Beyond Citizen Engagement
Involving the Public in Co-Delivering Government Services

P. K. Kannan

University of Maryland,
College Park

Ai-Mei Chang

University of Maryland
University College

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P. K. Kannan
Ralph J. Tyser Professor of Marketing Science
Chair, Department of Marketing
The Robert H. Smith School of Business
University of Maryland, College Park

Ai-Mei Chang
Professor of Systems Management
University of Maryland University College

IBM Center for
The Business of Government

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Foreword

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, *Beyond Citizen Engagement: Involving the Public in Co-Delivering Government Services*, by P.K. Kannan and Ai-Mei Chang.

The Obama administration's 2009 Open Government Initiative sparked innovative ways of engaging the public in government. But engagement for engagement's sake has not been an end goal. Trends in both the public and private sector, in the U.S. and around the world, have leveraged new technologies available to create meaningful dialogue and relationships between citizens and their government.

Daniel J. Chenok

As this report is being written, new agency initiatives in this arena are surfacing. For example, the National Archives and Records Administration has created the new role of "citizen archivist," enlisting individuals to help transcribe Civil War letters so they can be read on the Web. In fact, last year when the Archives released the paper-based 1940 Census records, over 150,000 volunteers joined together in electronically tagging more than 130 million records so they could be searchable on the Web. Similar efforts to engage citizens are underway in other agencies as well, as Kannan and Chang describe in this report.

The authors' interests go beyond just documenting this new phenomenon. Kannan and Chang examine how these initiatives were designed. They provide a guide to issues and practices that other public sector leaders can use to determine if programs, information, or services they provide could benefit from the use of co-delivery principles.

Maria-Paz Barrientos

We hope this report will serve as a useful inspiration and guide to public managers at all levels of government in their efforts to improve service delivery and engage citizens in their government in meaningful ways.

Daniel J. Chenok
Executive Director
IBM Center for The Business of Government
chenokd@us.ibm.com

Maria-Paz Barrientos
Partner, Social Business
IBM Public Sector
maria.barrientos@us.ibm.com

Executive Summary

Citizen participation in government is at the very foundation of democracy in the United States. This premise has been reinvigorated in recent years by the Obama administration's Open Government Initiative that resulted in dozens of federal agency initiatives to involve citizens by proactively seeking their input into policy and other decisions.

However, today there is an opportunity to go beyond traditional forms of citizen participation such as voting and testifying at public hearings. The rise and increasing pervasiveness of digital social media—Facebook, Twitter—have dissolved the many technical barriers to widespread and sustained citizen involvement in actually co-producing and co-delivering public services. Pioneering initiatives, in turn, are also thawing the cultural barriers among professional public administrators to engaging and co-designing public services with non-expert citizens.

Beginning in the early 1980s, academics began to recognize that the aspiration for citizen participation in government should go beyond only contributing to the policy formulation process. It was recognized that citizen participation could also extend to the delivery of public programs (Whitaker 1980). The recognition that the delivery of services could include citizen participation is reflected in the long history of citizen involvement as jurors and volunteer firefighters, self-management of community centers, and in neighborhood watch programs. But this newly recognized phenomenon of co-delivery was also increasingly being adopted in the private sector in many ways, including the use of ATM machines and self-service gas stations.

Beginning in the late 1990s and early 2000s, advances in technology allowed governments around the world to pioneer new approaches to more actively engage citizens in the design, production, and delivery of public services. An early trend was creating self-service opportunities so that citizens could find information or complete a service transaction online on their own. This included, for example, online availability of congressional bills or drivers' license renewals.

Government-initiated citizen participation efforts have begun to evolve beyond listening and responding to complaints *to* efforts at greater engagement, such as the use of e-petitions and citizen reporting of street-level service problems. Some federal agencies are pioneering new initiatives as well, such as the "citizen archivist" role at the National Archives and Records Administration, where citizens can help digitize the Archive's paper records, identify individuals in old photographs, and transcribe handwritten Civil War diaries.

There have been a number of traditional barriers to expanding the use of co-delivery approaches, such as:
- Government administrators' distrust of non-professional citizens
- Government administrators' fear of loss of control
- Lack of seed funding (Bovaird and Loeffler 2012)

However, a clearer understanding of different engagement strategies and their value and potential limitations can help lower some of these barriers, especially in cases where government leaders are willing to pilot the adoption of these new operating approaches.

This report highlights three different types of co-delivery initiatives that can increase citizen engagement, each offering different roles and opportunities for citizens to engage in public services: co-design, co-production, and co-delivery of public services.

Co-design initiatives. A co-design initiative allows citizens to participate in the *development* of a new policy or service. These kinds of initiatives typically are time-bound and involve citizens either individually or as a group. For example, the development of the Obama administration's Open Government policy in 2009 engaged citizens via an open electronic platform where citizens could be actively involved in the drafting of policy guidance.

Co-production initiatives. A co-production initiative involves citizens—as individuals or in groups—in *creating* a service to be used by others. These can involve either short-term or long-term participation. For example, the Youth Court of Washington, D.C. engages first-time, non-violent offenders to serve as a jury and try other offenders as a teaching tool to reduce the chances of recidivism. Similarly, the U.S. Patent and Trademark Office engages individual outside experts in the patent application examination process to speed patent issuance. In contrast, the Library of Congress engages large groups of citizens via crowdsourcing to classify and categorize content and facilitate appropriate information retrieval for all users.

Co-delivery initiatives. The co-delivery approach involves citizens—as individuals or in groups—in *delivering* a service to others. It can be premised on either short-term, transaction-based or longer-term relationships. The United Kingdom has been a pioneer in co-delivery of health and mental health programs, including family intervention programs and community support programs.

This report provides examples of each of these three approaches to engaging citizens in the public sector, and it explores their benefits and risks. It concludes with a guide for government executives, consisting of insights on introducing and implementing co-delivery initiatives. We hope that this guide will be helpful to government executives who want to pilot one or more of the approaches presented in this report.

Introduction

Citizens across the globe are increasingly seeking to get involved in the delivery of services traditionally provided to them by governments. This increased participation is occurring at all points in the policy-to-implementation spectrum of government programs:

- Setting program objectives

- Defining outcomes

- Shaping service delivery to meet citizens' needs and wants

Citizens do not view such initiatives as one-time, feel-good events where they volunteer their support. Rather, they want to become meaningfully involved on an ongoing basis both in the co-delivery of government services and in the opportunity to shape these services and contribute to their related social value.

