CREATIVITY MANAGEMENT IN PUBLIC ORGANIZATIONS
Jump-Starting Innovation

EVAN M. BERMAN
National Chengchi University
CHAN-GON KIM
Songpa-Gu (District), Seoul

ABSTRACT: *Creativity management is a management practice that jump-starts the innovation process by encouraging officials to act and respond with increased creativity and initiative. This article describes recent practices of a major metropolitan city, Seoul Metropolitan Government (the world's eighth-largest city), to increase initiative through modification of existing reward, management, and training systems. Detailed descriptions are provided. Results of a multimethod study show that during a two-year period, employees and managers proposed 62,666 ideas, of which 13 percent were selected for implementation. Survey results among 1,194 managers and employees also show that the percentage of officials who now view their divisions as innovative doubled in a two-year period, from 16 percent to 33 percent, thus providing further evidence of jump-starting innovation. Creativity management is presented as an effective approach for encouraging new ideas and solutions and broadening innovation practices in public organizations.*

KEYWORDS: *creativity management, East Asia, innovation, performance*

Agencies are increasingly searching for new ways of jump-starting innovation by encouraging new ideas and initiatives to boil up within them. This innovative process is especially needed as leaders and senior managers are increasingly unable to initiate and provide support for the great many initiatives that are needed in jurisdictions. However, getting lower officials to conceive new solutions and take initiative for addressing myriad problems is often a frustrating and enduring challenge (Amabile, 1998; Berman & West, 2003; Thompson, 1965). This article discusses "creativity management," a strategy that induces officials to act with greater initiative and creativity. Creativity management encourages managers and

employees to propose ideas, after which organizational processes are used to evaluate, adopt, and implement them. Creativity management is especially relevant for seasoned employees and lower managers who, based on their knowledge, position, and experience, may have much to offer. Creativity management complements traditional top–down, leader-driven approaches by promoting leadership at lower levels of the organization, while still providing top leaders with control over the selection and implementation of initiatives.[1]

This article discusses creativity management and an application in a major metropolitan jurisdiction. It addresses the following research questions: (a) what is creativity management, what key concepts does it involve, and what is new about it; (b) how does creativity management affect existing management processes; and (c) what is the evidence that creativity management increases innovation in a major jurisdiction? Empirical findings are based on a multimethod study involving a survey of 1,194 employees and managers of a major metropolitan jurisdiction, interviews with senior managers and employees, and analysis of databases and documents. Study caveats are discussed further.

Creativity management is a new concept in public administration. While the importance of creativity is widely acknowledged (e.g., to develop new solutions, new implementations strategies, etc.), the recent literature does not include much mention of strategies to harness this potential in public administration. *Innovation* is commonly defined as the process whereby new ideas, objects, or practices are created, developed, implemented, and diffused (e.g., Rogers, 1995; Walker, 2006). Past and current research often focuses on leadership strategy, organizational change, conditions prompting or supporting innovation, and the diffusion of innovation across public organizations (e.g., Borins, 1998; Fernandez & Rainey, 2006; Walters, 2001).[2] However, creativity management focuses on developing new ideas, the first part of the innovation process, and offers to existing foci new ways of broadening leadership and specific change management strategies. It also encourages creativity among lower and mid-level officials, for example. Creativity management can also be regarded as a kind of knowledge management in organizations, namely, that which seeks to acquire and use information from organizational members to address and resolve new challenges.[3] Beyond this, taking creativity seriously as a management activity is consistent with growing specialization in public administration. Examples of specialization include ethics management, information technology management, procurement management, risk management, and so on—all of which could scarcely have been imagined in

public administration a generation ago. We now offer creativity management in this list as an important new public administration practice.

All studies have limitations. First, the focus here is on jump-starting innovation, rather than on creativity management as a process used to encourage higher levels of innovation permanently. The case application of creativity management in this article was implemented for jump-starting innovation; the discussion section notes that changes from the "jump-starting" function are likely needed for sustained levels of high creativity. Second, although the theory illustrated may have broad relevance and applicability, we provide empirical results for just one case setting. Third, we make no comparison with the private sector, in which innovation is also important (e.g., Rainey, 1999). Fourth, the case application involves a formal and highly institutionalized effort, and we do not argue that such an approach is necessarily beneficial in all settings. A benefit of studying this formalized approach is that it readily identifies processes that might be considered by other organizations. Fifth, this study reports on a systematic assessment of a new practice in public administration but makes no claim to address fully all questions that arise. Sixth, no article can fully discuss a complete theory or management practice; a book is needed for that. A journal article can only identify the essential markers and concepts of theories and practices; the references provide many useful further readings.

Finally, this article contributes to global exchanges in our field, as it reports on a practice outside the United States that is relevant to the United States. For a long time, ideas of U.S. public administration have been exported abroad, but now the reverse may be occurring, not least because of participation by foreign practitioners and students in U.S. education who later return to home countries and innovate. Past experience by other countries shows that national context and culture are not necessarily barriers to appreciating the importance of efforts elsewhere, and of finding ways to adapt them. Practices and concepts described here might find useful application in U.S. public administration.[4]

What Is Creativity Management?

Creativity is typically defined in organizational studies as the development of ideas or practices that are (a) novel and (b) actionable in addressing a specific problem, such as reducing crime or pollution or improving an administrative process in some way (Amabile, 1997, 2005; McLean, 2005; Unsworth, 2001). Creativity in organizations may include approaches adopted from elsewhere that have been modified in some significant way to address local conditions; they are thus new to the organization. *Creativity management* is defined as management processes whose goals are to increase, evaluate, and prepare new ideas for subsequent implementation in organizations. While many organizations already affect the creativity

of their employees and managers (and not always in a positive way), the point of creativity management is to make processes that do so explicit and to increase creativity and innovation. As mentioned previously, an important and current focus is to induce lower officials to act with increased creativity and initiative.

Some might argue that creativity in human beings cannot be forced or induced and that any attempt to do so is likely to fail. This argument is an overstatement of issues relating to human creativity that belies the experience of research laboratories and universities that manage creative processes. Creativity is often viewed as a "puzzle-solving" activity that seeks new solutions and ideas (e.g., Woodman, Sawyer, & Griffin. 1993). Although problem solving often entails intractable "ah-ha" moments, problem solving is also a skill that can be improved by practice and by having relevant knowledge and experience. Although some people are more adept at bringing new approaches to problem solving,[5] organizations can do much to encourage those who have creative, problem-solving abilities to come forward and also further conditions that provide a welcoming climate for those working on new ideas (Andersen, 2008; Kolb, 1984; Nadler & Shozo, 1994; Xu & Rickards, 2007). This article is about such approaches. Brainstorming in groups is a well-known strategy that organizations can encourage, for example. Also, although successful outcomes cannot be guaranteed from every instance of puzzle solving, organizations can do much to increase creativity and initiative by encouraging many efforts, focusing on different issues. Seen in this way, increasing creativity in organizations is very much a numbers game of having many different creative, problem-solving efforts going on.

What is new about creativity management in public administration are (a) the modifications of existing processes, and even development of a few new processes to support the development and evaluation of new ideas, and (b) the quantity of ideas for innovation generated by many people in the organizations (hence, broadening leadership). It should be noted that while creativity management seeks to increase participation, it does not expect or require that all organizational members create new ideas; some may choose not to, and others may not have new ideas. Organizations can only implement so many new initiatives at any point in time, and so it may not be necessary that everyone puts forth new ideas. People who do not participate in creativity management may find other meaningful roles in their organizations that are acknowledged in other contexts. Creativity management will appeal to those who wish to contribute through new ideas and initiative.

Figure 1 shows how creativity management relates to the innovation process. Creativity management focuses on the first part of the innovation process only; it does not focus on subsequent implementation and even diffusion.[6] Figure 1 also shows the four main management processes of creativity management that stimulate new ideas: (a) idea generation and rating (evaluation), (b) orientation and training for greater creativity, (c) incentives and rewards associated with idea
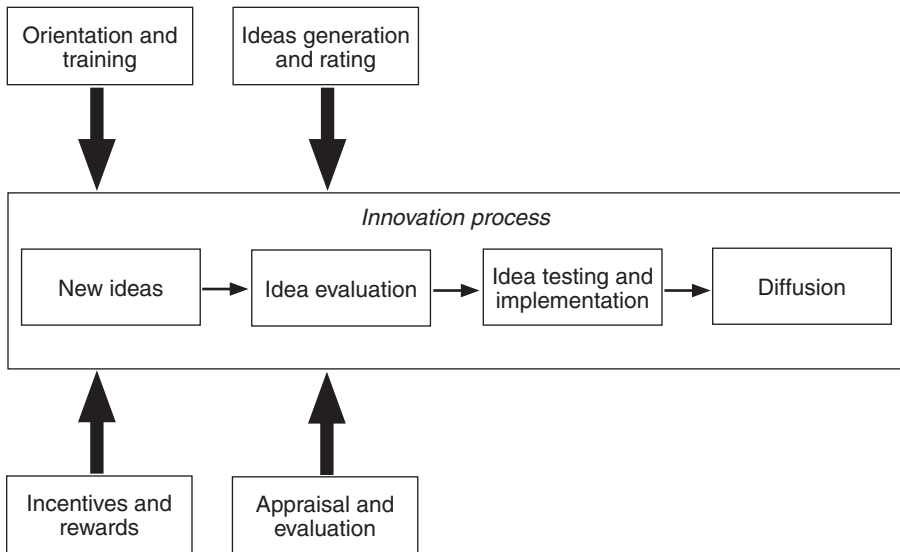
Figure 1. Creativity Management

generation, and (d) appraisal and evaluation processes. The latter includes individual appraisal processes as well as department evaluation processes; for reasons of space, we discuss elements of incentives, rewards, appraisal, and evaluation processes together. These four elements are not sequential but work in tandem; for example, people may experience incentives from reward and appraisal processes as they participate in training and idea-generating activities. The following provides a brief, conceptual discussion of these processes in creativity management, while the case application, discussed later, provides actual examples.

