi Çakmak; Abdullah Karagöz and Tolga Yılmaz; Atanur Aydın and Özkan Çiçek; Mustafa Taş and Erol Eraslan, 2012 and 2013).*

Considering that another criterion used to determine the degree of the use of information technologies in local administrations is computer literacy or ability to use computers (quoting from www.yerelnet.org.tr, Emini and Kocaoğlu, 2011b: 171), the two questions to be presented below and the answers to be given to them will introduce meaningful results.

In this context, data obtained from the answers given to the question “Which of the following is true for your level of ability to use a computer?” are presented in Table 2, and data obtained from the answers given to the question “Have you taken any education or a course on computer usage and Internet in your workplace?” in Table 3.

Referring to the data in Table 2, answers given to these questions by the people in Konya and Kayseri Special Provincial Administrations indicate that people’s level of computer usage is at a good level, yet not enough. In accordance with these ratios, personnel’s use of computer and Internet as part of using information technologies in the workplace is high. About 60 % of those who responded to this question said either “very good” or “good.” However, about the remaining 40 % of them do not seem to have a proficient level of computer and Internet usage. In Kırıkkale and Kırşehir Special Provincial Administrations, people’s level of computer and Internet usage is at a satisfactory degree. More than 70 % of the people who responded to the relevant question stated their ability level of computer usage as “very good” or “good.” Moreover, there is no one in Kırşehir Special Provincial Administration, who regards his/her level of computer usage ability as “bad” or “very bad.”

**Table 2 – Computer and Internet Usage Level of Corporate Employees**

	Konya		Kayseri		Kırşehir		Kırıkkale	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Very good	18	12,5	13	12,7	5	8,3	22	26,8
Good	72	50,0	47	46,1	39	65,0	37	45,1
Mean	47	32,6	38	37,3	15	25,0	17	20,7
Bad	6	4,2	3	2,9	-	-	3	3,7
Very Bad	1	0,7	-	-	-	-	2	2,4
Unanswered	-	-	1	1,0	1	1,7	1	1,2
Total	144	100,0	102	100,0	60	100,0	82	100,0

According to Table 3, which presents the findings concerning the answers given to the question whether employees have received any sort of education on computer and Internet usage in their workplaces, it is possible to conclude that such educations are generally seen as a matter of personal education in all the special provincial administrations that are included in this study. This means that workplaces do not have much contribution to people’s acquisition of the ability to use computers. Besides, in these workplaces, development of employees’ ability to use computers is not taken much seriously (Emini & Kocaoğlu, 2011a:189; Kocaoğlu & Emini, 2014:213; Kocaoğlu & Emini, 2015:148).

As a result, it is an absolute necessity to take steps in the direction of raising personnel’s computer and internet usage levels in all the special provincial administrations that are included in this study and even in Kırıkkale and Kırşehir Special Provincial Administrations, where the ratios are relatively higher. To this end, the first thing to do is the activation of a consistent education policy. For the activation of this education policy, on-the-job educations have to be extended. The current gap can certainly be filled by receiving consultancy service either from universities or from the private sector (Emini & Kocaoğlu, 2011a:189; Kocaoğlu & Emini, 2014:213; Kocaoğlu & Emini, 2015:149).

**Table 3 – Education-Training Policies in Institutions Regarding Computer and Internet Usage Policies**

	Konya		Kayseri		Kırşehir		Kırıkkale	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Given all staff periodically	7	4,9	14	13,7	14	23,3	22	26,8
Given only department of information process staff	15	10,4	22	21,6	6	10,0	14	17,1
Seen personal training issue	101	70,1	57	55,9	37	61,7	45	54,9
Unanswered	21	14,6	9	8,8	3	5,0	1	1,2
Total	144	100,0	102	100,0	60	100,0	84	100,0

Aside from the proficiency of people's computer and Internet usage in an institution where information technologies are used in local service delivery, professionals that have been specialized in information technology as "computer operator", "computer engineer", "system designer" and "software specialist" are also needed (Şahin, 2007:528). In this direction, within the scope of this survey, employees were firstly requested to answer the question "Do you have a specialist in your organization that can make computer software?" Right after that, they were asked another question: "Do you have adequate number of people in your workplace that can carry out maintenance and repair services of data processing hardware?"