This desire for greater, more meaningful, sustained engagement on the part of citizens has become stronger in recent years with the expansion of various Web 2.0 technologies. These include:

- The creation of online social networks

- Ubiquitous, on-demand access to communication channels to interact with the government

- An overall increase in education levels and training opportunities for citizens

In addition, this trend is reinforced in the U.S. by demographic shifts as the millennial generation enters the adult population. Studies show that they are far more community- and service-oriented than older age cohorts (Winograd and Hais 2008). The central question this report examines is:

> How can governments meaningfully leverage the contributions of individuals who desire greater engagement in their community, on behalf of their own well-being and that of their fellow citizens, while also increasing the efficiency and effectiveness of public services?

This is a particularly timely question to ask as citizens increasingly expect to be involved in more meaningful ways in their government, while many governments at all levels are increasingly facing budget cuts and financial crisis as the economy struggles to move past the lingering effects of the Great Recession.

There is increasing evidence and realization, based on private sector experience, that such co-delivery initiatives can lead to improved outcomes. In the case of health services, crime prevention, and social programs, it can be argued that the intended benefits of such initiatives can never be fully achieved without citizen involvement. The value citizens can bring to

designing and implementing processes can be significant and is often not measured or recognized by service providers. Additionally, the outcome is not just seen in economic terms but also in social dimensions. Input of citizen resources through co-created processes can often have a leveraging impact on the resources that government agencies put in, leading to improved social and economic value for money invested in such initiatives.

Over the past two decades, governments have been using technology to allow self-service as an option. Government is now recognizing the potential value of increasing use of co-delivery initiatives such as:

- Designing educational policies and schools for cities and regions, such as charter schools

- Improving local neighborhoods through the use of online networks to create community awareness or neighborhood watch programs

Some of these efforts have been pilots and experiments, but there are clear indications that the increased use of co-delivery is taking root in both public and private sectors in the U.S. and around the world.

This report seeks to contribute to a more nuanced understanding of different dimensions for citizen engagement in government services—from co-design to co-production to co-delivery activities—and its suitability for various governmental activities. The report also describes how such initiatives can strengthen the bond between citizens and governments and how such efforts can increase citizen trust in government. It is also important to understand the perceptions that citizens have regarding their involvement in co-delivery initiatives, and how to take these insights into account when designing joint initiatives. Such an understanding can help leverage the emerging social trends among citizens to increase civic engagement and to make government more relevant to addressing societal challenges.

Organizations in both private and public sectors face challenges in how they can effectively harness the potential of citizen/customer engagement in services in a constantly evolving environment. This evolution is not just limited to the technology dimension, where the changes are very fast-paced indeed, but also takes place in the organizational and social dimensions.

There is a clear trend in both private firms and public institutions toward increased engagement of customers and citizens. This trend includes the use of intermediaries. The design of services, the model for allocation of resources, and measurement and accountability models have to be transformed. Collectively, these represent a challenge for government agencies to take on.

Background

The world is more interconnected than ever before, with geographic and social boundaries rapidly disappearing. These changes have been fueled by rapid advancement in information and communication technology, opening up new possibilities and opportunities for active participation in web communities and social networks while increasing the awareness of issues facing societies and providing a channel for action to change societies and political landscape. Citizens want greater transparency and involvement in governance and service provision by public agencies.

Technology Trends Create New Opportunities

The trend in the 1990s and early 2000s in both public and private sectors to provide self-service options took advantage of advancements in technology. This trend helped fuel the desire of citizens (and customers, in the private sector) to be more involved in the design and delivery of services. Private sector companies were often pioneers in developing such initiatives, such as the LEGO Factory's innovative platform. LEGO Factory is a place where children design new models using a digital designer and compete against each other online. LEGO advances co-design in a variety of ways. First, LEGO invites design experts to collaborate with the customers in the design process. This helps the experts get fresh ideas from customers, while maintaining the design principles. Second, LEGO has various blogs, such as Nxtbot and bNXT, on which users post suggestions and advice, thus enabling each others' design efforts. Lastly, LEGO allows customers to compete for the best design. This helps customers to design the finest products. Thus, LEGO and its customers work together to innovate and create the best customer-centric products.

In parallel with the private sector, the public sector also began pioneering its use of co-delivery. Greater connectivity, greater awareness of economic disparity, and changing social demographics led citizens to increase social capital in their communities. This was reflected in their increased involvement in altruistic causes with a non-profit motive. Social value creation has increased in popularity across society and citizens have been exploring creative ways to contribute in both the public and private sectors. Another private-sector pioneer is Intuit's TurboTax, which created an online forum where tax customers contribute effort for the common good and directly help other community members. The TurboTax live community is a customer-support community for its financial and tax return products. In this community, the more experienced customers create value by giving advice and support to those who need help. Those members who have contributed significantly to the community get recognized by displaying the number of questions they have answered and the number of thanks they have received from other members. McKinsey Consulting estimates that when customer communities handle an issue, the per-contact cost can be as low as 10 percent of the cost of resolving the issue through traditional call centers, a substantial saving for Intuit in the cost of serving customers.

As these examples show, citizens—and customers—become more frequently involved and treated as active partners in initiatives focused on helping specific communities and citizen groups—especially in initiatives that affect their families, communities, and society. The conventional wisdom among citizen groups is that government agencies typically underestimate their willingness to help others. When they see other non-profit, non-government agencies taking an active role in contributing social value that benefits communities, citizen groups perceive that government could also engage citizens more actively.

Governments are responding, largely because the global public sector is under increasing budget pressures and governments are now looking for alternative ways to meet societal needs. Designing solutions that leverage citizens' desire for control over how service decisions are made (e.g., self-service) and how resources are allocated can lead to citizen empowerment. This could, in turn, lead to their contributing more of their own resources across many dimensions—expertise, effort, money, time, and motivation.

The processes and technologies for co-delivery are functions of the service-outcome time frame and the nature of the services themselves. The service co-delivery processes that are transaction-based in nature with immediate service outcomes (e.g., the EZPass system, where toll road users self-serve the payment of their tolls via electronic passes) are mainly technology-driven. Innovations in digital and network technologies are likely to provide many opportunities for co-delivery initiatives such as the Library of Congress example or the mash-up of traffic data offered by the British Columbia Transportation Department.

What Is Co-Delivery of Public Services?

Since the trend began about two decades ago, academics and others have been trying to define the terms associated with it. For example, co-delivery is "the provision of services through regular, long-term relationships between professionalized service providers (in any sector) and service users or other members of the community, where all parties make substantial resource contributions" (Boviard and Loefffler 2012).