IDEA GENERATION AND EVALUATION PROCESSES

The following discussion focuses on the major elements in the processes of generating, collecting, and evaluating and the initial implementation of new ideas. What makes creativity management feasible is that it uses many processes that are already well accepted. Idea generation is no exception, using individual and group brainstorming in work (e.g., quality circles) and departmental and other contexts (e.g., staff meetings). Creativity management furthers idea generation by promoting these processes (e.g., asking staff to discuss improvements monthly) and by providing input regarding targets (e.g., reducing crime, reducing budget shortfalls), methods (using IT, contracting out, etc.), and conditions (new events, problems, etc.). After ideas have been suggested, they must be collected and submitted for subsequent evaluation. Few organizations have efficient processes for collecting these ideas and managing them through the evaluation process; the

basic "idea suggestion box" is ill equipped for efficiently collecting and processing hundreds, if not thousands of ideas, and electronic-based processes may be preferred. Depending on the size of the organization, one or more staff members can be tasked with the collection and review process (Carrier, 1998; Fairbank & Williams, 2001).

Collected ideas are then evaluated. The review process can be multitiered, akin to proposal evaluation by government funding agencies, which includes a preliminary review, a technical and policy review, and final evaluation (disposition). Preliminary review is often done by senior staff to ensure that ideas are appropriate and include sufficient information or detail. Once accepted for evaluation, reviewers are needed. These are often senior managers and experts (if technical input is needed) as well as citizens and nonexperts who can be part of idea evaluation committees. Rating (evaluation) criteria can focus on feasibility, originality, and impact on the jurisdiction, as well as criteria reflecting mission and strategic priority of the organization (environment, revenue generation, etc.).[7] In small cities, the final evaluation can be made by the mayor and council, perhaps monthly or quarterly, but in larger organizations, senior managers are likely involved, too.

The process of acknowledging and rewarding individuals or groups whose ideas are found to be meritorious stands apart from subsequent decision making that may be needed for implementation; timing, resources, and policy are likely subsequent considerations for implementation. Generally, to facilitate implementation, senior managers and elected officials may schedule meetings, perhaps as part of existing meetings, and they may have a small budget for rapid implementation and projects requiring only small expenses (e.g., a new IT gadget). However, larger expenditures or those requiring policy changes require decision making through normal processes, which these meetings can also address. Staff that oversees the evaluation process will typically also track meritorious ideas through subsequent decision making and work with departments to ensure the implementation of new ideas. To summarize, the idea submission and evaluation process is straightforward, and it is used to assess hundreds, if not thousands, of new ideas:

Idea Generation→ *Idea Submission*→ *Idea Screening*→ *Idea Review*→
Final Disposition→ *Individual/Group Rewards and Idea Implementation*

ORIENTATION AND TRAINING

The literature is clear that leaders typically provide legitimacy and support for new change efforts, and creativity management is no different (e.g., Berman, 2006). People want to know why a new effort or change is needed and how it affects them. Following path–goal theory, leaders will need to clarify what creativity is, what creativity is not, what is expected of members, how new ideas will be developed,

screened, and evaluated (as previously discussed), what rewards are available, and what, if anything, are the consequences of not meeting expectations (or even outright resistance). Such orientation to jump-starting innovation may involve short training or orientation sessions (a few hours) that also describe specific practices and processes, such as creativity as brainstorming and puzzle solving (Quinn & Wennes, 2008). Beyond this, organizations may also encourage members to look beyond their work and departments, to general trends in society and the world and the impact of these trends for the jurisdiction.

INCENTIVES, APPRAISAL, AND EVALUATION

The literature shows that new rewards are often used in the initial phases of new management efforts, signaling importance and commitment by the organization (e.g., Fernandez & Rainey, 2006). In creativity management, rewards can be given to those who submit ideas or whose ideas are evaluated above a certain evaluation threshold.[8] Special rewards are common, at least for a few years, as the organization aims to jump-start innovation, after which both special rewards and incentives are phased out as a higher level of innovation is then more routine and common. Beyond this, individual appraisal criteria should reflect expectations of creativity, perhaps constituting 10–15 percent of total points, and creativity and initiative can be made a more significant factor in promotion. These changes are to be permanent. As the saying goes, "What gets measured (and rewarded) gets done."

At higher organizational levels, program and department evaluations may include creativity and innovation as criteria, as well as efforts to promote the general environment for creativity. Studies on organizational change also show leaders encouraging new ideas and using group discussion and pilot efforts that test and refine ideas in a climate of openness and acceptance to change (Argyris, 1990; Bernier & Hafsi, 2007; Heinzen, 1990; Kim, 2008). Creative workplaces often have practices that include hiring creative persons and managers with pro-innovation orientations and that provide encouragement for new ideas and problem solving (e.g., Damanpour & Schneider, 2009; Gibb & Waight, 2005; Waight, 2005; Walker, 2008).[9] Department evaluation and managerial appraisal of departments can reflect attention to these matters.

Finally, this description does not address the conditions influencing the effectiveness of these processes. Although research on such matters is piecemeal, to say the least, creativity management can be hindered by other policies that work against the development and encouragement of new ideas. There are well-known problems of prior fear-based and erratic management styles that generate resistance to new management initiatives, however well intentioned (e.g., Argyris, 1990; Berman, 2006).[10] There is also the danger of managers' using creativity management to further their own ambitions or using rewards in ways that show

favoritism. These are potential problems in all management reforms and are not unique to creativity management.

Methods

Between March and September 2008, we undertook a multimethod research effort that involved site visits, interviews, and a systematic mail survey at the Seoul Metropolitan Government (SMG), South Korea. The case setting is Seoul, the world's eighth-largest city, with a population of about 10.3 million.[11] Seoul's economy is about the size of Michigan's or Arizona's, but SMG takes up just 234 square miles and has a growth rate of 6–8 percent annually (Forstall, Greene, & Pick, 2004; Organization for Economic Cooperation and Development, 2008; SMG, 2006, 2008). The city government consists of SMG, which has about 15,700 employees and managers who provide citywide services, and another 29,800 municipal employees and managers who work at 25 district offices and public corporations (e.g., mass transit, housing).

The multimethod approach uses three main strategies to produce both qualitative (in-depth) and quantitative (generalizable) data. First, numerous official documents were accessed, including samples of submitted ideas and their evaluation. Access to documents and translation support was made possible by a high-ranking participant–observer in this study. Access to ideas was available for those submitted in the two-year period between June 2006 (the beginning of creativity management) and May 2008. Second, an e-mail survey was conducted among a random sample of 1,400 city officials. The sampling frame is all (about 15,700) SMG employees and managers, and conventional sampling procedures were used. The survey consisted of 21 closed-ended and open-ended questions. A total of 1,194 completed responses were received, for a response rate of 85.3 percent. On average, survey respondents have worked 14.4 years for SMG and are 43 years old. Among respondents, 70 percent are men, and 13.2 percent are managers. Respondents work for a broad range of SMG departments.[12] Triangulation was used to increase validity in ways described in the following discussion.

Third, 42 officials were interviewed, including senior employees and supervisors of diverse services (e.g., tax collection, auditing, zoo, city research laboratory, medical services), employee trainers and facilitators, the director of the Seoul Human Resource Development Center and staff, officials of the Creativity Promotion Division within SMG, and employees from various departments. Most interviews lasted from 1.5 to 2.5 hours, and some were conducted in small group settings. Topics included the nature of creativity training programs, techniques and approaches to creativity used in work, the impact of new performance evaluation systems on creativity and organizational innovation, and other matters within the purview and experience of interviewees.

All research methods have caveats. First, creativity management is a young program at SMG, and changes and improvements are ongoing and noted in this article. Second, low-grade employees are underrepresented among survey respondents, 16.1 percent versus 34.0 percent from senior employees and managers; follow-up interviews show that fewer low-level employees submit ideas or believe that the subject matter of creativity management is relevant to them. Third, interviewees were selected based on their experience with creativity management activities at SMG. While participation was voluntary, all interviews are subject to bias, and some interviewees may have felt the need or have been encouraged to put a good face forward. While the early stages of some interviews showed some evidence of this, after some prodding, interviewees freely answered even the most critical questions. Indeed, interviewees shared a broad range of opinions.

We establish the framework of creativity management based on previous discussion and identify major concepts and elements of creativity management (Research Question 1). We then describe creativity management at SMG, thereby showing how creativity management affected existing management processes (Research Question 2). Finally, we examine the evidence of creativity management that increases innovation (Research Question 3).

