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# Explore the Possibility of Moving the Government to the Web 2 in IRAN

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## ABSTRACT

In the age of digital information, it seems the government has increased expectations of citizens. The Government expects the flow of information between citizens and government agencies to support multilateral. In line with the need to recognize the need to engage with citizens and citizen-oriented content, state agencies to use Web 2 tools have on your website. Due to the lack of adequate scientific research in the field of web applications in public section, this paper focuses on the use of Web tools in public 2 that have concentrated in Hamadan. This type of survey is run on the target application. All employees of the governmental statistical population of 44,352 people in the province in the years 2012 and selected sample of 380 the Morgan. Methods of data collection, web questionnaire with 20 questions and 2 were estimated using Cronbach's alpha reliability coefficient of 85.2 percent. Presumptive level data analysis was done using the Z test. This article has been tested four hypotheses. The components include: creating information symmetry services, solutions and policy is made the results of testing this hypothesis is rejected and the supply is undesirable citizens.

## Keywords

Citizenship Resources, State Machines, Web 2 "Social Networks (Facebook), Media or Multimedia Sharing, Wikis, Blogs, Micro Blogging (Twitter) and Chat."

## 1. INTRODUCTION

Web 2 is the next generation Internet infrastructure in terms of speed and still lacks a precise definition, but it is, how to create, publish, and interact with other people through a new generation of network infrastructure and tools that have been defined. The definition of "Tem Orily's" Web 2 represents the second generation of Internet services such as social networks like MySpace and communication tools [2]. Through various platforms enabled by Web 2.0 technologies, citizens can collectively create public



information, provide service, and take part in policy processes [1]. In the past two years, various businesses, technical experts and academic authorities have been many discussions about Web 2 [3]. News, articles, reviews associated with Web 2 is too high and should be acknowledged that shook the internet web 2. Has been launched, many sites held conferences to promote the concept that made it even into existence the first journal special issue web 2. Web 2 opponents know that it is only a passing wave to the internet has died. But what is clear web 2 whatever it is associated with many fans. The interesting thing is there that everyone defines it in a way that gives a different impression. Web 2 can be considered an umbrella on new technologies to improve the user experience of the web beyond the capabilities of traditional HTML (Web 1) is given. It can be a series of activities that helps the users to easily design websites, online communities and web tools to connect their services [4].

Government programs, there is evidence of innovation and creativity. In this regard, it is noteworthy electronic structures of citizen participation in government through public mobilization and deployment of web agents, web 2. In addition to extensive cooperation with government websites, users presence in the social networking websites are also significant and have an active presence in social networking sites, such as public Facebook, YouTube, and so on as well as [8]. In addition, national portals and ministerial websites, tools such as discussion boards (forums), blogs, online chat, online polls and surveys, email newsletters, and other interactive tools for users to efficiently and properly use said [16]. These tools, users can help government agencies involved in decisions [15].

## 2. BACKGROUND STUDY

Contests, wikis, social networking and social voting are identified as the main strategies for citizen sourcing that uses technologies. The four strategies are described in terms of how a government agency can acquire the wisdom of crowds and from whom. Information and communication technologies are categorized in terms of bilateral or multilateral digital communication that allows citizens to participate in collective decision-making and cooperation in carrying out a task via online networks provide [17]. Some government agencies are now serving their policy and are based on information from public sources. This new trend is called citizenship resources how to get services that are necessary to meet the requirements of their duties, and how they make these decisions [7]. Just some of the researchers and administrators of the concept of citizenship resources they use [10].

This section presents a framework for assessing how citizen-sourcing projects work. The framework approaches assessment of citizen-sourcing projects from three perspectives: design, process, and outcome. This section



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seeks to create understanding about the contexts in which the aforementioned benefits are made possible. Table 1 suggests a set of three key dimensions to view a variety of citizen- sourcing projects.