But there are other related terms—co-design, co-production, co-creation, etc. In this report, the term co-delivery will be used as the umbrella concept. We see use of the term "self-service" as a related, but different, concept. Making self-service an option has been the strategy of many governments in recent years via their e-government initiatives, but does not involve dynamic interactions between individuals and government service providers (see *Self-Service Delivery Initiatives* on page 12).

The broadest application of the co-delivery model therefore includes citizens helping the community overall, but also helping individual members of the community specifically and directly, which could be beyond the power of mechanisms traditionally used by government to provide services in a community. The authors define co-delivery as:

> an active, creative, and social process, based on collaboration between governments and citizens and/or between citizens and citizens that is facilitated by the government to generate value for citizens through innovative services.

This definition captures the sentiment of Prahalad and Ramaswamy (2000, 2004) and the latest thinking about co-delivery in private-sector, for-profit businesses (e.g., Promisecorp.com). The definition characterizes the process of co-delivery as being:

- Active (in contrast to passive)

- Creative in terms of the design input that is generated from citizens

Self-Service Delivery Initiatives

Self-service initiatives are an early form of co-delivery of services. They evolved as an outgrowth of technology advances in the 1990s and early 2000s. They were a good first step in overcoming inherent concerns that professional government managers had about greater citizen engagement. Most self-service initiatives, such as self-service kiosks and web-based services, have become mainstream in government settings, largely because of their success in the private sector; these include self-service gas and self-checkouts at grocery stores.

The self-service option becomes a separate channel through which citizens interact with government agencies. The success of such initiatives depends on the level of citizen adoption of the channel, and an understanding of the cost/benefits of maintaining this channel in addition to traditional channels.

Costs to Citizens

To determine whether or not citizens will adopt a self-service channel, it is important to understand the costs citizens need to bear in interacting through the channel. These include:

- **Search costs***: These are the time, effort, and convenience factors in interacting with an agency through a self-service channel. To the extent that these costs are lower than the ones in traditional channels (face-to-face), there is a higher incentive for citizens to adopt this channel.

- **Risk costs**: These costs include economic risk, quality, or performance risk and privacy and personal risk. If the quality of service through the self-service channel is not up to par, or it costs more money for citizens to interact through this channel, or if there are significant privacy risks, then citizens are less likely to adopt the self-service channel.

- **Channel access costs**: Citizens need to have appropriate skill levels to interact through the self-service channel. While many of the required skills depend on the design of the self-service process, some citizen groups with lower education levels may not prefer to use, for example, the web-channel as their costs of learning and accessing the channel may be high.

The above costs vary depending on the individual citizens involved. It is the net cost of search, risk, and channel access that will determine whether a citizen will adopt a self-service or traditional channel. Citizens compare the costs of obtaining their service through the traditional channel and self-service channel and make their adoption decision. Understanding these costs helps a government agency to segment its citizen base and determine the percentage of citizens that are more and less likely to adopt the channel.

Costs to Government

An agency considering a self-service channel should take the following factors into account.

- **The costs of service provision through the self-service channel:** The general premise here is that the use of technology in these channels reduces the costs of service provision, either by reducing the level of staff needed to provide service in person, or by using citizen effort in getting much of the service provision, or both. Sometimes these costs may actually be higher on a per-transaction basis, especially if the number of citizens adopting the channel is low. If there is a significant benefit to citizens with increased service satisfaction, it might be well worth the investment.

- **Marketing the self-service channel:** It is important to market the channel to counteract possible citizen inertia in adopting the channel. If the benefits are made clear, then the percentage adopting the channel can be increased. Agencies should also set targets to increase participation in the channel and provide education to citizens to encourage adoption of a self-service channel.

Examples of the Self-Service Initiatives in Action

- **United States Small Business Administration (SBA).** The SBA's website, www.business.gov, features online tools and resources to engage and facilitate conversation between the small business community and all levels of government. According to the White House Open Government Initiative, "The small business community benefits from expanded access to other small business owners and experts who can help answer their questions. The community facilitates and expedites the exchange of information between a business owner and a wide range of resources including other small business owners, intermediaries representing small business, and federal, state, and local government employees.

Additionally, the government gains very valuable input from the customers it serves so that resources and policy can best help the small business community thrive and grow" (http://www.whitehouse.gov/open/innovations/Business).

- **United States Postal Service kiosks and mailboxes.** Kiosks in U.S. post offices enable citizens to purchase stamps and postage when the service capacity is limited in branches. Similarly, a neighborhood mailbox cluster, where mail is delivered centrally instead of to each home, is becoming increasingly common in new housing developments. In this instance, mail recipients must help deliver their own mail.

- Social in terms of citizen-to-citizen interactions

- Initiated by the government rather than by the citizens (which differentiates it from pure volunteer work)

Understanding Key Design Elements of Co-Delivery

Within any co-delivery initiative, there are a series of decision points concerning the design and characteristics of the initiative that designers should take into account for the initiative to be successful. These include:

- **At what point does engagement occur?** Citizens can become engaged at different points in the policy cycle in any initiative. These points can include:

  – Program or policy design stage

  – Policy or service production stage

  – Final service or information delivery stage

  – Evaluation stage

- **What is the nature of the engagement?** Two types of interactions can occur in a co-delivery initiative. One type is transaction-based: a citizen will interact to complete a specific task or contribute a specific idea. These tend to be short-term in nature. For example, providing advice on the design of a new policy via an e-rulemaking website is a one-time transaction.

  Another type of interaction is relationship-based: where there is an ongoing interaction between individual citizens or groups of citizens and a government program. For example, participation in a chronic disease mitigation program or becoming a registered expert for patent application reviews are types of co-delivery engagement.

- **How will participants interact with government?** Another key design issue is whether the initiative is intended to be an interaction between a government program and an individual, or an interaction between multiple individuals and the government program. As discussed in the following section of this report, the United Kingdom's Keyring program helps communities of the mentally disabled maintain independence, and in the TimeBank system, residents at a housing project in Cardiff can earn credits that can be converted to services by participating in community projects.

Determining such design issues in advance will help frame the boundaries of the initiative and hopefully contribute to a better designed and more successful initiative.

Do Citizens Want to Be Engaged in Co-Delivery of Government Services?

Citizen willingness to actively engage in co-delivering government services is a key issue in the success of such efforts, and is often raised by government leaders as a barrier to attempting co-delivery in the first place. However, recent surveys and focus groups in Europe show growing citizen interest in greater involvement in the development and delivery of selected government services.

