A Planner’s Online Toolbox: An Evaluation of Online Tools for Enhancing Public Engagement in the Planning Process

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A Report Submitted to the School of Urban and Regional Planning in Partial Fulfillment of the Requirements for the Degree of Master of Planning
**Acknowledgements**

I would like to thank my supervisor, Dr. Ajay Agarwal, for his patience and guidance during this process. I would also like to thank my interview participants for sharing their experiences with online public engagement tools.

 Additionally, my two years at SURP was such enjoyable and rewarding experience thanks to all the staff, faculty and my classmates. Also, thanks to Heather for your love and encouragement, and making my time in Kingston extra special.

Finally, thanks to my parents, Vil and Louise, and my sister, Erika, for all their continuous love and support.
Executive Summary
Online tools are an emerging trend in planning practice, but there has been little research examining their use and effectiveness. The planning profession has started exploring how to effectively integrate online tools to create successful and lasting public engagement experiences. However, there is a limited amount of information available regarding what strategies and tools work best for different purposes and few planning organizations have the available time and resources to undertake this type of evaluation.

This study addresses the following research questions:
• Which online tools offer features and functions best suited for achieving different public participation goals?
• What are the strengths and limitations of online public engagement tools in practice?

Four widely used public engagement tools, EngagingPlans, MetroQuest, MindMixer and PlaceSpeak, were evaluated to answer these research questions. The evaluation framework focused on the functions, usability, flexibility, transparency, interactivity and resources of online tools.

A summary table of the evaluation findings is provided on the next page. This table presents a synthesis of the analysis based on the optimal fit of each tool for achieving specific public engagement goals, as well as their key strengths and limitations.
### Tool Evaluation Summary Table

<table>
<thead>
<tr>
<th>Online Tool</th>
<th>Suitable Public Outreach Objectives</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| EngagingPlans | - Inform citizens about planning project by serving as the main information source.  
                     - Support in-depth learning about planning issues.  
                     - Measure opinions and prioritize actions.                                                       | - Attractive and easy to use interface.  
                     - High degree of customization in website appearance and features.                                | - Advanced features require additional coordination and cost.                                                         |
| MetroQuest    | Support in-depth learning about planning issues.  
                     - Measure opinions, prioritize actions and allocate funding.  
                     - Collect spatial input through mapping.                                                            | - Clear and well organized layout.  
                     - Concisely structured helps ensure input is focused and relevant.  
                     - Features and activities are highly customized.  
                     - Most interactive platform with many advanced options for gathering citizen input.              | - Closed platform limits transparency by not sharing input among citizens.  
                     - Customized features require greater resources to setup.                                           |
| MindMixer     | - Measure opinions, prioritize actions and allocate funding.  
                     - Collect ideas through images, discussion and mapping.  
                     - Deliberate issues through group discussion forums and comment rating.                           | - Standardized approach simplifies setup.  
                     - Highly transparent features; comment rating, archiving past topics and “who’s listening?”  
                     - Most affordable at $1000/year for unlimited topics.                                               | - Information can appear hidden, such as images and closed topics.  
                     - Limited options for customization.                                                                 |
| PlaceSpeak    | - Inform citizens about planning project by serving as the main information source.  
                     - Collect ideas through images and discussion.  
                     - Deliberate issues through group discussion forums and comment rating.                           | - Clear and well organized layout is easy to navigate  
                     - Standardized approach simplifies setup.  
                     - Emphasizes reliable feedback by defining project boundaries and verifying participant’s location. | - Extensive registration requirements for all input features can create a barrier to participation.  
                     - Limited options for customization.  
                     - Only supports one poll question at a time.                                                        |

The findings of the analysis informed the following seven recommendations:

- **Recommendation 1**: Match the tool to the goals of the public engagement initiative. Each online tool has different features and functions designed for achieving specific public engagement goals. Therefore, planners must first consider what kind of information they want to share.
and receive from the public and ask which tool would be most effective at achieving this goal.

- **Recommendation 2**: *Consider the availability of staff resources and the level of customization that is needed.* Planners should keep in mind that online tools require dedicated staff to regularly provide new content and respond to citizen input. Each of the online tools also varies in terms of setup. Standardized tools can be setup quickly and easily by planning staff, whereas the more customizable tools require collaboration between planners and tool developers.