Creativity Management at SMG: A Description

Creativity management was adopted in Seoul through leadership at the highest level. A new mayor (Oh Se-hoon) was elected in May 2006 and undertook a community-based visioning exercise to formulate new goals and initiatives, which included creativity management (SMG, 2006). The relevant background facts are as follows. The need for new initiatives was high in Seoul as its citizens increasingly demanded environmental and quality-of-life improvements, and Seoul also needed to increase economic attractiveness relative to nearby metropolises, such as Shanghai and Tokyo, with which it competes.[13] As in many other bureaucracies in East Asia, the culture of leader-driven change resulted in some world-class programs and innovations (e.g., SMG is a leader in e-government),[14] but senior leaders often find themselves unable to undertake the broad range of initiatives needed because of their competing daily responsibilities managing numerous divisions and offices within SMG. Reliance on leader-driven change also led to bureaucratic malaise and stagnation in areas that experienced a lack of leadership initiative.[15] Hence, the vision of the new mayor was to unleash more creative initiatives at lower levels of the organization to supplement those already under way. Moreover, the job of Seoul mayor is generally regarded in Korea as a stepping-stone for the presidency of South Korea, and prospective candidates commonly use this position to demonstrate vision and leadership. It should be noted that SMG has a well-educated cadre of managers (42 percent
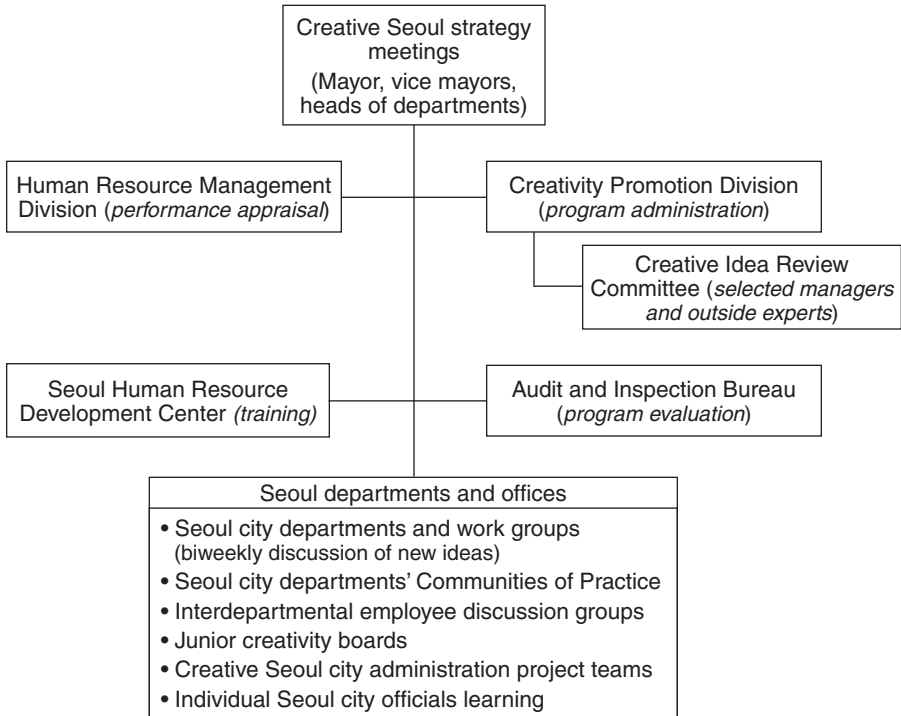
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┌─────────────────────────────┐
│   Creative Seoul strategy   │
│         meetings            │
│     (Mayor, vice mayors,    │
│   heads of departments)     │
└─────────────────────────────┘

┌──────────────────────────────┐      ┌──────────────────────────────┐
│ Human Resource Management    │      │ Creativity Promotion Division │
│ Division (performance        │      │ (program administration)      │
│ appraisal)                   │      └──────────────────────────────┘
└──────────────────────────────┘            ┌──────────────────────────────┐
                                             │ Creative Idea Review         │
                                             │ Committee (selected managers │
                                             │ and outside experts)         │
                                             └──────────────────────────────┘

┌──────────────────────────────┐      ┌──────────────────────────────┐
│ Seoul Human Resource         │      │ Audit and Inspection Bureau   │
│ Development Center (training) │      │ (program evaluation)          │
└──────────────────────────────┘      └──────────────────────────────┘
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Seoul departments and offices
• Seoul city departments and work groups
  (biweekly discussion of new ideas)
• Seoul city departments' Communities of Practice
• Interdepartmental employee discussion groups
• Junior creativity boards
• Creative Seoul city administration project teams
• Individual Seoul city officials learning

Figure 2. Organization of Creativity Management in Seoul Metropolitan Government

of its managers hold a master's degree or a Ph.D.), who should be able to take initiative and lead new efforts.[16]

As described by senior officials,[17] the main pillars of creativity management as adopted at SMG are (a) evaluation and rewards for individual employees and managers who propose new ideas; (b) training, education, and discussion that stimulate new ideas and the flow of information discussion; (c) an audit and performance management system that encourages program innovation; and (d) citizen ideas for improving SMG services. These activities follow those described in the previous section but include additional citizen suggestions, too. The organization of these multifaceted efforts at SMG is shown in Figure 2. The organization chart shows the monthly meetings of senior managers with the mayor, at which selected, highly evaluated employee ideas are presented. The role of four departments is also shown; the Creativity Promotion Division (CPD), part of the Office of Management and Planning, is the only office that was specifically created for this effort. CPD consists of a director, 4 assistant directors (team leaders), and 13 general staff.[18]

IDEA GENERATION AND EVALUATION PROCESSES

CPD, along with the mayor and department heads, has helped departments create individual and group processes for generating ideas. SMG work groups and programs are expected to meet weekly or biweekly to discuss new ideas, address problems, and find ways to improve their performance. Beyond these, Communities of Practice (similar to quality circles) increased from very few in 2006 to 80 in 2007 and 430 by late 2008. In addition, Junior Creativity Boards were created, which are composed of lower officials who meet monthly to find solutions for operational and work-life matters. Groups of employees also meet with others across departments to discuss experiences and generate new ideas, sometimes focusing on common problems or interests. Ideas can be submitted by individuals and groups. Between June 2006 and February 2009, city officials posted 105,357 ideas to the "Imagination Idea Bank."

With about 3,000 ideas being submitted each month, evaluation has become an important task for the CPD. There has been a bit of trial and error, and during the study period (through September 2008), the evaluation processes was changed. Initially, through December 2007, evaluation was conducted by Seoul Development Institute,[19] a policy think tank that provided initial ratings. But many city officials complained that this unit did not fully understand the many complex, technical issues, which, in turn, resulted in low evaluations, and the think tank researchers also complained that they spent too much time on idea evaluation. Although a top-level group provided final rankings, a decision was made to conduct the first-level review in-house. After December 2007, a three-step process was introduced. In the first step, CPD selects a reviewer pool of 120 managers among mid- and high-level officials at SMG. CPD assigns each idea to five reviewers, who evaluate in a simple up or down (recommend or reject) vote, behind their desk computers, whether ideas are new, creative, or significant enough for SMG to consider them further.[20] Ideas that receive at least three *recommend* votes go to the next step; those that are rejected are assigned a D rating. In the second step, ideas that go forward are reviewed in-depth by 10 reviewers at meetings to identify excellent ideas. Usually two meetings are held each month (prepared by CPD), and about 30–50 ideas are selected in total every month (from about 300 or so). Those that do not go forward also receive a D, if they are generally regarded as minor or even trivial suggestions, or perhaps not new ideas at all, such as those already suggested or being used.

In the third step, ideas are reviewed monthly by the Creative Idea Review Committee, which consists of mid-level city officials (director), senior researchers at Seoul Development Institute, professors, experts from the private sector, and the director-general for management and planning, who chairs the meeting. This committee rates ideas as A, B, C, or D. Rating criteria are creativity (40 points), feasibility (30 points), and effectiveness (30 points); letter ratings are based on

the following scale: A (91–100 points), B (81–90 points), C (71–80 points), and D (below 71).[21] However, after the study period, in December 2008, the process was further simplified. The previous process seemed a bit too burdensome for the 120 managerial reviewers, who each evaluated about 150 ideas every month. Reviewers are now selected from among the pool of 900 mid-level (Grade 5) managers at SMG who are assistant directors. Areas of specialization are identified, and idea submitters identify areas of expertise on submission; the computer automatically selects reviewers, who are given one week to provide evaluations using the same scoring approach as the Creative Idea Review Committee as described.

Although further experimentation with the proposal review process is likely, after about four years, it has become a routine. Spreading the number of initial reviews among a greater number of lower managers also helped ensure that senior managers are not overwhelmed by the number of reviews.[22] As for the CPD, it compiled an inventory of reviewers for different kinds of topics, and the management of idea evaluation is now reduced to a few minutes of staff time for each idea. More time is now dealt with new matters, such as identifying duplicating ideas, monitoring the follow-up of highly rated ideas, and ensuring that low-rated ideas are encouraged for improvement and resubmission.[23] CPD is also involved in managing the processes of presenting top-ranked ideas to the meeting of mayor, vice mayor, and departments; periodic review of the creativity management process (called the Creative Seoul Strategy Meeting); and the implementation of ideas that have been accepted. The latter includes both further decision making (e.g., ensuring that they are discussed in capital budgeting meetings), as well as overseeing subsequent implementation in departments. Initially, departments were a bit slow to implement A-, B-, and C-ranked ideas as they sought additional funding for them. CPD played a role in smoothing out such issues with the budget department; now, all new, implemented ideas receive a supplemental creativity budget to assist in implementation. New ideas have an expanding, nonpunitive impact on department resources. All C- and higher-rated ideas are expected to be implemented by departments, and every six months CPD prepares a report on the implementation status of these A-, B-, and C-ranked ideas.