Surveys conducted in European Union countries in the past four years focus on community involvement in neighborhood, environment, and health care programs. Surveys include respondents from Denmark, the United Kingdom, France, the Czech Republic, and Germany (Holmes 2011; Horne and Shirley 2009). Some highlights:

- When respondents are asked how much they believe that they could make a difference in improving safety, the local environment, and health, the index of agreement (maximum 100) ranges from 64 to 79 percent across the countries surveyed. In the same survey, the number who often get involved in public service ranges from 48 to 56 percent. Overall, while two-thirds to three-quarters of citizens believe that their contribution can make a difference to public outcomes, the percentages that actually get involved are somewhat lower.

- When public services involve health, neighborhood, and environment, a large proportion of citizens are willing to spend their own time and effort. In self-care medical and educational programs, a majority of patients and parents want to be treated as equal partners with professionals and want to do more by themselves.

- In general, citizens want to be empowered in the co-production/co-delivery initiatives. They tend to value choice, control, and involvement in the processes. But citizens are also very discriminating about their service engagement experiences. They want public services to be different from normal retail/supermarket experiences.

- In the context of policies adopted by governmental agencies, citizens involved in co-creating (designing) the policies show a high level of support for the policies, even if they do not personally agree with some elements of the policy. They also indicate high levels of satisfaction with the co-delivery process and their levels of involvement.

In addition, focus groups with American citizens from different age categories were conducted by the authors (Kannan and Chang) over a three-year period focusing on all aspects of citizen perceptions of and involvement in government services, their use of Web 2.0+ and social media tools, and their understanding of co-production and co-delivery processes and technologies. In the context of citizen engagement, focus group participants were provided concrete examples of self-service, co-production, and co-delivery initiatives covering both transaction-based service processes and relationship-based processes. The focus groups reinforced the findings of the surveys, described above. Highlights include:

- **Attitudes towards citizen engagement initiatives are very positive**: Overall, citizen groups are very positive in their attitudes toward engagement initiatives. Co-production and co-delivery initiatives are seen as a logical outgrowth of technology developments and self-service initiatives in the area of transaction-based government services.

- **Citizens' willingness to contribute resources to government service processes is generally high:** Citizens' willingness to contribute varies with the application areas. In general, citizens' willingness to contribute is high in areas involving local government and their immediate environment—neighborhood, environment, recycling, cleanup of public spaces, safety in neighborhoods, etc.

- **The design strategy of an initiative is key to adoption:** Participants stress that the design of the initiative is key to its ultimate success. "Does it make me want to participate and contribute?" "Is there a feel-good factor?" "Am I making a difference—how do I know that?" "It has to be more than a cost-cutting exercise." There is general agreement that citizens need to see that their involvement is making a difference.

- **Need for training:** Many respondents question the implicit assumption that all citizens have the necessary expertise to contribute effectively in government service processes. This is especially true in the case of transaction services. In such cases, the need for training citizen in the process of co-creating is highlighted. ("Our school has very useful guidelines for parent volunteers; I would expect something like that if I were to co-create some service.")

Understanding the Three Types of Co-Delivered Public Services

Governments are rethinking the traditional provider-centric operating model to incorporate more citizen involvement. Under this new approach government's role becomes more that of an enabler or platform for citizen action instead of the sole provider of services.

The Co-Design of Public Services

Co-design initiatives provide opportunities for citizens to participate in the *development* of a new policy or service. These kinds of initiatives typically are time-bounded and involve individual citizens or groups. For example, the development of the Obama administration's Open Government policy in 2009 engaged citizens via an open electronic platform where citizens could suggest policy options and other citizens could join in or revise them online.

Examples of co-design initiatives. Following are two examples of government-sponsored co-design initiatives in other countries:

- **Consulting Canadians.** The Canadian government provides a single-point access online for its citizens to provide their input on any matter of government policy or actions contemplated by any government agency or department. These consultations, as they are called, are listed by each agency or department at the www.consultingcanadians.gc.ca website indicating the dates of consultation—when citizens can provide their input—and the progress on each consultation. The consultations are updated on a regular basis by each agency and department and provide easy access to citizens to provide their design input on any action listed at the website.

- **New South Wales Education Department.** Australia undertook a strategic planning exercise in 2007 for the design of its education services for the Tamworth region. This exemplifies a co-delivery exercise with significant input from the stakeholders, such as teachers, students and parents, and local government planners (Holmes, 2011). The interaction among stakeholders was facilitated by a third-party independent agent, who ensured the inclusiveness and deliberation of all stakeholders in the process. The process itself involved multiple sessions with students, parents and teachers; workshops; deliberation forums with citizens acting as jury; briefings with interest groups and the education department. The output of the engagement was communicated through local media of all types. The process resulted in 58 recommendations being made to the education department, with consensus on a significant number of them, and the process ensured that the local community had an active and significant input in the design of the education initiative intended to have an impact for years to come.

The Co-Production of Public Services

A co-production initiative involves citizens—as individuals or in groups—in *creating* a service to be used by others. For example, the Youth Court of Washington D.C. engages first-time,

non-violent offenders to serve as a jury and try other offenders as a teaching tool to reduce the chances of recidivism. Similarly, the U.S. Patent and Trademark Office engages individual outside experts in the patent application examination process in order to speed patent issuance. In contrast, the Library of Congress engages large groups of citizens via crowdsourcing to classify and categorize content to facilitate appropriate retrieval of information for all users.

A co-production initiative is often seen in a social, educational, or health care services context that involves a longer-term interaction of an agency with an individual (also called a relationship-based service), where the production of a service requires the active input of effort and resources from both a government agency and individual citizens to enhance efficiency and chances of a positive service outcome.

Examples include rehabilitating youth offenders, managing the quality of life of mental patients, or using educational services where learning occurs through active efforts by individual users. Co-production initiatives may also involve participation of third-party service providers and volunteers. Such initiatives depend on the effort or active participation by the affected individuals if a positive service outcome is to occur.

The successful outcome in such programs often focuses on the integration of different professional disciplines, such as social services, crime prevention, medicine, addiction treatment, and education. It also depends on the extent to which citizens contribute their resources and efforts to solve the problems. These resources are not just time, skill, knowledge, or effort on the part of the citizens; more important are their motivations, social relationships with their family, and the family's willingness to voluntarily play a critical role in achieving the outcome. These resources cannot be substituted by other resources and cannot be made up by more money and time by the government agencies. Government can bring in resources such as money, expertise, case workers and professional service providers, plans, and expectations, but unless citizens contribute significantly, successful outcomes cannot occur. This means the risks of service outcome should be shared between government agencies and the participants in the program (Horne and Shirley 2009).

A successful outcome in such situations hinges not only on the contribution of resources from both parties—government agencies and participants—and sharing of risks, but also sharing of control over how the resources are used. Government needs to cede some control of its employees and participants so that customization in service provision is achieved. The relationship-based aspects of service provision become significant because the participants need to trust the government agencies and professional workers focusing on better outcomes to these problems. A paradigm shift in service provision—based on mutual trust and participants having more control and using their own non-substitutable resources—is necessary for successful outcomes.