- **Recommendation 3**: *Fully utilize web-based technologies.* Many online tools only use the most basic features. Planners should look beyond text to communicate planning ideas and develop a fun and interactive online engagement experience.

- **Recommendation 4**: *The registration process should allow users to begin participating quickly.* Requiring citizens to provide extensive personal information can create a barrier to participation. Therefore, it is important that planners find a balance between collecting personal information and allowing citizens to begin participating quickly and easily.

- **Recommendation 5**: *Integrate applications that citizens already use.* In some cases, the input that planners are looking for may be suited to popular applications that citizens already use, which capitalizes on their existing familiarity and a well-established user base.

- **Recommendation 6**: *Document the online feedback and share planning outcomes.* Websites provide documentation of what participants said and planning organizations should validate that they listened by posting the outcomes and final plans alongside the feedback of participants.

- **Recommendation 7**: *Actively promote the tool and recruit participants.* The use of any online engagement strategy should begin by carefully thinking about how to recruit participants and how citizens not immediately familiar with a planning issue will discover the process.
# Table of Contents

**ACKNOWLEDGEMENTS** | I  
**EXECUTIVE SUMMARY** | II  

## 1.0 INTRODUCTION  
1.1 PUBLIC PARTICIPATION AND PLANNING | 1  
1.2 PUBLIC ENGAGEMENT AND THE DIGITAL AGE | 2  
1.3 RESEARCH PURPOSE AND QUESTIONS | 4  
1.4 RESEARCH OBJECTIVES | 5  
1.5 SELECTION OF ONLINE TOOLS | 6  
1.6 STRUCTURE OF REPORT | 9  

## 2.0 RESEARCH METHODS  
2.1 GENERAL RESEARCH APPROACH | 10  
2.2 EVALUATION FRAMEWORK | 10  
2.3 TOOL FUNCTIONS | 12  
2.4 TOOL EFFECTIVENESS | 14  
2.5 EVALUATION TABLES | 18  
2.6 RATING SYSTEM | 19  
2.7 DATA COLLECTION | 20  
2.8 INTERVIEWS | 21  
2.9 LIMITATIONS | 21  

## 3.0 ANALYSIS  
3.1 TOOL FUNCTIONS | 23  
3.2 TOOL EFFECTIVENESS | 30  
**CATEGORY 1: USABILITY** | 30  
**CATEGORY 2: FLEXIBILITY** | 36  
**CATEGORY 3: TRANSPARENCY** | 40  
**CATEGORY 4: INTERACTIVITY** | 45  
**CATEGORY 5: RESOURCES** | 49  
**TOOL EFFECTIVENESS SUMMARY** | 52  
3.3 INTERVIEWS | 53  
3.4 OVERALL TOOL EVALUATION SUMMARY | 57  

## 4.0 RECOMMENDATIONS AND CONCLUSION  
4.1 RECOMMENDATIONS FOR PLANNERS | 60  
4.2 CONCLUSION | 63  

**REFERENCES** | 65  

Appendix A – Tool Usability Evaluation Tables  
Appendix B - Tool Flexibility Evaluation Tables  
Appendix C - Tool Transparency Evaluation Tables  
Appendix D - Tool Interactivity Evaluation Tables  
Appendix E - Tool Resource Evaluation Tables
List of Figures

Figure 1: Hierarchy of the Evaluation Framework ........................................ 11
Figure 2: MetroQuest Scenario Exploration Feature ...................................... 25
Figure 3: MetroQuest Budget Allocation Feature .......................................... 27
Figure 4: MetroQuest Mapping Feature ..................................................... 28
Figure 5: MindMixer Comment Rating Feature ............................................ 29
Figure 6: PlaceSpeak Homepage Layout .................................................... 33
Figure 7: MetroQuest Help Screen ............................................................ 34
Figure 8: EngagingPlans Homepage .......................................................... 37
Figure 9: MindMixer Who’s Listening .......................................................... 41
Figure 10: Interactive Choose Your Future Game ......................................... 46
Figure 11: MindMixer Reporting ................................................................. 51