Finally, top managers also have a process that stands apart from the previously described idea collection and evaluation system. Top managers meet collectively once every three months with the mayor, who presides over an all-day meeting (8 A.M.–10 P.M. Saturday), in which directors-general (department heads) present new ideas and discuss improvements among participants. New ideas are suggested, and managers are then held accountable in subsequent months for implementing these ideas. A top manager provided the following description:

> These meetings involve all of the city's senior directors and the mayor. Each director-general presents the major challenges of his [or her] department, and how he [or she] plans to address them. Beforehand, the mayor assigns two other directors to

present their own analysis and critique of the proposed solutions. You might think the criticism is soft to avoid conflict, but the discussion is sometimes brutal. The mayor is harsh on those who are insufficiently creative, and he evaluates everyone on the spot, which figures heavily into managers' end-of-year bonuses. These meetings are very hard, but they do produce new and useful ideas. There is also a lot of patching up that goes on after these meetings.

ORIENTATION AND TRAINING

To promote creativity and learning, the mayor directed the Seoul Human Resource Development Center to provide all employees with a two-day training course in creativity. As previously described, the purpose is to ensure that all employees are provided with a positive orientation toward developing and submitting ideas. The training includes scenarios and role playing and addresses challenges and processes of brainstorming and initiative taking. Departments are encouraged to provide additional training in their area, which some do.

SMG also undertook steps to promote a climate of continuous learning. All city officials are required to participate in 60 hours of continuing education each year (upper-level managers, 30 hours), and officials who fail to do so are ineligible for promotion. In addition, SMG promotes electronic dissemination of educational videos and voluntary participation in staff discussion groups. SMG also has an on-line learning system that provides educational videos that can be viewed on PCs or downloaded to cell phones; during October 2008, on average, 538 officials viewed 3,931 videos daily. Although these activities are not directly associated with new-idea generation, officials state that they believe these activities support increased creativity by staff and that some ideas may have come from these activities.

INCENTIVES, APPRAISAL, AND EVALUATION

Employees and managers are heavily incentivized to take idea generation and implementation quite seriously. First, employees whose submitted ideas are evaluated as C receive $50, those evaluated as B receive $100, and those as A receive $300. A concern during the study period was that only a few submitted ideas received high ratings. According to the Creativity Promotion Division, among the 62,666 submitted ideas between July 2006 and May 2008, only 26 ideas were evaluated (and adopted) as A, 67 ideas were evaluated as a B, and 1,231 ideas received a C. However, even D-rated ideas were used in the workplace. There is general agreement that ratings were too low during the study period and that they did not fully reflect the number of usable ideas generated. At the end of the study period, a revised incentive plan was put in place that gives $50 for some lower-evaluated ideas and up to $1,000 for very highly evaluated ideas (which remain infrequent), and the A through D scale has been replaced with a point-based system.

Second, additional cash prizes are given for the top three ideas in each of several idea categories (creativity, implementation, budget savings, knowledge manage-

ment, city administration, city policy). These annual top-prize awards range from $1,000 to $3,000 for third place to $3,000 to $10,000 for first place, as well as additional bonus points for officials' promotion. Third, creativity elements related to planning, overcoming obstacles, and developing customer-oriented approaches now account for up to 25 percent of total appraisal points. Performance appraisal affect promotion as well as annual bonuses, which are up to 230 percent of one's monthly salary, depending on rank. Fourth, monthly appraisals were instituted as part of creativity management to increase opportunities for rewards, as well as to take steps against chronically poor performers.

Beyond this, evaluations are also undertaken of departments and programs. The appendix shows the matrix for evaluating creativity management in departments; the 25 items show specific activities that each department is expected to do or have, such as activities for generating and evaluating ideas, participation of department head in creativity activities, incentive budget for creativity activities, number of ideas submitted to the city's intranet, and implementation of creative ideas, as well as programs and workshops for knowledge and creativity. Department and program evaluations, conducted by the Management and Planning Office, affect departmental budgets in subsequent years (e.g., for matters of international travel, new initiatives, recruitment) and materially affect salary increases and promotions of managers.

The context of SMG creativity management included a few problematic elements as well. Some cynical opinions were expressed during the study period that creativity management was a stage or façade for the mayor, who wanted to show himself as a capable leader. Also, the use of monthly appraisals was controversial and replaced by quarterly appraisals in October 2008. In interviews, employees and managers were decidedly mixed in their assessment of monthly performance appraisals. On the one hand, almost all interviewees agree that monthly appraisal helped document performance,[24] but, on the other hand, interviewees state that it did little to alter the performance of low and mediocre performers and that it also produced significantly more paperwork, especially for managers. Moreover, punitive (disciplinary) action against officials with poor performance became a central focus of staff and labor unions and received negative press in local newspapers. Consequently, after October 2008, SMG sought other ways of dealing with poor performers through subsequent negotiation with the labor unions. It is fair to characterize these aspects as distractions to creativity management in the study period.

Assessment

IDEAS AND THEIR SUBMITTERS

During the first two years of creativity management, June 2006 to May 2008, officials posted 62,666 ideas to the "Imagination Idea Bank," and 11,846 ideas from
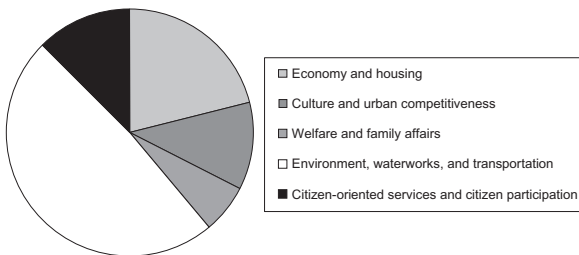
Officials' ideas
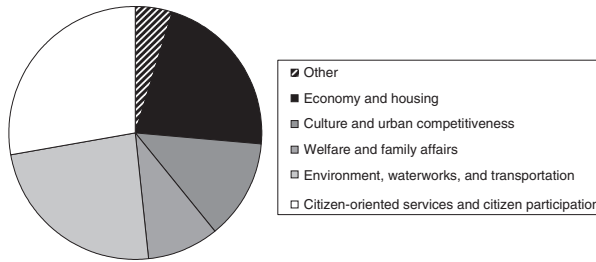
Citizens' ideas

Figure 3. Analysis of Submitted Officials' (*N* = 62,666) and Citizens' (*N* = 11,846) Ideas by Area as of May 31, 2008

citizens were collected on the "Seoul Oasis" Web site (see Figure 3). Based on our survey, on average, city officials submitted 4.7 ideas;[25] only 16.0 percent of respondents report that they had not submitted any ideas,[26] while 18.0 percent state that they made submissions more than 10 times. By contrast, in the entire 10-year preceding period, from 1997 through 2006 only 4,664 employee and 3,585 citizen ideas were registered through various electronic and written means. According to interviewees, most managers and citizens simply did not pay much attention to the previous system of gathering ideas, nor did they much figure into any management system. The increase, about 45 times on an annual basis, is readily attributed to increased emphasis on generating new ideas (e.g., incentives, training, etc.) and is statistically significant ($Z = 3.32$, $p < 0.01$).[27] Hence, creativity management increased the number of submitted ideas.[28]

Table 1 shows a sample of awarded ideas. Many officials' ideas involve new program initiatives, some of which are quite major, while many citizens' ideas aim directly at improving their quality-of-life experiences. Also, Table 2 shows that 71 percent of survey respondents state that improvements in customer or stakeholder satisfaction are the main objectives of their submitted ideas; 34 percent state that the objective is to improve customer satisfaction, while others state that the purpose is to deliver a service more quickly (16 percent), to custom-tailor a service (14 percent), or to provide more information to stakeholders (7 percent).

Table 1. Selected Adopted Ideas from City Officials and Citizens, July 2, 2006–May 5, 2008

	Adopted ideas from city officials		Adopted ideas from citizens
Titles of ideas	Short summary of ideas	Title of ideas	Short summary of ideas
Construct a new waterfront town for international business in Yongsan district	Seoul's Yongsan district was less developed because of train yard and maintenance facilities. Maintenance facilities can be moved to other region and the land can be developed as a new waterfront town at the Han River, including an international ferry terminal and a 150-story landmark building accommodating international businesses.	Donation through smart transportation card	Establish donation system at refill machine of smart transportation card at subway stations. People can donate money to disadvantaged persons (e.g., disabled, elderly children who are head of household) using their smart card.
Create sandy beaches alongside the Han River	To control flood in summer, concrete river banks were constructed alongside the Han River, removing sandy beaches in the past. Creating sandy beaches will attract tourists in Seoul.	Digital wall for marriage proposal	Establish water screen at the downtown stream (Cheonggyecheon), project slides (video, message from marriage proposers) onto water screen (digital wall), make it memorable event for lovers.
Hosting the World Design Capital 2010	Hosting the World Design Capital 2010 will promote Seoul to become a global design hub. Design is a growth driver of Seoul's economy. The event will bring global attention to Seoul's uses of design in public and private organizations.	Find a tiny flaw in the jewel, Seoul	Establish a Web site for submitting photos of tiny flaws in Seoul. Citizens can take pictures to report defects in Seoul area to make the city more beautiful and perfect.
To lower Jamsu Bridge as a pedestrian passage	At the double-deck Banpo Bridge on the Han River, the lower Jamsu Bridge can be used as a pedestrian passage so that citizens can enjoy the river.	Establish a center to experience the life of the disabled	Ordinary people do not understand inconveniences of the life of the disabled. Seoul city needs to establish a center to experience the life of the disabled so that ordinary people can better help the disabled in society.