Co-production in the context of social programs reduces the demand for curative services and instead puts the focus on preventive services. It leads to better long-term outcomes to "chronic, contested, and complex issues" by growing social networks to support resilience (Horne and Shirley 2009). In certain situations, such as social service and health programs, co-production can lead to increased quality of life by encouraging self-help, self-control, and behavior change. Extant studies have shown that when participants have more control, it leads to better outcomes in the context of social programs. Co-production is also seen as essential to building sustainable public services and necessary to "guarantee the long-term viability of essential public services" especially given the scarce resource situation facing all governmental agencies (Horne and Shirley 2009). It leads to sustainable services and increased return on government investment.

Examples of co-production initiatives. Following are several examples of co-production initiatives. Some are short-term and transaction-based in their design, while others are longer-term and relationship-based in their design:

- **The British Columbia Ministry of Transportation**. In Canada, this program combines MapQuest data with real-time traffic data to create a mash-up of current driving conditions and advice to drivers and commuters. Such information allows citizens to avoid congested routes while regulating the traffic load on main arteries. Drivers can call in or enter information they come across as they drive, which gets updated in the map. This is an example of drivers helping each other through network technology with the technology component managed by an intermediary (Deloitte 2008).

- **SeeClickFix.** This interactive website allows citizens to report non-emergency issues that they come across in their communities—potholes, graffiti, broken street lights, etc. (Barkat, Jaeggli and Dorsaz 2011). Users can track local government responses to their reports. This service is free for citizens to use, and 50 U.S. cities are using back-end tools and apps to enable fixing the reported issues. (www.seeclickfix.com).

- **The Library of Congress.** The Library is using co-delivery to classify and categorize content, aiding appropriate retrieval of information for all users. The Library is now implementing several pilot projects that allow users of its information to tag the content and provide metadata information using "social bookmarking." The pilots have three specific goals:

  – Provide the Library's public domain content in user community environments

  – Encourage users to co-produce by generating tags for the content they read, which helps other users as well as the Library

  – Create folksonomy to supplement expert-generated taxonomy

  The agency plans to place citizen-generated content on its website for other users to take advantage of after verification procedures to ensure the integrity of the content (Novak and Springer, 2007).

- **The U.S. Patent and Trademark Office (USPTO).** USPTO has embarked on a co-production initiative by enlisting outside experts in reviewing patent applications and allowing the public to examine the patent applications and provide input of prior examples. This initiative—Peer-to-Patent: Community Patent Review Pilot—launched in 2007 allows the USPTO to reduce its backlog of reviews through community involvement in the patent examination process, and is an excellent example of how co-production through community networks can help government agencies be more efficient and effective (Deloitte 2008).

- **The Youth Court of Washington.** In the District of Columbia, the Youth Court has put co-production into action by designating first-time, non-violent offenders between the ages of 12 and 17 to serve as juries in the Youth Court; they then try other, subsequent offenders (Rosenberg 2011).

  The program keeps the first-time offenders out of the formal juvenile justice system and puts them to work, making the co-delivery (of justice) experience into something positive and helping them to get back on the right track. The co-production experience lowers the probability of recidivism, helps the offenders to negotiate and communicate better, and makes them more responsible for their actions. The Youth Court system has been fairly successful. A recent survey showed that 77 percent of the youth graduated from high school and 43 percent of those went on to study in colleges, and the recidivism of 11 percent is much lower than the rate in the formal juvenile system (Rosenberg 2011).

The Co-Delivery of Public Services

A co-delivery service setting can be either transaction-based or relationship-based, where citizens individually or jointly engage in *delivering* innovative services for themselves as well as other citizens. The focus of co-delivery initiatives is on active, joint citizen involvement in the delivery of services (or outcomes) for both self and others.

Co-delivery initiatives are the ultimate manifestation of citizen engagement in government services. These initiatives span a broad spectrum ranging from transaction-based service processes to relationship-based processes and from shorter-term to longer-term. Citizens provide design ideas and work to fulfill service delivery that not only benefits themselves but also other citizens. Technological innovations and the role of third-party intermediaries have both been important catalysts for co-delivery initiatives.

Examples of co-delivery initiatives. Following are examples of both transaction-based and relationship-based services in several governments around the world:

- **TimeBank System (United Kingdom).** In Cardiff, UK, Taff Housing is one of the disadvantaged housing estates where tenants earn "time credits" by "volunteering time to help deliver services of the housing association" (Boyle and Harris 2009). These time credits can be used as cash to purchase leisure services and arts admission in nearby organizations. The TimeBank system is a powerful method to create networks of volunteers to help communities in need and has been practiced extensively in the UK to deliver volunteer services (see www.timebanks.org).

- **Family Intervention Projects (United Kingdom).** Family intervention projects (FIPs) are intensive, whole-family approaches to reducing antisocial behavior. They provide an outreach service, accommodation in the community, and 24-hour monitored residential accommodation for chaotic families. At the heart of the project is a relationship between the whole family and a key worker—backed up by a contract with sanctions. There are currently 53 FIPs in the UK that have helped around 500 families. Evidence indicates that 85% of existing participants had reduced or ceased their antisocial behavior; the risk of homelessness and family breakdown has also been reduced.

- **Expert Patient Program (United Kingdom).** This co-production initiative provides peer support that enables patients to contribute their expertise to one another. The aim of the program is to help patients with chronic or long-term health conditions to build their self-confidence through a series of six-week courses. The topics range from healthy eating to dealing with pain and feelings of depression to self-help techniques. The courses are delivered by trained tutors who have the same conditions as the patients. The aim of the program is to help patients take more responsibility for managing their health and cooperate with healthcare professionals, leading to positive, manageable outcomes; the program covers about 17.5 million patients with long-term health conditions including arthritis, asthma, diabetes, and multiple sclerosis (Horne and Shirley 2009).

- **Keyring (United Kingdom).** Keyring helps citizens with mental and physical disabilities to share their skills and talents for the benefit of everyone in the community. The focus is on ensuring that the community members have the right to live independently and enabling them to make choices about how and where they live their lives. The community members are organized into networks with each network consisting of a volunteer who lives in the community, knows the members, sees them regularly and in case of emergencies, and helps them to make useful links with other members in the community. The members work on varied projects that range from helping people in emergency situations and saving lives to running campaigns for streetlights and neighborhood improvements. The member networks also feature community support workers and supported living managers, funded by Keyring.