List of Tables

Table 1- Key Tool Features ........................................................................ 8
Table 2: Tool Functions Category Table ..................................................... 13
Table 3: Example Evaluation Table for Category 1: Usability ....................... 19
Table 4: Data Sources and Cases ............................................................... 20
Table 5: Tool Function Comparison Table .................................................. 23
Table 6: Usability Evaluation Summary Table ............................................. 30
Table 7: Flexibility Evaluation Summary Table .......................................... 36
Table 8: Flexibility Evaluation Summary Table ........................................... 40
Table 9: Interactivity Evaluation Summary Table ........................................ 45
Table 10: Resources Evaluation Summary Table ......................................... 49
Table 11: Summary of Tool Ratings (equally weighted out of 20) ................... 52
Table 12: Comparison of In-Person and Online Participation Levels .............. 54
Table 13: Overall Tool Evaluation Summary Table ...................................... 57
1.0 Introduction

1.1 Public Participation and Planning

Public involvement is a growing part of the planning process in Canada. Since the 1970s, the Canadian public has been rallying for greater involvement in the planning process and today it is a legislated requirement in all municipalities. At the same time, the planning profession recognizes that citizen participation is an ethical and fundamental responsibility. Specifically, planners shall “provide full, clear and accurate information on planning matters to decision-makers and members of the public” and “provide opportunities for meaningful participation and education in the planning process to all interested parties” (Canadian Institute of Planners, 2004). While public participation is a legislated and professional requirement of the planning process throughout Canada, the degree to which citizens are meaningfully engaged varies.

Public participation is more than just a professional requirement: it is a practice that carries many benefits for planners. A public engagement process that considers the values and concerns of citizens can lead to better-informed plans that respond to local needs (Lieske et al. 2009). Furthermore, citizen involvement in the decision-making process also increases the legitimacy of policies and plans, which in turn increases the likelihood that these plans will be adopted and implemented by decision-makers and politicians (Burby, 2003).

Despite these benefits, traditional techniques of consulting the public, such as public meetings, can be ineffective due to a number of limitations. Conroy & Evans-Cowley (2004) argue that most traditional venues and methods are often inefficient and ineffective at activating citizen interest and result in low

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1 In this report, public participation is defined broadly as the practice of involving members of the public in the agenda setting, decision-making, and policy-forming activities of organizations and institutions responsible for policy development (Frewer & Rowe, 2005).
participation levels. This is largely due to their timing and format. Work and household responsibilities create a significant time constraint for most adults. At the same time, the format of traditional public meetings fails to engage citizens in an interactive way. Innes and Booher (2004) are more critical of traditional approaches to public engagement, stating that they do not achieve genuine participation, they do not provide significant information to decision-makers or improve plans and policies, they do not satisfy citizens that their voices are being heard and they do not represent a broad spectrum of the public.

The lack effective public participation presents a challenge for planners who are responsible for engaging citizens in making decisions about the future of their communities (Conroy & Evans-Cowley, 2004). To be fully effective, planners need to design a public engagement strategy by selecting tools and techniques that match the purpose of the outreach effort and the preferences of the public (Walters et al., 2000). Planners looking to improve past participation efforts through new strategies should consider emerging information and communication technologies, which present a new set of tools to capture the benefits of public engagement while addressing some of the traditional limitations.

1.2 Public Engagement and the Digital Age
We are now living in a digital age in which information and communication technologies are the backbone of the economy and society. Citizens are increasingly using information and communication technologies to interact and access information online. Approximately 83% of Canadian households have access to the internet (Statistics Canada, 2012). Accordingly, planners are beginning to look to the internet as a means of engaging a broader group of citizens (Evans-Cowley, 2010). Web based application developers have responded to this emerging practice by creating user-friendly tools and platforms
to facilitate civic interaction, thus adding a new public engagement method to the planner's toolbox.

Online tools\(^2\) provide a number of opportunities to enhance public engagement in the planning process. First, they make participation more convenient because they are unconstrained by time or geographic location (Coleman & Gotze, 2001). Second, they enhance the two-way flow of information, by allowing citizens to get informed about planning issues, submit their ideas and feedback or vote for their preferred plan. For some participants, the online environment can be less intimidating compared to a public meeting so they will be more comfortable and willing to participate (Baker et al., 2007). Fourth, communication technologies support continuous participation by providing project updates and ongoing opportunities to provide feedback. Online tools can also present information in a more engaging manner through visualizations and interactive activities. Lastly, these tools offer the potential to attract more participants in an efficient and cost effective manner.