Idea	Description
Construct underground roads instead of expressway alongside the Han River	To ease traffic congestion in Seoul, city constructed expressways alongside the Han River, which make it difficult for citizens to access the river on foot. The solution is to construct underground roads instead of city expressways alongside the Han River.
Publish cases of failure in city administration	Public officials tend to hide failure or errors in administration, but those cases are important lessons for other officials to avoid similar errors. Collect and publish those cases of failure or errors.
Falling fountain on the Banpo Bridge	On the Banpo Bridge on the Han River, a gigantic falling fountain can be constructed, extending 1,140 m, which is the first of its kind in the world.
Apply the concept of street furniture design to elevated roads	In the past, elevated roads were constructed focusing only on their function as traffic. Now, it is time to consider elevated roads as street furniture and apply the concept of design to make the urban environment more beautiful.
Enjoy cultural performances for only 1,000 won (US$1)	Invite low-income family to City Cultural Center every month, pay only 1,000 won (one dollar) and see performance of art. Provide the deprived with opportunity to enjoy cultural performance and increase maximum happiness for them.
Construct a bridge with transparent glass floor on the Han River	Seoul city will construct a bridge with transparent glass floor, 450 meters long, linking two high-rise parks alongside the Han River so that visitors can overlook the scenery of the river.
Floating islands on the Han River	The Floating Island will be built on the Han River. When completed in September 2010, the Floating Island, composed of three artificial islands, will have facilities for performances, exhibitions, festivals, water sports, and leisure activities. The Floating Island with design of flowers will be a new Seoul landmark, a tourist destination, and the largest of its kind in the world.
Construct a bridge for walking on the Han River	The Gwangjin Bridge in the eastern part of the Han River has less traffic compared with other bridges. Half of eight lanes will be assigned for walking and bicycles.
Bicycle festival	To encourage riding bicycles instead of cars to reduce pollution and traffic congestion, offer interesting bicycle festival, including bicycle fashion show, trade of bicycles, free repair, exhibition, art using bicycles, bicycle sports competition, etc.
Upgrade bus stops	In bus stop waiting areas, there are bus shelters with seats. Need additional facilities such as CCTV cameras, maps showing surrounding area and subway routes, and installing light at night to see better.

Table 2. Approaches of Submitted Ideas

Which approaches characterize your idea? (check all that apply)	%
Process modification or improvement	37.9
Improved customer interaction or access	31.9
Modified program objective or activity	17.6
New program objective or activity	16.6
New policy or rule	12.8
IT application	8.1
Complete process redesign	6.5
Partnership with business	3.3
Partnership with other public agency	3.3
More employee decision-making authority	2.9
Privatization	1.6
Other	3.3

Notes: N = 927 respondents, who made 1,198 responses; totals exceed 100 percent due to multiple responses.

Other main objectives are cost (12 percent) and error (3 percent) reduction. Among respondents, 58 percent also identify policy outcomes as main objectives, such as relating to economic development or the environment. Table 2 shows various approaches of submitted ideas, which shows the importance of increasing stakeholder interactions, process improvement, and new policy and program development. Table 2 also shows that IT applications are infrequently mentioned (8 percent), which may simply reflect IT uses in the previously described ways. Percentages exceed 100 percent as multiple answers were allowed, and analysis by grade does not show significant differences between employees and managers. In a separate question, 51 percent of respondents state that the scope of their highest-rated idea was a specific department, 29 percent state several departments, and 20 percent a specific division within a department.[29]

We also examine the grade of employees and managers making suggestions. Lower-grade employees submitted 16 percent of ideas, middle-grade employees submitted 38.8 percent of ideas, senior-grade employees (including field supervisors) submitted 32.2 percent of ideas, and middle managers submitted 13.2 percent of ideas.[30] Some managers explain that lower-level employees often lack experience in public organizations and in conceptualizing problems and finding solutions, and thus submit few ideas. Middle and senior employees have more experience, and intense competition for promotion among these grades also causes them to submit more ideas. The finding shows that most ideas are submitted by senior employees. Analysis also shows that those who have worked at SMG longer submit more ideas. For example, among the most senior employees (grade 6), those who have worked for less than five years at SMG submitted an average of 3.8 ideas, those who worked between 6 and 10 years submitted 4.5 ideas, and those who worked more than 10 years, 5.2 ideas.[31] Women submit slightly more

ideas than men, 5.0 versus 4.6 ($p < 0.05$). Few top managers submit ideas on the Imagination Idea Bank. Some interviewees state that they prefer to give ideas to subordinates to benefit their units and performance appraisals.

Interviews confirm that incentives had a major impact on officials' decisions to submit ideas. Many also said that increased discussion with colleagues was fun and that it was something that they looked forward to. A succinct comment by an interviewee was: "We submit ideas because it is fun and counts towards our appraisals." The impact on appraisal, salary raises, and promotions strongly influences people to submit ideas.[32] Those whose ideas were rewarded (evaluated with a C or higher) submitted more ideas than those whose highest awarded grade was only a D: respectively, they submitted 7.4 versus 5.2 ideas (tau $-$ c = .208, $p < 0.01$). Although this finding is consistent with a broad range of possibilities (e.g., those who have better ideas also have more ideas), the large number of low-rated ideas is also consistent with the notion of incentives' driving submissions, though, as noted previously, even some D-rated ideas were used in practice and noted on performance appraisals.

EVALUATION AND IMPACT

Survey results show that only 13 percent of ideas are selected for implementation; 21 percent of ideas are evaluated as old ideas that are either already being used or that have been rejected in the past, and 66 percent of ideas are new ideas that are not implemented. Hence, about (.13 x 62,666 =) 8,084 ideas are used in some way. Further, among respondents whose ideas were adopted, none received an A or B (see earlier discussion of evaluation), while 17 percent received a C and 82 percent received a D, which suggests that about (.17 x 8,804 =) 1,374 implemented ideas are significant in some way (or, about 2.2 percent of all ideas). Given the earlier report that only 93 ideas received an A or B, and 1,231 ideas received C (total 1,324), it follows that (93/1324 x 1,374 =) 96 implemented ideas were very outstanding or highly important (about 0.15 percent of all ideas). In short, about 1 in 8 (13 percent) of all submitted ideas (or 8,084 of 62,666) are used in some way, and about 1 in 45 (or 2.2 percent) are used and significant in some way.

When asked "How innovative would you say that your division (within your department) was before 2006?" 20 percent state "not innovative," 64 percent state "somewhat innovative," and 16 percent state "innovative" or "very innovative." These results confirm that SMG was not perceived as a creative workplace. When asked how innovative their division has been since 2006, the starting date of creativity management, the respective responses are 11 percent, 56 percent, and 33 percent—a statistically doubling of those stating their division is now "innovative" or "very innovative" (tau $-$ c = .313, $p < 0.01$).[33] These results are shown in Figure 4. While there is obviously yet some way to go, having one in three officials now agree that their city is innovative is surely evidence of both improvement and the
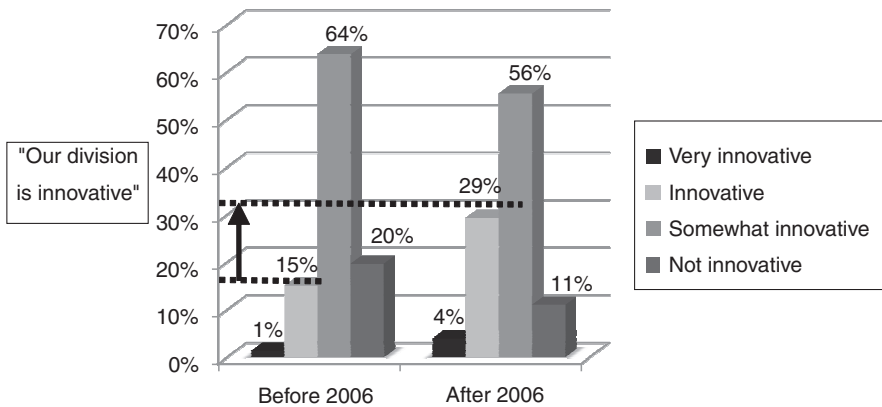
Figure 4. Perceptions of Innovation

beginning of establishing a broad-based experience of innovation (hence, jump-starting innovation in many divisions). When asked, "Has creativity management produced significant changes or improvements in programs in your division?" 19 percent state "not significant," 62 percent somewhat significant, and 18 percent "significant" or "very significant."[34] These latter results are quire consistent with those reported about innovation in departments since 2006, the start of creativity management, and the correlation among these two measures is strong (tau – c = .346, $p < 0.01$).