- **The Harlem Children's Zone (United States).** This program in New York City is an excellent example of a sustained co-delivery effort in a social application arena focusing on well-being and development of children. The two guiding principles of the program are:

  – "To help children in a sustained way, starting as early in their lives as possible,

  – To create a critical mass of adults around them who understand what it takes to help children succeed" (http://www.hcz.org/about-us/the-hcz-project).

The co-delivery effort involves professionals, volunteers, and public servants working to positively impact the health and educational outcomes in Harlem. "Harlem Children's Zone Project" is a unique, holistic approach to rebuilding a community so that its children can stay on track through college and go on to the job market.

The goal of the program is to create a 'tipping point' in the neighborhood so that children are surrounded by an enriching environment of college-oriented peers and supportive adults, a counterweight to 'the street' and a toxic popular culture that glorifies misogyny and antisocial behavior." The program supports parents' classes, prenatal care, schools, and university preparation classes. The impact of the program has been very positive and hailed as a miracle in a *New York Times* article (Brooks, 2009).

A Guide for Introducing and Implementing a Co-Delivery Initiative

Following is a guide to the questions and issues that can help government executives determine whether establishing a co-delivery initiative is an appropriate approach for improving their mission results. These same questions are also appropriate for assessing the use of self-service.

When Is Co-Delivery an Appropriate Approach?

Co-delivery is not right for every program or service. Given that government services vary across different agencies with different stakeholders and different objectives, a careful assessment needs to be done to understand the risks and value propositions of different levels of service engagement. For some agencies, self-service could be the only and the highest level of citizen engagement possible. In some service situations, it is not appropriate to give citizens the control that co-production and co-delivery processes may demand. A careful cost/benefit/risk analysis would reveal what level of engagement is appropriate for a given service environment.

- **Define the acceptable level of risk for a co-delivery initiative.** This is a key decision that needs to be made at the design stage. Programs such as Youth Court may be deemed too risky; yet without taking such risks, successful outcomes are not achievable. It is necessary to tackle the fear of reasonable risk at the design stage of the co-delivery process. Undertaking pilots on smaller scale may be a viable way to reduce such risks.

- **Effective co-delivery initiatives focus on outcomes.** These concepts view citizens as partners, assets and resources who can provide significant input to service provision. The value that is created in service initiatives is accomplished through leveraging citizen networks, through citizen reciprocal relationships, and is based on the *outcome* for citizens.

- **Start any initiative with the right motivation**. Co-delivery initiatives are all about successful service outcome that benefits the citizens, leading to significant improvement in outcomes through innovative, creative sparks. The primary motivation for a government agency should be improvement in service outcome, and not cost-cutting. If the service outcome is successful, it also will ensure that the process has been an efficient one, with reduced costs and government input and increased return on investment (ROI) manifesting themselves as by-products. A singular emphasis on cost-cutting is likely to lead to failure.

- **Co-delivery has service innovation at its heart.** While this is possible in the service design stage, ceding control to the users of service to innovate the process is essential. When citizens are involved in designing and delivering services for themselves and for others in their community, local innovations can flourish. Thus, the service design and the service professionals have to be flexible enough to let such innovations emerge.

- **Understand in advance citizens' ability and willingness to contribute their efforts in a particular initiative.** The literature suggests that citizens' willingness to contribute varies, depending on the policy or geographic areas involved (Boviard and Loeffler 2012). We

have observed that it is especially high in areas involving local governments and the local ecological environment. The motivating factors are mainly volunteering, a sense of making a difference in the community, and being treated as partners by the professionals and staff. Environmental and economic sustainability initiatives score high on the participation index. In general, citizens want more control on services that affect them and their family directly and are willing to contribute in those domains.

- **Targeting the appropriate citizens for these service initiatives is important.** Engagement in the co-delivery of government services will require effort and time from citizens. In the context of transaction-based co-delivery processes, some citizens may not have the time to use the co-created service channel, but rather may want to use full service. (This is similar to self-service versus full service in a grocery checkout). The issue is how to deal with the heterogeneity in needs over time. This calls for design of multiple channels of service provision that might increase overall costs and reduce the benefits of co-delivery initiatives.

Citizens who have the right skill set and motivation to participate in the initiative over a longer term are critical to the success of the initiative. It is important to keep citizens engaged, providing feedback to them to encourage their continued participation and commitment. Targeting and interacting with the right segment for such a service initiative are essential for its continued success.

How Do You Manage Risk in a Co-Delivery Initiative?

The examples in the preceding section demonstrate the breadth of co-delivery initiatives that are possible within the public sector settings. They cover diverse program and policy areas— service for businesses, social service, health service, crime prevention, information service— focusing on individual citizens and small and large businesses. The nature of service processes also varies from being purely transaction-based (e.g., Small Business Administration's Business.gov, USPS kiosks, web portals)—where citizens engage in service that has a short-term and immediate outcome—to relationship-based (e.g., Keyring's community for disabled members or the Harlem Children's Zone) where the service outcome and value are long-term. The other examples fall somewhere within the spectrum.

The co-delivery opportunities that are relationship-based in nature (Keyring, Harlem Children's Zone) tend to have higher risks in terms of successful service outcomes. Since relationship-based processes involve significant input from stakeholders other than the government entity, they are also characterized by relatively lower control by the government entity. As a result, this could lead to higher risks for negative outcomes.

The relationship-based co-production and co-delivery opportunities also tend to be longer term, which affords time for appropriate evaluation of the process and tends to mitigate risks. Nevertheless, as compared to transaction-based self-service processes, relationship-based processes always involve higher risks. On other hand, the value associated with service outcomes under relationship-based co-delivery initiatives is much higher as compared with transaction-based co-delivery processes. Thus, relationship-based co-delivery opportunities represent a trade-off between value and risks. If the risks are judged to outweigh the value derived, then such initiatives should not be undertaken. Transaction-based co-delivery initiatives and self-service initiatives, on the other hand, are characterized as having lower risks because they are largely under the control of government entities and involve shorter-term interactions.

The trade-off between the value of a particular service outcome and the risks associated with that outcome should be considered. It can be argued that in many applications that require a relationship-based approach, value cannot be realized without taking the necessary risks. For

example, initiatives such as Youth Court of Washington are fraught with risks of the system becoming farcical with minimal positive outcome. Similarly, the Harlem Children's Zone initiative has high risks of failure with a potential waste of resources. But in both cases, the value of a positive outcome can be highly significant. Such benefits cannot be derived without taking the risks. It can also be argued that such values cannot be derived otherwise—that is, without a co-delivery approach. While such claims may be arguable, it is clear that values and risks in such initiatives come with the territory.