The emerging trend of using online tools in planning practice also raises some concerns. The digital divide pertains to the issue that certain segments of the population do not have access to the internet could be excluded from the planning process (Coleman & Gotze, 2001). There is also concern with the trust and transparency of online tools. When public participation is moved online, it creates a separation between citizens and decision makers, which in turn could decrease accountability. Furthermore, there is no guarantee that adopting online tools will attract more participants. From a practical standpoint, another barrier is created by the fact that planners may have limited knowledge of what financial and staff resources are required to implement these tools.

\(^2\) Online tools refer to web-based platforms that support civic engagement in decision making. These tools primarily exist as websites that provide information about planning issues and invite citizens to provide varying levels of input through various features.
From a research perspective, the use of online tools for public engagement is a recent phenomenon and there has been limited research examining their use and effectiveness (Aggett & McColl, 2006; Conroy & Evans Cowley, 2004; Mandarano, 2010; Shipley & Utz, 2012). The planning profession has just started to explore how to effectively integrate online and in-person techniques to create successful and lasting public engagement experiences. Leighninger (2012) suggests that many professionals are still unfamiliar with what strategies and tools work best for different purposes. Furthermore, Aggett & McColl (2006) suggest that few planning organizations have the available time and resources to undertake this type of evaluation.

1.3 Research Purpose and Questions
Due to newness of online tools in professional planning practice, it is critical that the planning profession share which online engagement techniques and tools work best for achieving different public outreach goals. This study aims to broaden the knowledge base surrounding this emerging trend in planning practice by evaluating the performance and suitability of online tools based on several key criteria. This study focuses on the essential qualities of online tools, including user-friendliness, flexibility, transparency, interactivity and resources. Therefore, planners who are considering using online tools will be able to use the criteria and findings of this report to compare existing tools and select the one that best suits their needs. The findings will also identify aspects of tools in need of improvement, which could be used by tool developers as they update their products. Furthermore, the evaluation framework provides a foundation for assessing any future tools that might be developed.

This study also aims to provide practical recommendations for planners looking to implement online tools. Successful online engagement does not stop at
selecting the most appropriate tool. Planners must also consider a number of factors surrounding the implementation of online tools, such as tool cost, setup and maintenance. Therefore, the recommendations of this report will draw on the experiences of professionals in order to provide valuable and timely lessons for planners looking to implement online engagement tools.

Accordingly, this study will explore the following research questions:

- Which features and functions of online tools are most effective for achieving different public participation goals?
- What are the strengths and limitations of online public engagement tools in practice?

### 1.4 Research Objectives

Three research objectives were developed in order to answer these research questions. The first objective is to compare the functions and features offered by each online tool to determine their suitability for supporting different public participation goals. These common goals include:

1) Informing citizens about a particular issue or project
2) Measuring citizen opinions and prioritizing actions
3) Collecting ideas and feedback from citizens
4) Deliberating planning issues

The second objective of this research report is to analyze online tools using case examples where they have been implemented as part of a public engagement initiative. The tool evaluation will specifically focus on evaluating the usability, flexibility, transparency, interactivity and resource requirements of online engagement platforms.
The final research objective is to develop a series of recommendations for planners looking to use online tools. These recommendations will be based on the tool evaluation and interviews with professionals who have implementation these of tools for real-life projects.

1.5 Selection of Online Tools
This study evaluated four online tools that are being widely used for public engagement across Canada and the United States. The four tools include: Metroquest, EngagingPlans, MindMixer and PlaceSpeak. These tools were selected based on a review of planning resources and municipal public engagement efforts that identified them as the most commonly used tools by planning departments as they provide a standardized approach that could easily be utilized by professionals looking to incorporate an online component as part of their next project (City of Ottawa; Lennertz, 2011; Planning Tool Exchange; Rucker & Whalen, 2011 Exchange; Spencer, 2013). The four online tools are described below and summarized in Table 1.