**Table 1. Dimensions of citizen-sourcing**

<b>Dimension</b>	<b>Category</b>
Purpose	Image making Information creation Service coproduction Problem solving Policy making
Type of wisdom collected	Professional skills and knowledge Innovative ideas
Strategy	Contest Wiki Social networking Social voting

As described in Table 2, two main purposes of citizen-sourcing initiatives are identified and may be expressed as cool (making a cool image of government as an adopter of cutting-edge technologies) or hot (fostering citizens' enthusiastic participation in mass collaboration projects). The appropriateness and quality of the design of the Government 2.0 platform for citizen-sourcing are vital to the performance of citizen-sourcing. There are four facets of design which need to be considered: socio technical design, functional design, procedural design, and Government 2.0 policy design [9].

Government agencies under pressure to keep pace with citizens and business expectations tend to adopt new technologies to simply demonstrate “we're doing it too.” The Center for Technology in Government (2009) asked county government professionals in New York State, “What value can your agency gain from using social media tools?” Interestingly, “making a cool agency image” was a typical response, while other frequently given responses indicated that social media tools could enable collaboration, instant information sharing, and virtual community building [18]. The responses related to coolness included increasing public perception of the agency as being “in touch” or “social” and readily able to react quickly to emerging technologies; reaching younger citizens; attracting the next generation of workers; and enhancing the citizenry's image of government.



Citizen-sourcing also fits other serious purposes. Government agencies can crowd-source their way out of problems. Many agencies begin citizen-sourcing projects with the expectation that citizen-sourced innovative ideas will contribute to improving information, services, solutions or policies [5].

Table 3 shows a shift in the perspective from the traditional government model to the citizen-sourcing model. One of the primary goals of adopting citizen-sourcing is to involve citizens as co-producers of knowledge and information [12]. For example, users of San Francisco's 311 Twitter service [Twitter.com.SF311](https://twitter.com/SF311)) instantly share information about infrastructure problems (e.g., potholes) with other citizens and the city government, and request various non-emergency city services (e.g., street cleaning). The municipal authority immediately responds to each tweet (a post or status update with 140 characters or less on Twitter, a micro-blogging service) and reports on the progress of solutions or repairs. By sending tweets, San Francisco citizens who use Twitter can directly provide the 311 service agency and fellow citizens with updated information and alerts.

**Table 2. Citizen-sourcing: cool or hot?**

Cool	Hot
Image making (look cool!)	Information creation with citizens Service improvement with citizens Solution development with citizens Policy making with citizens

Furthermore, solutions are deliverables made possible by citizen-sourcing. Collective intelligence can help government agencies to solve some problems that government professionals could not, and at a lower cost. This is what is currently taking place in the National Aeronautics and Space Administration (NASA). Not only can crowd-sourcing provide technological solutions, but also suggestions for solving general problems in societies. For example, Ideas For Seattle ([IdeasForSeattle.org](http://IdeasForSeattle.org)) is filled with vigorous debates about diverse metropolitan issues—e.g., permitting on-street parking of scooters, expanding light rail, installing sidewalks, and revitalizing public parks.

Seattle citizens share their own ideas about the problems citizens face, evaluate posted ideas, and make comments on them. The city government considers citizens' postings on the website as potential solutions, and then reflects back to citizens what it learned from posted ideas and comments. Citizen engagement is introduced into the policy process by using citizen-sourcing to enlarge and enhance policy-advisory processes, policymaking, and policy feedback. The diversity of experience, opinions, and knowledge



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within a group can render the whole greater than the sum of its parts. Effective citizen participation can extend the body of evidence available to decision-makers; widen the range of views and experiences considered under policy impact, and harness civic energies of citizens to solve public problems [19]. For some agencies, Government 2.0 may now become a new source of policy advice, enabling policymakers to bring together divergent ideas that would not come from traditional sources of policy advice [13].

**Table 3. Paradigm shift to citizen-sourcing**

<b>Traditional government</b>	<b>Citizen-sourcing</b>
Information dissemination model	Information creation model
Service provision model	Service coproduction model
Solution purchase model	Solution creation model
Policy enforcement model	Policy making model

Governments can source two types of information from citizens: professional knowledge and innovative ideas. On the one hand, semi-professional knowledge and skills outside a government agency can contribute to problem solving. On the other hand, the public, or the greater population, can provide governments with novel and innovative ideas on a given topic. Governments solicit semi-professional expertise, a collection of which can become professional knowledge. Collective intelligence can solve given problems in less time and with less money [11]. A representative example is NASA's project to crowd-source solutions. When NASA scientists were stymied in devising a formula to predict solar flares in 2009, they posted their problem online and offered a prize to anyone who could provide a solution. The online contest, which awarded the winning solution entrant with a \$30,000 prize, led NASA to find the best solution. The new approach of on-demand problem solving enables NASA to tap into up-and coming professional knowledge distributed to amateur scientists and external professionals outside the agency in an easier way.