Based on the quantitative results, as well as actual ideas shown in Table 1, it seems that creativity management is indeed associated with having more new ideas in the organization. Many ideas are small. While only 26 of 62,666 ideas received an A rating and only 67 a B rating, many of these latter ideas are very significant undertakings. For example, one of these is to build the world's longest falling fountain from a bridge. It should be noted that at the time of the survey in 2008 only 343 of the 1,354 ideas rated A through C had been implemented, 77 ideas were in the process of being implemented, and 532 ideas were being prepared for implementation (e.g., budget preparation, managerial approval).[35] Hence, it is likely that as these ideas, as well as other, lower-rated ideas are actually implemented, perceptions of innovation will increase further. Based on interviewees, these perceptions seem largely based on processes for generating ideas to date, rather than their actual realization in practice.

The notion that improvements in perception of innovation are associated with creativity management effort is supported by further analysis. First, among those who state that creativity management did not produce significant changes or improvements in programs of their division, 83.6 percent also agree that their division is not or only somewhat innovative since 2006, but among those who

state that their division has been innovative or very innovative since 2006, 48.1 percent also state that creativity management produced significant or very significant changes and improvements to programs in their division. Thus, at least some part of innovative activity is attributable to creativity management.

Second, processes targeted by creativity management are also associated with increases in perceptions of innovation. Among respondents who report that they have "a lot" or "adequate" support from their department or division for making new ideas work, 53 percent state that their organization during the last two years has been innovative or very innovative, compared to only 19 percent among those who state that they have only "some" or "no" support from their department or division. Of those who talk with coworkers and managers at least twice each week about possible improvements, 47 percent report that their division is innovative or very innovative, compared to only 24 percent of those who report talking once per week or less.[36] These differences are all statistically significant (tau $-$ c $= .286$, .198, and .195, respectively, all ps < 0.01).[37] Among those who submit ideas, idea submission is also positively, albeit it weakly, associated with getting get comments from customers, citizens, vendors, and others about the quality of service (tau $-$ c $= .05$, $p < 0.05$).[38]

As a technical note, because officials are strongly encouraged to submit ideas regardless of whether their divisions are innovative, relations between the number of submitted ideas and perceptions of innovation in divisions are weak at best. For example, those who submit five or six ideas agree a bit more strongly (than those who submit zero ideas) that their division has been innovative since 2006 (39.0 percent vs. 27.2 percent, tau $-$ c $= .100$, $p < 0.05$), but this difference is further reduced among those who submitted a larger number of ideas[39] and is insignificant when analyzed for all respondents (including those who submit only few ideas; tau $-$ c, $n = .023$, ns).[40] Because creativity management strongly drives idea submission in its effort to increase innovation, idea submission is not a good indicator of perceptions of innovation across divisions during this jump-starting phase.

Table 3 summarizes the main quantitative findings of this study. A regression analysis of these relations predicting perceptions of innovation in divisions is provided in a footnote.[41] Finally, it should be noted that creativity management has also begun to produce an increasing stream of positive press and articles about SMG in professional and trade journals and in some large newspapers. Awards and accomplishments are noted, such as Seoul's recent selection as the winner of the 2010 World Design Capital competition by the International Council of Societies of Industrial Design, and as a winner and finalist in the United Nations (2009) Public Service Awards. This broader acknowledgement of Seoul as a dynamic city and being desirable for living and doing business is the ultimate aim of creativity management, seeking to increase Seoul's standing among global cities.

Table 3. Summary of 10 Main Findings

Main finding	Result	Z, tau − c
1. Creativity management produces a large number of submitted ideas.	62,666 in 2 years	
2. Creativity management increases the number of submitted ideas.	45 × increase	Z = 3.22**
3. Creativity management produces a large number of usable ideas.	8,084 ideas	
4. Creativity management produces many unusable ideas.	87%[a]	
5. Creativity management increases perceptions of innovation.	16% increased to 33%	tau − c = .313**
6. Many employees and managers submit ideas.	84% submit	
7. Most ideas are submitted by middle- and senior-grade employees.	71% of ideas	
8. The number of submitted ideas is weakly associated with perceptions of innovation between divisions.	39% vs. 27%	tau − c = .100*
9. Support from divisions for trying new ideas increases perceptions of innovation.	19% increased to 53%	tau − c = .286**
10. Talking with coworkers and managers about improvements increases perceptions of innovation.	24% increased to 47%	tau − c = .198**

[a]Upper limit. These are D-rated ideas, and some of these are used in practice.

*$p < 0.05$; ** $p < 0.01$.

Conclusion and Discussion

Creativity management is portrayed in this article as a reform to jump-start innovation by inducing officials to suggest ideas for change and processes to evaluate these and prepare them for subsequent implementation decision making. Creativity management is a new concept in public administration that targets the first phase of the innovation process, namely, generating new and actionable ideas. The case application of creativity management in SMG shows a comprehensive approach that relies on top leadership to provide (a) orientation and training, (b) electronic idea collection and evaluation processes, (c) rewards for meritorious ideas, and (d) changes of appraisal and departmental evaluation processes. In the first two years, 62,666 ideas were collected from officials at SMG. Survey results show that about 8,084 of these were adopted for subsequent implementation (about 13 percent), and, among these, about 1,374 were significant in some way and 96 were very significant. We include examples of these ideas. Survey results also show that officials double their perception of innovation during the two-year period (from 16 percent to 33 percent who perceive SMG as innovative or highly innovative). Officials' perceptions of innovation are associated with processes targeted by creativity management, such as increased discussion with coworkers about new ideas and support from officials for making new ideas work.

While creativity management is shown to jump-start innovation in the case application, two critical comments about this innovation are that (a) "it is just a big suggestion box; it has little that is new" and (b) "it is owned by top management and seems very ponderous." While criticisms often contain kernels of truth, we think these criticisms overlook or downplay four key features. First, numbers greatly matter. Jurisdictions increasingly benefit from large number of initiatives undertaken by numerous officials that this management reform provides for, but suggestion boxes often do not; at best, they produce only a few new ideas and seldom engender many new initiatives. Second, feasibility matters. Creativity management is foremost about adjusting existing management processes, rather than about creating an entire new system. Creativity management involves changes to appraisal, evaluation, training, group discussion processes, and the development of electronic idea collection and evaluation processes, if not already in place (Figure 1). Collectively, that is quite some change. What makes creativity management feasible is that each of these is perceived as doable. (If, additionally, great system change was also required, then many might feel that creativity was "too much" for most jurisdictions.) We discuss creativity management, which is a new management concept in public administration and which induces increased creativity and initiative.

Third, as regarding ownership, change must start with some group. Many successful examples of change point to top management taking ownership for change, which is often seen as a requirement for initial success. Although quite a few officials welcome the opportunity to contribute ideas and have them taken seriously (hence, take ownership, too), many officials may be reserved and skeptical, as is common with reforms.[42] Broad-based ownership usually requires gradual shifts of such attitudes giving way to more favorable ones. Although we do not address long-term change, creativity management includes elements to support long-term change. Systemic change of training, appraisal, rewards, brainstorming, and evaluation supports cultural shifts (when implemented in fair and consistent ways). Creativity management also acknowledges that people contribute in different ways to organizations and that rewards should be provided for other types of contributions, too. This acknowledgment may make creativity management more acceptable to those who do not benefit from creativity management but rather benefit from making other contributions that are rewarded. Fourth, while the effort is large, it is not very ponderous for SMG. Using a staff of 18 to manage this effort is not very much for the world's eighth-largest city. Initially, the reviewers were a bit overwhelmed, but that is now resolved by broadening the pool that includes middle managers, too. Smaller jurisdictions may need only one or two staff persons for review purposes and will likely adopt incentives and appraisal changes to fit their circumstances. No case study should be taken as an example or model for all other jurisdictions to follow but, rather, as providing markers and lessons to be considered.

Indeed, the application of creativity management in Seoul was certainly not without its problems and mistakes. The commingling of creativity management with punitive action for low performers was clearly a distraction that worked against the acceptance of this management reform; with hindsight, separating strategies for dealing with these two matters would have been a better choice. Also, SMG did little to provide specific orientation for officials other than for them to "think from the perspective of citizens." Customer-orientation is a tried-and-true approach that worked for SMG (considering the number of ideas), but other jurisdictions might want to provide a bit more strategic focus (or benchmarks), such as on specific problems or solutions, especially those that have made prior headway in this regard. Seoul itself emphasizes strategic priority in progress in economic vitality, being a city of culture, welfare for citizens, having clean air, and active civic participation, all of which provide foci for problem solving. More attention is needed toward using interdepartmental teams on problems of transportation, environment, education, and housing, which benefit from cross-departmental participation. The emphasis on new ideas, rather than on useful ideas, might also be revisited as the diffusion of creative ideas across visions becomes a growing priority.

The need to direct input is also implied by the experience that "quality circles often have a life span of about 3 years. This is because they identify and solve the most obvious problems. After that, they tend to fizzle out. If SMG's CM process is generating about 8,000 ideas to implement per year, they will not last long."[43] Although some interviewees admitted having had this experience, others report that this problem is addressed by forming new problem-solving groups. New problems and opportunities pop up all the time, and managers sometimes direct employees to these problems. Yet it seems possible that as prior pent-up ideas are eventually all brought forward, the annual number of new ideas may somewhat decline, although that has not been the experience of Seoul through late 2009, perhaps because new targets are found. The long-term institutionalization of greater initiative is beyond the scope of this article, of course. Indeed, whether creativity management has, in fact, become adequately established and supported in Seoul to survive future leadership transition is unknowable at this time.