EngagingPlans is a ready-to-use toolkit for planners looking to develop and maintain a public engagement website. It was developed by Urban Interactive Studios based in Denver and has been used on broad scale community plans in Central Arkansas and London, Ontario, as well as the Gardiner East Environmental Assessment in Toronto. The website toolkit includes a variety features aimed at meeting the basic information needs of planning projects, while also offering some more innovative and exciting engagement opportunities. EngagingPlans allows local planning organizations or consultants to develop an independent website that is customized to the specific outreach needs of a project, but is also easy to set up and maintain. These websites serve as the main source for communicating with the public by consolidating all of the external communication related to any project requiring public input. Beyond sharing
information with the public, the platform also allows organizations to collect the feedback and ideas about plans and policies from citizens. EngagingPlans also provides a consulting service if planning organizations wish to develop more advanced features for their website.

MetroQuest is another website platform that supports the communication of planning ideas to the public so that they can learn and provide feedback using a variety of fun and interactive screens. MetroQuest is a pioneer in the online engagement field and has been widely used since its founding in 1997 by a Vancouver based company known as Sustainability Tools Inc. MetroQuest provides a structured approach to online public engagement aimed at helping municipalities and planning agencies gather public opinions and build broad support for planning initiatives. The MetroQuest websites serve as an extension to a primary project website because they are designed to provide and gather specific information through an interactive platform. Planners work closely with MetroQuest to develop a platform designed to identify issues, establish community priorities, compare the tradeoffs of alternative plans and gather input on preferred options.

MindMixer is an online platform based on the idea of a virtual town hall. The company was founded by a group of urban planners and designers in 2010 and has been used in over 300 communities across North America. MindMixer provides an online forum for communities to share ideas and discuss a range of topics and issues. The MindMixer websites take a crowdsourcing approach, where planners post a topic or challenge and invite citizens to submit ideas. Citizens can also learn more about an issue or vote and provide comments on the ideas of others. The MindMixer team works with planners to create a website that usually serves as an extension to a main project page.
Similar to other online platforms, PlaceSpeak allows participants to review background information, respond to surveys and post and share ideas. PlaceSpeak began in Vancouver and has evolved from its initial use for the Urban Futures Survey. PlaceSpeak is unique in that it requires participants to input their residential address in order verify their geographic location. This allows planners to target residents in specific neighbourhoods and ensure that feedback is only from residents of the specified area. Planners add content to the PlaceSpeak template to create a website that serves as the primary online communication source for a project. Planners can select what features to include, update project information and define the spatial boundaries to determine who can participate.

<table>
<thead>
<tr>
<th>Online Tool</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>EngagingPlans</td>
<td>-Offers a suite of standardized features that are easy setup&lt;br&gt;-Option for more advanced customization&lt;br&gt;-Supports information sharing and input gathering&lt;br&gt;-Serves as the main website and online communication channel for projects</td>
</tr>
<tr>
<td>MetroQuest</td>
<td>-Highly customized features require advanced setup and coordination with developer&lt;br&gt;-Focus on informing and gathering input from the public through highly interactive features&lt;br&gt;-Serves as an extension to main project website</td>
</tr>
<tr>
<td>MindMixer</td>
<td>-Offers a limited range of standardized features that are easy to setup&lt;br&gt;-Focus on gathering and discussing citizen ideas&lt;br&gt;-Serves as an extension to main project website</td>
</tr>
<tr>
<td>PlaceSpeak</td>
<td>-Offers a limited range of standardized features that are easy to setup&lt;br&gt;-Supports information sharing and input gathering&lt;br&gt;-Focus on verifying the geographic location of participants&lt;br&gt;-Serves as the main website and online communication channel for projects</td>
</tr>
</tbody>
</table>
1.6 Structure of Report

This report contains four sections and four appendices outlined below:

- Chapter 1 provided a background of public participation and the emergence of online tools followed by a statement of the research questions and objectives.
- Chapter 2 of this report describes the methods that were used to answer the research questions and complete the tool evaluation.
- Chapter 3 presents the analysis of four online tools through the use of an evaluation framework.
- Chapter 4 provides recommendations for planners interested in using online tools as part of their public engagement practice.
- Appendix A to D provides a detailed evaluation of each tool that supported the analysis in Chapter 3.
2.0 Research Methods

The purpose of this chapter is to describe the research method used to evaluate the four online tools.