What Are Some of the Key Design Questions That Need to be Addressed?

Following are some issues government leaders should address in advance of committing to a co-delivery initiative:

- **Distinguish between models for transaction-based versus relationship-based processes.** The orientation of co-delivery service processes ranges from transaction-based to relationship-based. The time frame for service outcome varies accordingly: immediate for transaction-based service processes, long-term for relationship-based processes. The nature of risks with the outcome also varies from being low for transaction-based services to high for relationship-based processes. The decision to embark on a relationship-based co-delivery process involves balancing the trade-off between value and risks. In some instances, co-production may be the only strategy that could lead to positive outcomes.

- **Set clear boundaries between the roles of citizens and government.** There is a need for setting clear boundaries between the tasks that citizens do and staff do so that work proceeds in a coordinated way. However, allow for flexibility in design and implementation—especially in relationship-based co-delivery processes—and focus more on the right outcome than the right process.

    Government has a duty to delineate the separation between the tasks performed by employees and professionals and tasks performed by citizens. An ill-structured design of tasks could risk participants stepping on each other's toes, leading to conflicts and dissatisfaction with the process. A too-rigid separation, on the other hand, could stifle the innovations that could potentially arise in co-delivery processes. Agencies need to monitor the process carefully and continuously to learn what works and what does not, and refine the design over time.

- **Technology can be a critical ingredient.** Technological innovations have a powerful impact on citizen co-delivery. Even if citizens are motivated only for themselves in providing input, creative design of co-produced and co-delivered service processes based on technology can leverage that input to benefit the whole community. Technology plays a critical leveraging role in the service process.

- **Co-delivery initiatives are based on the equality of participants in creating value.** Thus the co-delivery of the service has to "foster equal partnership between providers and users of service, afford equal value of different kinds of knowledge and skills, and acknowledge that everyone has something to contribute" (Boyle and Harris 2009). As we pointed out earlier, this means a paradigm shift as far as design is concerned, completely changing the expectations and approach of both service professionals and users.

What Are Some of the Key Implementation Steps?

If the design issues above are addressed satisfactorily, then government leaders should incorporate the following ingredients into their implementation:

- **Engage participants in the development process.** It is important to understand the motivation of the participants and leverage it in designing the initiative. Targeting participants who have the appropriate skills, motivation levels, and time is very critical at the design stage. Design should leverage technology significantly for transaction-based co-delivery process. Allocating the right amount of resources for testing and support is important for a successful launch.

- **Foster citizens' civic engagement and trust**. The process of involving citizens in policy enactment and design of public services can provide impetus for raising the level of civic engagement of the whole community, especially in local government applications. Co-delivery can increase government transparency, help citizens understand the inner workings of government service provision, and help them appreciate the design and constraints of delivering the service. Giving control to citizens in co-delivery processes can also increase the trust in government.

- **Share your results transparently.** It is important to understand that government agencies need to "co-create" successful citizen engagement processes. So, contribute to case repositories and disseminate information about your initiative by sharing it with other agencies, regardless of the outcome! It is only through a meta-analysis of these initiatives that success can be achieved on a consistent basis.

- **Getting the incentives right for citizens to participate in a co-delivery initiative is important.** It is essential to understand the citizen groups targeted from their motivational viewpoint. Is it their own benefits they value most, or is it their reputation in the community or their altruistic goals? Since motivations can be different, the designs can be made flexible enough to let citizens with different motivation co-create and thrive. This certainly calls for creativity and experimentation in the design process.

- **Invest in education and training of both government and citizen participants.** Co-delivery and co-production initiatives require education and training of both sets of participants—citizens as well as employees and professionals—to set expectations, guidelines, and rules of engagement. While emphasis is generally always put on citizens, preparing the staff for service is absolutely essential for its success. The design of the initiative should include this component. In addition, in order to ensure that the momentum of these initiatives is sustained beyond their initial novelty period, periodic feedback to participants and staff is necessary to keep participants motivated. Creative ideas from participants and staff are to be appropriately channeled for consideration and implementation.

- **Transparency of service operations is touted as an advantage of citizen engagement.** However, from the agency viewpoint, being completely transparent may not be the best strategy. Depending on the application areas, appropriate levels of transparency should be designed in. This calls for a careful review of tasks involved in the process especially in the context of transaction-based services.

- **Co-delivery and co-production initiatives need to be marketed to the citizens in the right way to set the intended expectations and rules of engagement**. Nothing succeeds like success for marketing such initiatives and thus a small successful pilot should always be the first step.

How Do You Know If It's Working?

When it comes to assessing the success of co-production or co-delivery initiatives, there is clear demarcation between transaction-based oriented service processes (including self-service) and relationship-based oriented service co-delivery/co-production processes. In the former case, there is a generally clear and more tangible service outcome that is immediate as compared to relationship-based service processes. The nature of service outcome also tends to be more

standard and measurable using standard service quality metrics (Zeithaml, Parasuraman and Berry 1990). However, in the case of relationship-based service processes, the service outcome is much more diffused over time, less tangible, and very customized and "contested." This makes the measurement of outcome all the more difficult. The following address ways to measure success in the cases of co-production and co-delivery initiatives:

- **Use a systems approach when measuring progress.** Take a systems-orientation in measuring the progress and success of any co-production and co-delivery initiative. Remember it is very likely that costs accrue in one agency while the benefits are reaped by another agency. Take these interdependencies into account in measuring the ROI of the program and the success of the outcome.

- **Create best practices knowledge management systems for co-production initiatives.** Knowledge management systems that record specifics of each co-delivery/co-production initiative across government agencies—design, implementation, experience, and measurement—and function as case repositories can be of significant help in providing support and advice to other entities contemplating similar initiatives. Technological developments and technology tools used to support service initiatives can be shared across agencies to foster the adoption of these models for citizen service.

- **Focus on the processes in transaction-oriented initiatives**. The transaction-based oriented processes which include self-service and some types of co-delivery activities generally need to have some emphasis on the processes, on the relative input of government agencies versus citizens in terms of all kinds of resources, and clear standards of operations. The initiatives need to have multiple targets—an overall goal with a number of intermediate targets, so that a clear message can be sent out to citizen participants on how the initiative is meeting goals and making a difference.

  Achievement of the intermediate targets needs to be communicated to the participants so that they remain motivated to engage in the initiatives. In addition to measuring the outcome quality and participant (both citizens and employee staff) input, government agency resources should be measured so that ROI of the initiative can be quantified. Participant growth and retention rates vis-à-vis other channels can be compared to highlight the efficacy of the co-delivery strategy.