Concerning a variety of general issues more directly related to improving the quality of living, government agencies would like to hear from the larger population of citizens. The public's ideas are sometimes innovative enough to outperform and outsmart opinion leaders and policy makers. Ordinary people may possess useful information to enhance governmental decision making, regardless of their professional status [6]. Given opportunities to share opinions on government, citizens are able to offer something more than the static responses made available to them in regular voting, opinion polls, and surveys.

**Table 4. Evaluation criteria**

<b>Focus</b>	<b>Criteria</b>
Design evaluation	Socio technical design Functional design Procedural design Government 2.0 policy design
Process evaluation	Transparency Openness of information about operations and decisions of government Openness of information for participation and collaboration Openness of participation and collaboration processes Participation Inclusiveness Representativeness Diversity Collaboration Communication Partnership Deliberation
Outcome evaluation	Effectiveness Impact

**The framework for assessing citizen-sourcing:** This section presents a framework for assessing how citizen-sourcing projects work. The framework approaches assessment of citizen-sourcing projects from three perspectives: design, process, and outcome. Table 4 summarizes the core criteria of evaluation.

**Design evaluation:** The appropriateness and quality of the design of the Government 2.0 platform for citizen-sourcing are vital to the performance of citizen-sourcing. There are four facets of design which need to be considered: socio technical design, functional design, procedural design, and Government 2.0 policy design. Failures in designing Web pages, interfaces, software, or information systems often come from overlooking the organizational and institutional sides of the ICTs used. From this ensemble



view of e-government, the design of a Government 2.0 platform is inevitably socio technical.

**Process evaluation:** The process for citizen-sourcing projects also needs to be evaluated in terms of the three pillar goals of the Open Government Directive. The basic description of the three principles is drawn from the Memorandum for the Heads of Executive Departments and Agencies [14].

**Outcome evaluation:** A remaining concern in evaluating citizen-sourcing is its outcome. Two key components should be evaluated. The primary one is the effectiveness of a final product itself (idea, solution, or policy draft) created by citizen-sourcing. The lexicographic definition of effectiveness denotes “producing a result that is wanted” (Merriam-Webster Dictionary) or more specifically “the degree to which objectives are achieved and the extent to which targeted problems are solved” (www.businessdictionary.com). Breul (2010) introduced key guiding principles of sourcing policy, the top of which is “support agency missions, goals, and objectives.” Hence, to evaluate the effectiveness of citizen-sourcing, government agencies should examine. The extent to which its outcomes are aligned to their missions, goals, and objectives, the performance of citizen-sourcing should be evaluated in terms of its intended purpose information creation, service delivery, problem solving, or policy making. Second, whether the product exerts an impact on government should be examined. In other words, the impact of participatory inputs on the work of government should be assessed. If citizen-sourcing is only initiated to create the appearance of keeping pace with citizens who use new technologies, its impact would hardly be of central importance.

### 3. METHODOLOGY

The main question: the use of Web tools in public 2 what is Hamedan province?

The research hypotheses are:

Hypothesis 1 - The function of e-government in Hamedan province by creating information.