2.1 General Research Approach

This study uses a multiple case study method to examine the strengths and limitations of online public engagement tools, and to compare the range of functions that each tool provides. According to Chmiliar (2010), multiple-case study research involves selecting several related cases to develop a more in-depth understanding of the phenomena and support more robust conclusions than a single case study. Multiple case studies also support cross-case examination of data to identify similarities, differences and themes among the cases (Yin, 2009).

2.2 Evaluation Framework

In this study, the multiple cases consist of projects that used one of the four online public engagement tools: EngagingPlans, MetroQuest, MindMixer and PlaceSpeak. These tools were analyzed using an evaluation framework adapted from previous research studies that examined the functions and effectiveness of technological planning tools. Jankowski and Nygers (2001) developed an evaluation framework to assess the ability of different tools to assist with various planning tasks by examining their functions and versatility. Aggett & McColl (2006) built on this study by developing an evaluation matrix for collecting, analyzing and comparing different decision-making tools. The study also analyzed the effectiveness of online tools based on their user-friendliness, flexibility, transparency and interactivity. Lastly, Coleman & Gotze (2001) identified specific guidelines and criteria to consider when developing online platforms for public engagement.
The evaluative framework of this study is structured based on tool function and effectiveness. Tool function is defined as the versatility or range of tasks that a tool can support, whereas effectiveness considers the tool in terms of usability, flexibility, transparency, interactivity and resources. Figure 1 illustrates the hierarchy of the evaluation framework along with the evaluation criteria.

**Figure 1: Hierarchy of the Evaluation Framework**
2.3 Tool Functions

Tool functions refer to the different capabilities and features of each tool. Identifying the different functions allows connections to be drawn between a tool’s specific capabilities and its potential to support different public engagement objectives and project types. This study identified 13 tool functions:

1. **Information Delivery** – involves the communication of background and project related information.

2. **Visualization** – provides an additional level of information through a variety of visual representations to communicate planning content (e.g. figures, diagrams, maps, photos, plans, design drawings).

3. **Project Updates** – support easy posting of new information and activities, as well as the creation of mailing lists to contact participants regarding news and upcoming events.

4. **Scenario Exploration** – allows citizens to compare the tradeoffs of different planning and policy decisions.

5. **Comment Submission** – invites online participants to submit comments, input or questions to the planning organization.

6. **Surveys and Opinion Polls** – ask participants to answer questions aimed at collecting information about citizens or gain insight into a community’s values and preferences.

7. **Visual Preference Survey** - asks participants to select among a set of images that illustrate different planning and design concepts.

8. **Budget Allocation** – guides participants through an activity of balancing funding and spending on planning related decisions.

9. **Photo Uploading** – invites participants to post photos to encourage more visual input and develop an image catalogue.

10. **Crowdsourcing** – involves posting topics or challenges that invite citizens to suggest ideas.

11. **Map Input** – allows participants to tag their comments to a specific location using a mapping tool.
12. **Group Discussion** – provides an open forum where participants are free to post comments and respond to the comments of others.

13. **Comment Rating** – invites participants to rate the comments of other participants, which helps provide a measure of consensus.

Table 2 categorizes these 13 tool functions based on four common public outreach goals. These categories allow the capabilities of different online tools reviewed in this study to be compared by demonstrating their potential to support different public outreach goals.

**Table 2: Tool Functions Category Table**

<table>
<thead>
<tr>
<th>Tool Name</th>
<th>Inform</th>
<th>Measure Opinions &amp; Prioritize Actions</th>
<th>Collect Ideas</th>
<th>Deliberate Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging Plans</td>
<td>Information Delivery</td>
<td>Visual Question submission</td>
<td>Visual Preference Survey</td>
<td>Budget Allocation</td>
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<tr>
<td>MetroQuest</td>
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<tr>
<td>MindMixer</td>
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<tr>
<td>PlaceSpeak</td>
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2.4 Tool Effectiveness

A literature review revealed that the effectiveness of an online tool to support public engagement in the planning process can be evaluated based on four categories: usability, flexibility, transparency and interactivity (Aggett & McColl, 2006). These categories represent the most essential qualities of online engagement tools and provide critical measures for evaluation. In addition to the evaluation categories identified by previous research, this study emphasizes a fifth category: the resources needed by planning organizations to implement online tools. This information is essential for professionals looking to use these tools in practice (Feisburg et al., 2010). Specific evaluation criteria for scoring each of the tools based on these five categories are described in detail below.