- **Definition of "success" varies, depending on perspective.** There are two schools of thought on relationship-based oriented co-delivery and co-production processes. One perspective calls for less emphasis on the process per se and stresses looking outward to increase social networks to aid in successful outcomes (Horne and Shirley 2009). The reasoning here is that inward-looking measures such as meeting targets, rigid standards, and process milestones may stifle innovation and creativity that are sorely needed for successful outcomes. Since the definition of success varies from case to case, the heterogeneity may not lend itself to rigid processes and standards. Thus, the reasoning goes, a spirit of experimentation is needed to allow for out-of-box thinking that may lead to successful outcomes.

- **Ensure assessments encompass the system, not just the initiative**. A measurement issue that is common to both processes is the "tackling the accounting problem" (Boyle and Harris 2009). In many cases, service initiatives could lead to costs accruing in one department or agency while the savings and benefits accrue in another agency. For example, one of the results of family intervention programs could be to reduce unemployment and result in fewer food stamps being distributed. If the accounting of these programs is in "silo" systems that do not reconcile with each other, then benefits may be underestimated. This highlights a need for a systems approach in measuring the benefits of such citizen engagement programs.

- **Assess across initiatives, not just within an initiative.** It needs to be stressed that measurement at the individual service initiative level is only the beginning of understanding how the initiatives can be improved and made more successful. The knowledge that is created in a collective analysis of all initiatives, each with different business models, with different experiences across different geographical and service contexts, will be of significant help in improving co-delivery and co-production processes.

  Meta-analysis across a number of co-delivery initiatives spanning transaction-based and relationship-based processes will help identify common factors—participant and staff skill, contexts, and applications—that lead to successful co-delivery programs. Knowledge management systems that record specifics of each initiative—design, implementation, experience, and measurement—and function as case repositories can be of significant help in providing support and advice to others. Similarly, technological developments and technology tools used to support co-delivery can be shared across agencies to foster the adoption of these models for citizen service.

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About the Authors

P. K. Kannan is the Ralph J. Tyser Professor of Marketing Science at the Robert H. Smith School of Business at the University of Maryland, and is also the Chair of the Department of Marketing. He was the Director for the Center of Excellence in Service until December 2009. His current research stream focuses on new product/service development, design, bundling and pricing digital products and product lines, online attribution modeling, e-service, and customer relationship management (CRM) and customer loyalty. He has received several grants from the National Science Foundation (NSF), the Mellon Foundation, SAIC, and PricewaterhouseCoopers for his work in this area, and research papers have been published in *Marketing Science, Management Science, Journal of Marketing, Journal of Marketing Research,* and *Communications of the ACM*.

Dr. Kannan was the recipient of the prestigious INFORMS John D. C. Little Award for the Best Paper to be published in *Marketing Science, Management Science* for the year 2008. His research also won the INFORMS Society of Marketing Science (ISMS) Practice Prize Competition for the year 2007. His paper published in the *Journal of Marketing Research* was also the recipient of the 2009 Don Lehmann Award for the best dissertation-based article to be published in the *Journal of Marketing, Journal of Marketing Research* for the year 2008, and a finalist for the Paul Green Award 2009. Professor Kannan is the past Chair for the American Marketing Association SIG on Marketing Research. He is on the editorial boards of *Marketing Science, Journal of Marketing, Journal of Service Research, International Journal of Electronic Commerce,* and *Decision Support Systems.* He has edited or co-edited special issues for the *Journal of MIS* and *IJEC* in the areas of service science and digital content.

Dr. Kannan received his Ph.D. in Management with concentrations in Management Science and Marketing from the Krannert Graduate School of Management, Purdue University. He was previously on the faculty of the Department of MIS at the University of Arizona, Tucson for four years before joining the Smith School's Department of Marketing. His research experience and publications span the areas of Decision Science, IS, Engineering and Marketing. Further details can be obtained at http://www.rhsmith.umd.edu/marketing/faculty/kannan.aspx.

His teaching interests include CRM, new product development, Internet retailing and pricing, and marketing models/research. He has taught courses on these subjects in executive programs for Black & Decker, Home Depot, ARINC, McCormick, CSX, and Northrup Grumman. He has won the Allen Krowe Award for Teaching Excellence (2001). He has corporate experience with Tata Motors and Ingersoll-Rand and has consulted for companies such as Frito-Lay, PepsiCo, Marriott, Giant Food, Black and Decker, SAIC, Fannie Mae, and IBM.

Ai-Mei Chang is a Professor of Systems Management at the University of Maryland, University College, where she teaches graduate level courses in Information Technology Foundations, Infrastructures, and Security, eBusiness, and Project Management.

She received her Bachelor of Science degrees in Computer Science and Mathematics and her PhD in Management Information Systems from Purdue University in West Lafayette, Indiana.

Her research and teaching interests include e-government and government in a networked economy, with particular emphasis on strategies, social networking, information brokering, mobile commerce, and co-delivery; enterprise architecture, and enterprise security. She has published several articles in scholarly journals such as *Communications of the ACM*, *International Journal of Electronic Commerce, IEEE Transactions on Systems, Man, and Cybernetics, IEEE Transactions on Engineering Management, Decision Support Systems, Journal of Organizational Computing and Electronic Commerce*, *Information Systems Research*, and *Information Processing and Management*.

Dr. Chang has presented her research at conferences such as the Hawaii International Conference on System Sciences, and INFORMS. She is a member of the ACM and IEEE Computer Society. Dr. Chang is an Associate Editor for Decision Support Systems and Electronic Commerce and serves on the editorial board of The Journal of Organizational Computing and Electronic Commerce. Dr. Chang has been on several National Science Foundation review panels. She has also served on the program advisory boards of the eGov conference, Program Management Conference, Information Security Conference, and has cochaired several eGov conference tutorial sessions.

Prior to joining the University of Maryland, Dr. Chang was a Professor of Systems Management and Director, Center for eGovernment Education at the Information Resources Management College, National Defense University in Washington, D.C. Before that, Dr. Chang was an Assistant Professor of Management Information Systems at the Karl Eller School of Business, University of Arizona, Tucson.

Key Contact Information

To contact the authors:

Dr. P. K. Kannan
Ralph J. Tyser Professor of Marketing Science
Chair, Department of Marketing
The Robert H. Smith School of Business
University of Maryland, College Park
College Park, MD 20742

e-mail: pkannan@rhsmith.umd.edu

Dr. Ai-Mei Chang
6304 Landon Lane
Bethesda, MD 20817

e-mail: Chang.aimei@gmail.com

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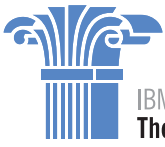
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