U.S. readers may ask to what extent the Seoul practice can be applied in their U.S. jurisdictions. The basic idea is to encourage employees and managers to submit new ideas, which is likely a good idea in every jurisdiction, no matter what size or circumstances they face. The basic conditions for this management practice are top management commitment to using at least some ideas, the need for some electronic form of idea management and review process (needed in all but the smallest of jurisdictions), and a small pot of money to implement new improvements (many of which are cost savings, of course). The more pertinent question is what factors cause jurisdictions to take this seriously as reflected in, for example, new decision-making processes, supporting activities, and appraisal

criteria. In the case of Seoul, top leadership commitment seems to have been the key factor, coupled by a strategic sense of global competition and a tradition of large projects that often involved innovation. Other jurisdictions will need to find their own motivations for being progressive and innovative.

This study suggests several future research issues, such as the relation between incentives and idea submission. The case setting pioneered many applications, including the level of incentives and changes in personnel appraisal system. We do not know which changes managers and employees find most useful, nor do we know the impact of incentives causing frivolous suggestions that increase overhead management. Also, unsettled questions remain about the quality of the review process (always fodder for fair criticism), as well as having either too much or too little leadership direction on creativity processes. These are important matters for fine tuning. Other research foci relate creativity to leadership style, recruitment and compensation, performance measurement, and many other foci of public administration research. While the concepts of creativity management seem readily adjustable to fit a broad range of conditions, further research could, in fact, examine its application in smaller jurisdictions.

We see creativity management as an excellent candidate for being a key part of the next new wave in public administration practice. New Public Management has run its course, even if not yet fully implemented in all jurisdictions.[44] Now, organizations that can unleash hundreds of new initiatives, large and small, are needed, and organizations that do so will provide models for a radically transformed public sector. The demand for such initiatives is growing and is consistent with larger, unyielding trends toward greater information and empowerment in the world, as well as increasingly ex-post accountability that furthers results and initiative taking. Public sector problems are among the very (if not most) complex and challenging, and in the knowledge economy, workforce creativity is ever more important, as is making the workplace more attractive for talented employees and managers. Agency leaders now routinely tell their managers that they expect more initiative and leadership from them. The time has come to unleash and, at times, even require the initiative and creativity of officials. While the exact nature and form of public organizations that routinely generate more initiatives is still in the making, it seems likely that creativity management, in some shape or form, will be part of processes that are surely to come.

Notes

1. See also Cates (1979), Light (1998), Makharita (2005), Osborne & Brown (2005), Riccucci, Rainey, & Thompson (2006), and Rickards & Moger (2006).

2. Innovation theories often urge greater creativity and initiative (e.g., officials need to invent new solutions; Borins 1998; Hood 1991), existing scholarship provides little insight into processes that increase creativity (e.g., Frederickson, Johnson, & Wood 2004; West &

Berman, 1997), although a bit more about creativity in leadership itself (e.g., Trottier, Van Wart, & Wang 2008).

3. It is also related to performance measurement (and balanced scorecards) insofar as it emphasizes measures of creativity and innovation processes.

4. Although it is surely at the research frontier to explain how culture and context affect outcomes, it is an overstatement to suggest that cultural understanding is required before the relevance of foreign practices or concepts can be considered. Experience clearly shows that national context is not always a barrier to relevance, adaptation, and diffusion. Even within the United States, vast cultural and contextual differences also exists but surely no one argues that management applications in, say, New York are a priori irrelevant to public organizations in, say, Louisiana or Utah. Cultural, political, and managerial contexts do not preclude other jurisdictions from adapting experiences to their needs and conditions.

5. See, for example, Bobic & Davis (2003), Dimock (1986), Farmer, Tierney, & Kung-McIntyre (2003), and Keirsey & Bates (1984).

6. Of course, organizations that promote new ideas will also give attention to the implementation of these ideas. Conceptually, however, implementation raises differences issues that are largely beyond the framework discussed here. Some implementation activities are later mentioned in the case of Seoul, for the purpose of completeness.

7. A reviewer suggested that we should discuss what constitutes creative from noncreative ideas. What is new and creative is often in the eye of the beholder. The point is, of course, to stimulate many new ideas that move a jurisdiction forward, and some might choose to emphasize other criteria than creativity per se.

8. This process is a bit akin to universities giving special or additional rewards for publications or grants when they want to increase these. Then, after some period (about five years or so), these special rewards are usually phased out as a higher level of attainment has become more common, while routine reward for such performance continues through appraisal, and promotion processes remain. Then, special or additional rewards are given to new, higher levels of achievement.

9. See also Argote, McEvily, & Reagans (2003), Drazin, Glynn, & Kazanjian (1999), Egan (2005), Hanna (1995), Hemlin, Allwood, & Martin (2004), and Oldham & Cummings (1996).

10. Indeed, the literature usually points to best practice examples that avoid such pitfalls (e.g., Denhardt & Denhardt, 2001).

11. The broader, regional population of Seoul is about 24 million.

12. Respondents work for a broad range of SMG departments: Infrastructure Management (9.1 percent), Transportation Headquarters (7.5 percent), Hangang River Headquarters (6.3 percent), Urban Competitiveness Headquarters (6.1 percent), Welfare Bureau (5.2 percent), Women and Family Policy Bureau (4.9 percent), Environmental Protection (4.6 percent), Balanced Development Headquarters (4.4 percent), Urban Planning Bureau (4.4 percent), Management and Planning Office (4.0 percent), Green Seoul Bureau (4.0 percent), Housing Bureau (3.8 percent), Water Management Bureau (3.6 percent), Cultural Affairs Bureau (3.5 percent), Fire and Disaster Headquarters (3.4 percent), Office of Waterworks (3.4 percent), Finance Bureau (3.0 percent), Seoul Design Headquarters (2.9 percent), Seoul Human Resource Development Center (2.2 percent), Customer Satisfaction Bureau (2.1 percent), Audit and Inspection Bureau (2.0 percent), and other departments that each constitute less than 2 percent of the sample.

13. The argument was used that metropolises need to improve their competitiveness to attract global talent and capital (e.g., Florida, 2007; Feiock, Moon, & Park, 2008; Landry, 2000).

14. See C. Kim (2005) and P. Kim (2000). Seoul also has some outstanding redevelopment (e.g., restoration of a stream covered with concrete in downtown) and public transportation achievements.

15. Typically, managers show strong commitment to rule orientation and judge how well they do by how well they follow the rules, rather than undertake new initiatives to advance their programs.

16. There are 1,292 managers at SMG, and, of these, 442 have master's degrees and 93 have Ph.D.s. About 20 percent received their advanced degrees abroad, typically from U.S. or UK institutions. The influence of Anglo-Saxon public administration management theories on SMG is large; many professors at Korean universities have U.S. or UK doctorates. The SMG personnel system consists of nine grades, and the five highest (1 through 5) are considered managerial.

17. Sources include brochures and PowerPoint presentations at international meetings.

18. The four teams are (a) Creativity Promotion Planning Team: creativity promotion planning, evaluation of department creativity activities and performance, management of Seoul Creativity Awards and prize money; (b) Creativity Implementation Team: management of Creative Idea contest; presentation day every month with fun performance, creative way of showing new ideas to the audience through competition among departments; management of idea presentation from citizen ideas; (c) Citizen Idea Management Team: management of Ten Million Imagination, Seoul Oasis, a portal Web site (http://oasis.seoul.go.kr) that allows citizens to exchange and propose their ideas on municipal policies freely; (d) Creativity Knowledge Management Team: management of city employee "Imagination Idea Bank," an intranet for collecting city employees' new ideas; management of learning organizations to foster creative activities such as reading book clubs, community of practice, and employee research groups.

19. The Seoul Development Institute, which is funded by SMG, is composed of 200 researchers (75 Ph.D.s, 125 master's degrees).

20. A reviewer asks for the form, which is straightforward indeed:

Idea	Recommend as a creative idea	Reject
Idea 1	Yes	
Idea 2		Yes
Idea 3	Yes	

21. The form for reviewing these ideas is simple:
Reviewed by Mr. Kim

Idea	Total Score (100) (Rating A, B, C, D)	Creativity (40)	Feasibility (30)	Effectiveness (30)
Idea 1				
Idea 2				
Idea 3				

When asked about rating scales for each of these criteria, an official from the Creativity Promotion Division stated that after discussion they concluded that it was impossible to create scales for creativity, feasibility, and effectiveness that were meaningful across the broad range of ideas that they received. It seemed better to rely on the subjective perceptions of expert judges who had been informed of the rating criteria of the letter grades.

22. A journal reviewer commented, "This sheer number of ideas would likely overwhelm many bureaucratic units." As described in the text, this feeling is not the case at SMG. SMG is very large and can handle a large number of ideas and staff to address them, Smaller jurisdictions, such as most cities in the United States, will have fewer ideas and can adopt a review process that better suits them. It goes without saying that jurisdictions should be able to develop a process of reviewing employee ideas.