The findings gathered from the answers given to the question whether there are software and hardware specialists in the special provincial administrations within the scope of this study are presented in Table 4. Accordingly, those who reported that there aren't any software or hardware specialists in Konya, Kayseri and Kırşehir Special Provincial Administrations or that if there are any, they are not enough are about 65 %. In Kırıkkale Special Provincial Administration, it is a bit low (57.3 %); more than half of the participants reported inadequacy though.

**Table 4 – Software Specialists in Organizations**

	Konya		Kayseri		Kırşehir		Kırıkkale	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes, enough	43	29,9	32	31,4	20	33,3	34	41,5
No, insufficient	95	66,0	68	66,7	39	65,0	47	57,3
Unanswered	6	4,2	2	2,0	1	1,7	1	1,2
Total	144	100,0	102	100,0	60	100,0	82	100,0

The fourth criterion that is used in determining the rate of information technology usage in local administrations is whether a corporate website has been set up. The fifth criterion is whether managerial activities have been transferred on to the web and services are conducted on the net as a whole (quoting from [www.yerelnet.org.tr](http://www.yerelnet.org.tr), Emini & Kocaoğlu, 2011b: 171).

When studied in terms of the criteria in question, all four special provincial administrations within the scope of this study do have their own web sites, the addresses of which can easily be remembered and they are actively in use. When the corporate websites are analyzed, it can be seen that they do have the links such as "contact information, address, organizational chart, various reports, notices", which have to be found on a website and each website ensures the minimum requirements. In addition to these, information about institutional regulations, ethics committee, license information system, utilities standard, budget, investment plans, strategic plan, performance and investment plans, activity reports, tender bids and information on other details can be found on these websites. Besides, there are special links for information acquisition, web mail and comments, suggestions, requests as well as links to application projects (e-home affairs) related to service delivery (Konya Special Provincial Administration, 2012; Kayseri Special Provincial Administration, 2012; Kırıkkale Special Provincial Administration, 2012c; Kırşehir Special Provincial Administration, 2012b). Yet it should be noted that their websites are not functional in terms of online service delivery. In other words, their corporate websites are confined to presenting limited information rather than offering online service delivery. Organizations set up their own websites, but fail to conduct administrative processes through these websites.

The arithmetic mean values of the answers given to the question "To what extent are the following advantages provided through the use of computers and internet in your organization?" are presented in Table 5. The table indicates which of the propositions stated in the question are regarded as an advantage. According to this, in all four special provincial administrations, storing information securely and easy and quick access to these data have been seen as an advantage with the highest rate of mean. Similarly, proposition about conducting routines like document preparation more effectively and more quickly has been accepted with the second highest mean in all of the four special provincial administrations.

Of the advantages ensuing from using information technology, the ones that have been mostly opted for in Konya, Kayseri and Kırşehir Special Provincial Administrations are generally about personnel and the way work is done. As a matter of fact, propositions that using information technology in service delivery saves time for the people delivering service, diminishes working people's workload, provides speed, efficiency and productivity, reduces costs and ensures more effective and productive use of resources have mostly been marked by the people in these three organizations. In Kırıkkale Special Provincial Administration too, the two propositions related to people delivering service are at the forefront, but it can be observed that propositions about communication with other organizations, timely delivery of service from a proper place, transparency and prevention of corruption, interaction with citizens and better evaluation of demands and requests are also selected with a high average.

**Table 5: Standard Deviation and Arithmetic Mean Values of the Answers Given to the Question  
"To what extent are the following advantages provided through the use of computers  
and internet in your organization?"**

