Civic Engagement Strategies for Financial Sustainability
BUDGET GAMES AND SIMULATION

Gaming contributes to better decision making. Translating raw data into useful information is challenging — decision makers rely on information, but access to data does not directly empower informed budget and policy decisions. All types of individuals, including expert economists, struggle to interpret and use data to develop appropriate policy recommendations.[1] If citizens lack trust in public institutions, it's even more difficult for them to place data in context and understand its relationship to a government's options and decision-making process. Budget simulation games help people understand data and translate it into sustainable decisions.

Budgeters, elected officials, and the public can all use games to practice making real budget decisions within a lower-stakes environment than the actual budget process. The games provide practice for the challenges of decision making. Participants experience the hard trade-offs inherent in budgeting and appreciate the necessity of working together to reach financially sustainable decisions. Game design principles add fun to the simulated experience, and some scholars and practitioners advocate this approach as a way to make democracy more engaging.[2] The experience of shared gaming helps build trust and more effective discussion (versus discord) among participants at town hall meetings and other civic events.

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DATA, INFORMATION, AND DECISIONS

The dictionary definition of "data" is "factual information (such as measurements or statistics) used as a basis for reasoning, discussion, or calculation." They reflect an observation — for example, a ten-year series of property tax revenues. By itself, an individual data point (i.e., tax revenue for one year) lacks significance, but when multiple data points are considered together (i.e., in a time-series graph or revenue forecast) and interpreted to show a trend, interrelated data points become meaningful information that can be used to inform decisions—assuming that the decision maker has enough expertise to interpret it properly.

Rational choice models dominate government research. These models originate in economic theory and generally assume that decision makers understand information (i.e., humans are generally viewed as rational actors who make

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logical decisions when they have complete access to information).[3] Thus, traditional economic models assume that stakeholders will effectively use ideas such as government transparency, or the government's obligation to make information available to citizens.

But behavioral psychology and behavioral economics both challenge the assumption that humans are rational consumers of data and information; these models suggest that most people won't use data even if they are accessible. In practical terms, this means that even if a government releases all data (such as budgets or databases of financial transactions), a majority of citizens will fail to access it, and the ones that do access it may not understand it.

The government has a responsibility to help constituents understand how their tax dollars are being spent and how they are being served. Therefore, the government must move beyond merely distributing budget and policy data, and actually provide information that is linked to alternate decisions that it might pursue.

Budget-simulation games can play an important role in educating decision makers and the public about the budgeting process. Decision makers can see a list of alternate decisions, practice the process, and deepen their understanding of budget and policy information. Citizens can directly experience the intricacies and conflicts of budgeting.

All budget game participants have the opportunity to learn and practice budgeting. A Deloitte research report states that a "psychological shift" occurs as "players can see how the choices they make now actually shape the future." This individual shift in perception, along with the increased knowledge of budget information and decisions, "sets up the possibility for discussion" regarding "hard choices." These games educate players while increasing their comfort with budgeting.[4]

IN-PERSON BUDGET GAMES

Governments, universities, and research groups have developed interactive games that simulate the local government budget process. These multiplayer games adapt to local circumstances and are generally low cost and played in person.

The Institute for Local Government developed the "Balance or Bust Board Game" to simulate a budget process for a typical California local government.[5] The institute provides templates for a board game, playing cards, and instructions in a downloadable format. Only a few extra items, such as dice, are needed to play. A sample game card reads: "Deteriorating field conditions may leave them unsafe. This is the cost of school field maintenance only. The city spends an additional $290,000 to maintain athletic fields in city parks."

During the game, employees work through the process of decreasing spending or increasing revenues for a given year and in relation to departmental activities. If a department requires a particular service with a specific cost, that project must be offset by another cost or a revenue source, like a grant or economic development project. The game also incorporates midyear adjustments and other aspects of the budget process. All of the proposed actions are recorded by a "city clerk" to ensure the decisions are retained and used to determine when the budget is balanced.

Other simulation games include "Budgetopolis" and "Bottom Line!" which were created by the University of North Carolina at Chapel Hill.[6] These are usually facilitated by university staff and can be played with different groups, ranging from elected officials to the public. The games helps participants understand the complexity of the budget process by working toward a long-term budget solution within the context of events that governments may face at any time, like a natural disaster or economic downturn.

"School Budget Hold'em," developed by Education Resource Strategies (ERS), explores the complexity of budgeting by allowing school districts to consider strategies that "make the most of every dollar to accelerate student learning" by letting "leaders envision their budget as a reflection of their priorities."[7] This three-hour game requires identified district priorities, and it can be played online or in person with predesigned cards. The players must include a facilitator,

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staff from departments, and external stakeholders, such as the public. The instruction card states that the game's goal is to "have each team create their best 'hand' using the available cards and keeping in mind the group's priorities and budget target."

This ERS game challenges players to consider the tradeoffs among instructional priorities and groups within a school. Participants select realistic scenario cards that require them to make decisions such as increasing efficiency by closing or consolidating under-enrolled school districts, raising student fees, reducing teacher and staff salaries with targeted cutbacks, or changing instructional curriculum to better serve students. There is no right or wrong answer; the best answer achieves compromise between players.