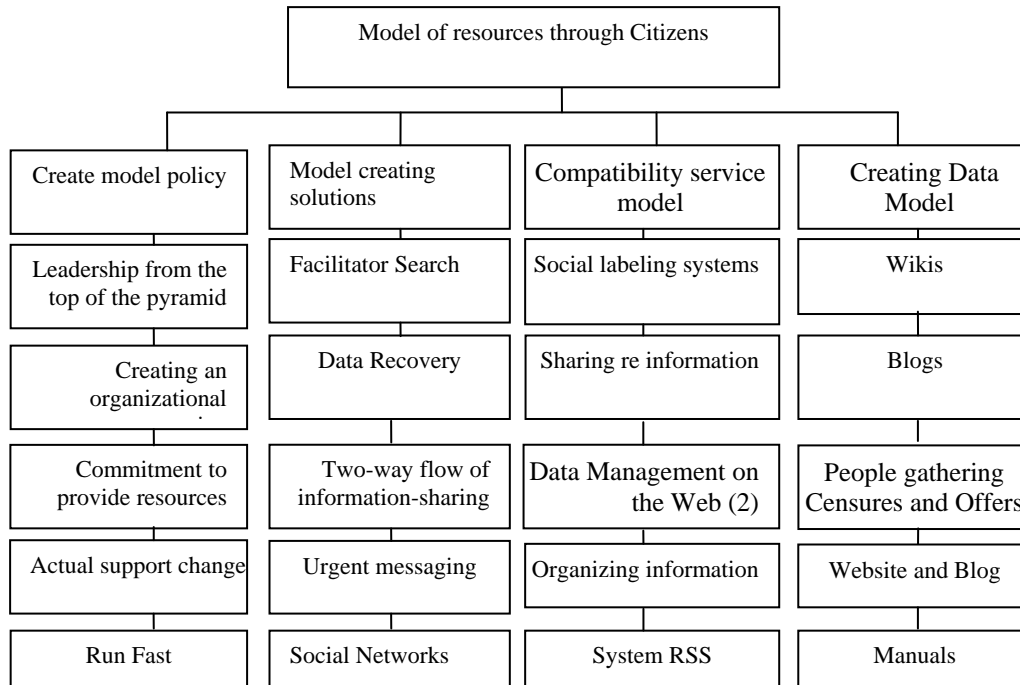
Hypothesis 2 - The function of e-government in Hamedan province based on constituency service.

Hypothesis 3 - The function of e-government in Hamedan province, based on a solution.

Hypothesis 4 - The function of government in Hamedan province under the policy.

Government agencies can use to gather collective resources, to solve their problems. Many organizations, civil sourcing projects with the expectation that they will creative ideas of citizenship sourcing an important role in improving the information, services, practices, or policies will play.





**Figure 1. Model of resources through Citizens**

This research was a descriptive - cross sectional analysis. In order to investigate the possibility of moving to Hamedan province was in public web 2. As the population studied, all employees of the Executive Office of the device in eight districts Hamedan province included Hamadan Malayer, Skinheads, Tuyserkan, Kabudarahang, Asadabad, Bahar, and Razan studied. State executive agencies are: State executive offices that are using the current budget.

For the sample of the study population sampled in each area to explain the purpose of the state is of interest. For a sample size of Morgan is used, then according to the figures of employee performance through the information office hit Hamedan number 44352 areas of each province was determined using Morgan. A total of 380 samples were taken in this study were gathered, the number of systematic random sampling method the systematic use of statistical sampling frame so that all the employees were exposed to various devices, The sampling fraction and sampling interval sampling of what you state apparatus 65, respectively, were determined.

A questionnaire was prepared to collect information to assess the state agencies that are characteristic of Web 2 using the citizenship issue presented by the source Frameworks 2.0 Taewoo Nam written and other studies. The questions of the questionnaire studies with respect to the





objectives of the study and Likert measure (1 = completely disagree to 5 = very much agree) be determined then the reliability of the questionnaire utilizes view of the experts and its reliability by test-retest reliability of the experts and the proliferation of test questionnaire Alpha 85.2% was used. Z-test was used in this study.

## 5. RESULTS

It was 380 employees in eight regional executive of in Hamedan province. Table 6 contains the descriptive analysis, where eight employees participated in the study area includes: 75 patients (20%), Malayer 60 patients (16%), Nahavand 50 patients (13%), 50 Tuyserkan (13%), Kabudarahang 38 patients (10%), Asad Abad, 38 patients (10%), Bahar 35 (9%) and Razan 34 (9%) through the sampling of the entire executive staff participated.