<b>Evaluation</b>	<b>Konya</b>	<b>Kayseri</b>	<b>Kırşehir</b>	<b>Kırıkkale</b>
Enables storing information securely and facilitates easy and quick access to information.	3,8705	4,0588	3,7833	3,9634
Routines like document preparation can be done more quickly and effectively.	3,8000	4,0000	3,6897	3,8500
Saves time for the personnel delivering service and people receiving service.	3,5328	3,6500	3,4407	3,6456
Reduces the workload of employees.	3,5106	3,6566	3,6000	3,8375
Reduces bureaucracy and red tape.	3,4485	3,5644	3,5424	3,5926
Provides speed, effectiveness and productivity in service delivery.	3,4366	3,5446	3,3729	3,7375
Reduces costs.	3,3869	3,5446	3,4833	3,6707
Ensures more effective and productive use of resources.	3,3623	3,4950	3,5172	3,6829
Facilitates information and service transfer from other public organizations.	3,3453	3,5686	3,6271	3,7683
Facilitates communication within the organization.	3,3071	3,6238	3,3667	3,6951
Ensures delivery of proper service to the right place at the right time.	3,2590	3,5149	3,4407	3,7342
Makes delivery of service possible from more places and at more suitable time periods.	3,2374	3,5347	3,3833	3,7375
Enables transparent management and helps reduce corruption.	3,1087	3,1200	3,1167	3,5309
Allows a better evaluation of people's demands through better interaction with them.	2,7407	3,3900	2,9138	3,5875

**Notes:** (i) n= 144, 102, 60, 82; (ii)

**Scaling:** 1= Very little, 2= Little, 3= Partly, 4= Much 5= Very much

### **Result**

It was deemed necessary to conduct an in-depth study into local administrative units and particularly special provincial administrations to see their condition as regards their use of information technologies, thinking that it will cast a light both to the scientific directory and to academic practitioners as well. In this context, so as to build evaluations on a solid basis, firstly changes in the quality of local services and the position of special provincial administrations in this change have been studied. Then, the importance of using information technologies in local service delivery and its advantages has been assessed. Finally, in order to heighten the originality of the study and exhibit the actual position of the subject in practice, a poll was conducted in the special provincial administrations of four cities with the participation of their personnel and a number of people were interviewed in this process. By this way, it was possible to make more concrete and powerful implications through scientific means.

While surveying Konya, Kayseri, Kırşehir and Kırıkkale Special Provincial Administrations, a number of criteria have been taken into consideration and a special effort has been made to find out their actual positions concerning other criteria including their "computerization level" and "establishment of computer automation infrastructure", while also comparing this to the assumptions that were set prior to the study. In addition to this, what aspects of information and communication technology usage are regarded as advantages by employees has also been assessed as another significant indication.

If an assessment is to be made on the axis of the specified criteria, in the very first place, it can be seen that all the organizations within the scope of this study have successfully reached computerization standards. It can also be seen that organizations do use programs in conformity with the services delivered and have made initiatives particularly in digital security issues. This is an indication of ongoing studies to set up and enhance computer automation infrastructure. Declarations in the strategic plans, activity reports and performance programs of these organizations are in such a manner as to back this perspective. Particularly in Kırşehir and Kırıkkale Special Provincial Administrations, there is strong evidence suggesting that these studies will continue in the future as well. In Konya and Kayseri Special Provincial Administrations, which were liquidated after the local elections held on 30 March 2014, the uncertainties in the transition process may have brought together relatively adverse effects. On the other hand, it is obvious that there is an inadequacy of qualified labor force in the field of information technologies. This inadequacy can be overcome through the employment of qualified employees and training the existing ones by various training activities. By this means, organizations can adopt a service policy, appealing more to new needs and demands. From the point of view of their websites, all the organizations within the scope of this study do have websites which are at a desired level. Yet, pertaining to the last criterion in this study, they are still not at a point to transfer managerial issues on to the web. It is not possible to make the presentation of all local services through these websites. However, all the issues that corporate people consider to be an advantage, whether they be related to the internal functioning of the organization and its relations with other organizations or to interaction with citizens and prevention of corruption, will be more meaningful only if they are tangibly put into practice.

Consequently, all the phases with the exception of the transfer of managerial issues on to the web have already been covered in the special provincial administrations within the scope of this study. That is, in spite of certain deficiencies, there has been a positive change in the use of information technology in local service delivery. All these results correspond to the propositions previously defined to a great extent. However, it is still not clear how local services will be delivered by the metropolitan municipalities of Kayseri and Konya after the painful transition period in Kayseri and Konya Special Provincial Administrations is over. On the other hand, it is expected that positive changes will take place in the near future in Kırşehir and Kırıkkale Special Provincial Administrations. Yet, to accomplish this goal, all the partners and dynamics within the organization should continue to believe in this and show maximum effort to this end. Only by this way can a modern, effective, productive and improved administrative functioning be established and a more democratic service concept be attained, through which citizen's needs and demands are locally met.

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