Each of these games prepares participants—whether the general public or public officials—for the inherent uncertainty of budgeting. Players develop a sense of camaraderie while clearly engaging in the process. For example, "the public had fun and became better informed about city finances" while playing the "Balance or Bust" game in the City of Cupertino, California.[8]

DIGITAL BUDGET GAMES

Digital budget games allow anyone to learn about the challenges of balancing a budget, and they are easy to facilitate. Some companies specialize in developing digital games to meet the specific needs of individual governments; for example, "Balancing Act" is an online game used by multiple cities. San Antonio, Texas, provides residents with an interesting budget simulation game based on "Balancing Act." The game is free of charge and presented in Spanish and English. It prepares citizens to actively participate in government decision making by providing them with relevant budget information.

"In addition, San Antonio took advantage of the simulator's unique learning structure. Unlike most budget documents, which often veer towards the 1,000 page mark and contain no easy way for citizens to specify what level of knowledge they want to gain, the budget simulation gave users the basics about the budget, then allowed those who wanted to delve deeper to do so via clickable "More Info" icons and pop-up windows with embeddable links to outside information."[9]

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The city of Fort Collins, Texas, strives to engage diverse citizens. The city uses digital methods such as "Balancing Act," which it supplements by setting up mobile budget booths to collect data. Doing so helps the city reach a range of people who lack digital access, including low-income and homeless residents. The effort moved beyond budget simulation; it helped the city understand its citizen's specific service needs.

EFFECTIVENESS OF BUDGET GAMES

An effective budget game helps players gain appreciation for the nuances of the budget process. This understanding builds trust within the community, which contributes to creating more stability in the budget process.

How can a government make a budget game effective? For in-person games, it's important to follow a few steps.

- Plan ahead. Who will attend the budget game? Where will it occur? How long it will run? Consider incentives and opportunities to reach stakeholders.

- Create a safe space for all participants.

- Provide information to establish a common understanding at the start about the game and its goals.

- Capture player perspectives to improve future budget game and civic participation.

Planning is the most important step. Make sure that a range of stakeholders will attend, which avoids the problem of some stakeholders, like special interest groups, being disproportionately represented. Some budget games require internal players, while others may integrate external stakeholders from the community. Consider offering attendance incentives such as a bus ticket or free food, especially if attendees have limited access to transportation or are low income. Choose a convenient location and comfortable environment to encourage engagement; participants may feel more at ease in a public library or community center than a traditional government office.[10] Planning for the game itself depends on the type of game. Some require formal facilitation, while others only require the group to print a game board and instruction sheet.

Creating a safe space is challenging, but imperative. Everyone must understand the ground rules and agree to follow them. Rules might include, "Allow others to speak without interruption" and "All information and discussions in the game stay in this room." Rules can be adjusted based on the context of the game.

Providing basic budget information before the game starts can increase its long-term effectiveness. Pertinent information like a popular annual financial report or a brief presentation may or may not be directly used during play, but seeing this information beforehand helps citizens think about how community problems may relate to the game.

Finally, consider how to capture participant perspectives. Distribute surveys right after the game to capture the levels of interest and learning. Ask specific questions about the players' understanding of the challenges and complexity of the budget process. If possible, send follow-up surveys via e-mail to gain a better understanding of participant perceptions.

THE CASE FOR BUDGET GAMES

How effectively can governments and citizens interact? Research provides mixed evidence — but most recent research is based on surveys, rather than observation, of citizens.[11] Recent case studies present evidence that budget games and simulations may be a new way to effectively engage people. In an increasingly digital world, budget games provide an opportunity to make government more engaging, and to sell the value of government to citizens who might otherwise be unwilling to engage their appointed officials and elected representatives.

CONCLUSIONS

Building trust is a key goal of budget games. Participants build trust among themselves, and with government. This confidence supports clearer communication of different and/or conflicting stakeholder interests, and builds an appreciation of the reasoned discussion of budget and policy alternatives. Budget games help participants move beyond simple yes-no questions and into a deeper understanding of the range of alternatives, and the potential for compromise. As a result, budget games have the potential to help increase the effectiveness of civic participation in decision making at the local level. ▮

Notes

1. Robin Hogarth and Emre Soyer, "Using Simulated Experience to Make Sense of Big Data," *MIT Sloan Management Review*, 2016.

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3. Shahram Heshmat, "What Is Behavioral Economics?" *Psychology Today* website, May 3, 2017.

4. "Red Ink Rising: The Road to Fiscal Sustainability," Deloitte, 2010.

5. "Balance or Bust Board Game," Institute for Local Government (ca-ilg.org).

6. Budget Simulation, UNC School of Government (sog.unc.edu).

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9. Kevin Amirehsani, "San Antonio Uses an Online Budget Simulator to Boost Citizen Engagement on the Budget," Alliance for Innovation (transformgov.org).

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