**Table 5. Number of Divided Cities**

Name regions	Number	Percent
Hamedan	75	20
Malayer	60	16
Nahavand	50	13
Tuyserkan	50	13
Kabudarahang	38	10
Asad abad	38	10
Bahar	35	9
Razan	34	9
Sum	380	100

**Table 6. Results of descriptive analysis data**

Standard error of the mean	Standard deviation	mean	The number of data		
0.05102	0.99456	2.1368	380	wikis	Creating information
0.04564	0.89913	1.9684	380	blogs	
0.04674	0.90987	1.9868	379	people gather feedback	
0.05108	0.99450	2.1715	379	Website and Blog	
0.04607	0.89816	2.0263	380	Manuals	
0.05104	0.99498	2.1605	380	Social labeling systems	Compatible Services
0.04583	0.89348	1.9665	380	Sharing re	



				information	
0.04631	0.90285	2.0132	380	Data Management on the Web (2)	
0.04787	0.93310	2.0053	380	Organizing information	
0.04646	0.90567	1.9816	380	System RSS	
0.05084	0.99146	2.1658	380	Facilitator Search	Creating solutions
0.04661	0.90867	1.9868	380	Data Recovery	
0.04837	0.94296	1.9974	380	Two-way flow of information-sharing	
0.05154	1.00464	2.1579	380	Urgent messaging	
0.04705	0.91725	1.9816	380	Social Networks	
0.04691	0.91452	2.0079	380	Leadership from the top of the pyramid	Policy Making
0.04757	0.9273	2.0105	380	Creating an organizational perspective	
0.04654	0.90725	1.9895	380	Commitment to provide resources	
0.04849	0.94148	1.9151	377	Actual support change	
0.04644	0.90524	1.8921	380	Run Fast	

The first hypothesis is a performance of e-government in Hamedan province based on creating information. Both of the upper and lower limit is negative, the average value of the test is smaller and the larger table size is calculated from the Z, the H0 hypothesis is rejected.



The second hypothesis is a performance of e-government in Hamedan province based on the assumption that Compatible service. Both of the upper and lower limit is negative, the average value of the test is smaller and the larger table size is calculated from the Z, the H0 hypothesis is rejected.

The third hypothesis based on the performance of e-government in Hamedan province a solution. Both of the upper and lower limit is negative, the average value of the test is smaller and the larger table size is calculated from the Z, the H0 hypothesis is rejected.

The fourth hypothesis based on the performance of government in Hamedan province under the policy. Both of the upper and lower limit is negative, the average value of the test is smaller and the larger table size is calculated from the Z, the H0 hypothesis is rejected.

The results of this study confirmed the low use of Web 2 tools in public and of Hamadan, especially in terms of creating and construction services and creating solutions to policy making. The first hypothesis is creating performance of e-government in Hamedan province based on creating information. Experimental results show that information is creating component of wikis, blogs, people gather feedback, websites, blogs, manuals are , has not been implemented in the province. The performance of e-government in Hamedan province based on the assumption that service. Services, including: social labeling systems, feedback information in web information management, organization, information system, an RSS feed is. According to test results, the hypothesis is rejected and in the province are very poor service levels.

The third hypothesis is based on the performance of e-government in Hamedan province creating a solution. Creating solutions are also components that include: facilitating search, retrieve information, the mutual information sharing, instant messaging, social networking, where these components are also in poor condition.

The fourth hypothesis that is performance of government in Hamedan province based on the policy making. Policy making, including leadership from the top of the pyramid is creating an organizational vision, commitment and resources to support real change, rapid implementation. The authors believe that this could be the reasons for the low utilization rate of in Hamedan province is in public: Lack of familiarity with web applications 2, not subject knowledge to use Web 2 tools lack the necessary infrastructure such as the Internet did not develop software and hardware required in this area. Based on the findings, we can conclude that the use of these tools in the province of state agencies is low. In other words, state agencies under in Hamedan province of the tools they use and this could be interested in this area of research independently.



## 6. CONCLUSIONS

The results of this survey, state agencies in designing websites for better management of resources and technological tools necessary to help support web 2 and state agencies to focus on the empowerment of human resources information technology infrastructures equipping the knowledge of Information Technology. Also, identify the appropriate Web 2 tools and applications to creating a suitable policy information, services, creating solutions and making developed in public policy. This infrastructure has been created in small parts of the province such as municipalities and certainly in other sectors will also be applicable to consider.

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