23. Even with the initial nonautomated processing, the processing of initial ideas took only a few hours each day for about 10 people. The math is that about 3,000 ideas per month means $(3,000/22 \times 10) = 13.5$ ideas per person per working day. On average, each idea took about 15 minutes to process; hence, each staff member spends about 3 to 4 hours each day dealing with new ideas. Of course, additional staff hours are needed for follow-up, reminders, correspondence, and final evaluation. Also, the staff of 18 at CPD seems modest among the workforce of 15,700 officials at SMG.

24. As one employee stated, "This gives us a chance to better document performance. It makes it easier for outstanding employees to be promoted and also to get an increased annual bonus."

25. This finding from the sample survey of 1,400 officials is consistent with the total number of ideas reported earlier: 4.7 x 15,700 (employees) = 73,790. Although this number is a bit higher than the 62,666 reported in the text, not all of the 15,700 employees began the program at the same time, and these figures also include lower-grade firemen in SMG who submit fewer ideas.

26. Some reasons that officials might not have submitted ideas are that (a) they are old and near retirement and thus not interested in this system; (b) officials who have just entered public service are not yet familiar with the administrative system and work processes; (c) officials who have been just promoted to a higher grade level do not feel incentives should be promoted right away; and (d) officials who work at support functions such as the Management and Planning Office do not deal with projects or programs, so they are remote from improving the work process.

27. This finding is based on averaging 4,664 employee ideas over the 10 prior years and data on the two-year creativity management effort.

28. Undoubtedly, the frequency of monthly appraisals spurred some employees to develop many idea submissions, but the switch to quarterly appraisals has not slowed down the number of ideas much (which grew from 62,666 in May 2008 to 105,357 in February 2009).

29. These responses exclude the "citywide" category, which may have been confusing, given that citywide jurisdiction of divisions and department.

30. Lower-grade employees are defined as grades 8 and 9 in the SMG personnel system, middle- and senior-level employees as grades 6 and 7, and middle managers as grades 4 and 5.

31. It is important to compare within similar grades because officials at higher grades have been longer with SMG, of course. Using multiple regression, number of ideas = f(grade, years of service), years of service is significant ($p < 0.01$) but not grade. Selecting only grades 5 and 6, the difference is significant as well ($F = 2.7$, $df = 4$, $p < 0.05$). Among all grades, those who have worked longer than 20 years submit slightly fewer ideas than those who worked between 16 and 20 years.

32. A journal reviewer stated about this comment: "This relates to my earlier worry that employees will generate ideas for incentives. It is also fun, they say. I bet. The program does increase idea submission, I grant." Well, the point of the incentives is to do just that. Whether this approach can lead to permanently highly incentives is a matter outside the scope of this article, which deals with jump-starting innovation only.

33. The increase in means is a bit less telling, from 0.98 to 1.26 on scale (3 = *very innovative*; 2 = *innovative;* 1 = *somewhat innovative*; 0 = *not innovative*).

34. Although women agree with men that their division has become innovative in the past two years, women perceive the level of innovation to be slightly less. For example, whereas 21 percent of men state that creativity management has produced significant or very significant changes or improvements in their division, only 14 percent of women state the same (tau – c = .091, $p < 0.01$).

35. One top manager noted: "I have 33 projects under implementation but most will be completed by 2009 or 2010."

36. And among those who get comments at least weekly from customers, citizens, vendors, and others who interact with SMG, 44 percent report that their department or division is innovative or very innovative, compared to 27 percent of those who receive such comments less often.

37. The most important factor is having support for making new ideas work; among those who report having "a lot of" support, 73 percent report that their department or division is innovative, which increases only an additional 5–8 percent for high levels of reported coworker discussion and stakeholder feedback, discussion, and feedback

38. However, the number of ideas is not directly associated with perceptions of innovation

in divisions (tau – c = .023, *ns*), reflecting that officials are encouraged to submit ideas in divisions that are innovative as well as not very innovative.

39. The difference is 33.1 percent versus 27.2 percent (tau – c = .079, $p < 0.05$). A possible explanation is that those who submitted a very large number of ideas have higher expectations for innovation.

40. Respondents who submitted five or six ideas agree more strongly that creativity management has produced significant or very significant changes in programs in their division (27.6 percent versus 15.8 percent, tau – c =.159, $p < 0.01$). This relation, too, is insignificant when analyzed for all respondents. In short, idea submission is not a good indicator of the perception of innovation or creativity management impact across divisions.

41. A reviewer asked for a regression analysis, which we present here, albeit with the caveat that this regression is surely no full model specification. However, the many variables do serve as control variables, of course (standard errors in parentheses): Adjusted-R^2 = .345.

Perceptions of Innovation = .286 Constant + .000 Grade – .014 Years at SMG + .006 No. of ideas
(in Division, since 2006)   (.267)   (.024)   (.017)   (.006)

+ .055 Highest evaluated idea + .493** Creativity mgt. change
(.051)   (.034)

+ .223** Div. support for new ideas + .033* Talk w/coworkers about change
(.030)   (.016)

– .011 Comments from stakeholders + .023 Age + .002 Sex
(.016)   (.027)   (.051)

$N = 769$. *$p < .05$; **$p < .01$.

42. Berman noted the 25–50–25 rule, which states:

> When a new idea is suggested, about 25 percent of the manager's audience will embrace it (with varying degrees of enthusiasm), 25 percent of the manager's audience will reject it (with varying degrees of enthusiasm), and 50 percent will be indifferent; they may come to support it in time, if and when it works out and becomes a fait accompli. They are "fence sitters." (2006, p. 648)

Berman also noted that "the 25–50–25 rule has not been rigorously validated by scientific research, but many managers feel that it more or less accurately represents their experience when they propose any new idea" (p. 648).

43. Comment made by an anonymous reviewer.

44. Although significant progress is still being made using these strategies (according to diffusion estimates, some agencies are making slow progress), it bears noting that the diffusion of New Public Management has been across countries (Saint-Martin, 1998), between private and public sector organizations (Rainey 1999), and between large and small public jurisdictions.

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Appendix. Evaluation of Departmental Creativity

Evaluation area	Subcategory	Indicators	Score (100 pts.)
1. Establishment of the system of creativity activities and its operation (20%)	1-1. Department and divisional activities for generating and evaluating ideas.	• Performance of department activities for generating ideas	3
		• Performance of divisional activities for generating ideas	2
	1-2. Degree of active creativity activities	• Performance of feedback from previous years' evaluation	3
		• Performance of incentive budget for creativity activities	5
		• Number of creativity awards from the mayor and other awards from outside organizations	2
	1-3. Participation of department head in creativity activities	• Department head's participation in meetings for idea generation with employees	3
		• Department head's support for creativity activities	2
2. Collection of creative ideas and implementation (50%)	2-1. Collection of creative ideas	• Number of ideas on "Imagination Bank" on the city's intranet	7
		• Number of submitted ideas for monthly Idea Contest at meeting with mayor and directors-general	5
		• Number of collected ideas through department's activities	3
	2-2. Implementation of creative ideas	• Implementation of creative ideas submitted at the "Imagination Bank" and "Seoul Oasis" (citizen suggestions)	15
		• Implementation of ideas from monthly Idea Contest at the meeting with mayor and director-generals	5
		• Implementation of collected ideas through department's activities	5
	2-3. Dissemination of creative ideas	• Management of success and failure stories of creative administration and its dissemination to other departments	5
		• Learning from cases of success and failure in creative administration from other departments	5

Appendix (*continued*)

Evaluation area	Subcategories	Indicators	Score (100 pts.)
3. Learning activities for creativity (15%)	3-1. Operation of programs for learning creativity	• Development of programs for learning creativity and operation	3
		• Participation in programs for learning creativity outside of a department	2
	3-2. Club activities for knowledge of creativity	• Operation of clubs for knowledge of creativity and participation	3
		• Operation of other clubs for research and participation	2
	3-3. On-the-job training and individual research	• Operation of on-the-job training for newly appointed officials	3
		• Number of individual officials' research (books, articles, etc.)	2
4. Fostering creative organizational culture (15%)	4-1. Action meetings	• Performance of action meetings (gatherings of officials and department heads to discuss and solve issues)	5
		• Operation of creativity facilitators	2
	4-2. Workshops on creativity	• Number of workshops for creativity and other works	3
	4-3. Removing unnecessary works	• Finding unnecessary works and removing them	5

Evan M. Berman is university chair professor at National Chengchi University (Taipei, Taiwan) in the International Ph.D. Program in Asia-Pacific Studies and the Department of Public Administration. He is the author of numerous books and articles in the discipline and current editor-in-chief of ASPA's Book Series in Public Administration and Public Policy. His most recent book is Public Administration in East Asia: Mainland China, Japan, South Korea and Taiwan *(Taylor & Francis, 2010), with Jae Moon and Heungsuk Choi. He is also a former chair of ASPA's Section on Public Performance and Management (evanmberman@gmail.com).*

Chan-Gon Kim is a deputy mayor of Songpa-gu (District), Seoul Metropolitan Government, Korea. Kim has been in charge of a variety of projects and has published articles in the fields of e-government, administrative reform, and urban development. He previously served as an associate director of the National Center for Public Performance/E-Governance Institute at Rutgers University–Newark. Kim received his Ph.D. in public administration from the School of Public Affairs and Administration at Rutgers University–Newark in 2005 (chan_gonkim@hotmail.com).