Category 1: Usability

User-friendly tools allow people with an average level of computer literacy to access and use the tool without special equipment or prior training. This category has been included because tools must be designed from a user-centred perspective in order to achieve broad usability among a diverse group of citizens with varying degrees of experience (Haklay & Tobon, 2003). Usability examined the following criteria:

1. **Accessibility** of a tool considers how easy it is for participants to access the tool as well the hardware and software needed to use it. Increasingly, accessibility must consider whether the platform is compatible with tablets and smartphones.

2. **Registration** and sign up should be optional or require a minimal amount of time and effort. Extensive registration and personal information requirements can create a barrier to participation. Therefore, it is important that participants are able to go to a website and begin participating quickly and easily. Furthermore, all of the posted content should be accessible to any citizen and not require registration.

3. **Ease of use** considers how intuitive the most basic tool functions are to use.
The tool should function similar to other websites. More sophisticated functions, such as mapping, should also be intuitive or easy to learn.

4. **Design and layout** of the website interface should support easy navigation and legibility through a clear and organized structure.

5. **Instructions** and help options should be available if participants need assistance. This can include a frequently asked questions page and a link or contact information for technical support.

6. **Information management** helps planners share content in an organized manner so that participants can easily find information. Online platforms should allow planners to supplement text with images and provide links to further details if desired.

7. **Language** and content should be clear and easy to understand. Plain language should be used rather than technical terms or the tool should include a glossary of key terms. A translation option provides additional support for participants of diverse backgrounds.

**Category 2: Flexibility**

Flexibility considers the ways that a tool can be adapted by planning organizations to meet the needs of different projects and public engagement initiatives. Flexibility consists of the following criteria:

1. **Customizable** layout and features enable the tool to support a variety of public engagement goals. The tool should allow features to be added or removed and for the appearance to match the brand of the planning organization or project.

2. **Integration** considers how well the tool incorporates external tools to increase its functionality, as well as whether the tool can be embedded into a primary project website or act as a standalone website.

3. **Support subsequent stages of public engagement** means that tools can support the evolving needs of planners by incorporating new information, phases, activities, and initiatives.
Category 3: Transparency

Transparency considers the ability of online tools to assist planning organizations communicate what is happening and how. Therefore, platforms should provide documentation of all the information and data being considered in planning decisions. Furthermore, transparency is concerned with the potential for online tools to bring government activities closer to citizens and to ensure accountability of decision-makers. Transparency examined the following criteria:

1. **List of key contacts or feedback form** should be provided to inform participants of who is listening to their comments and welcome input and questions. Providing the names and contact information of key staff provides an alternative mode of communication, ensures accountability and enhances the legitimacy of the online engagement process.

2. **Background information and purpose** of the planning project or issue should be posted on the homepage. The online tools should explain the purpose of the website and provide an understanding of what the results of the exercise will be and how participant input will be used.

3. **Comments and poll results** should be visible by the public so that citizens can see which ideas are the most popular. Participants should also be able to see which participant ideas received the highest ratings in order to provide a measure of consensus.

4. **Documenting the process and outcomes** after the formal public participation period has ended is a critical function of transparent tools. Allowing citizens to access this information beyond the participation period can enhance accountability and legitimacy by providing evidence to compare what citizens said versus what was decided.

5. **Authentication** should be required for any activities that involve posting comments on a public discussion forum. Mandatory registration prevents abusive and inappropriate posting by anonymous users and allows project administrators to verify the identity of participants. Providing a method for authenticating other input opportunities can enhance the validity of this feedback.
Category 4: Interactivity

Interactivity considers the ability of online tools to easily incorporate and communicate citizen ideas and concerns as part of an engaging user experience and interactive participatory planning process (Geertman, 2002). Interactivity is largely concerned with whether a tool only allows information to flow from planning organizations to citizens or whether it supports advanced levels of participant involvement (IAP2, 2007). Therefore, interactivity provides a measure of the level of feedback and communication that the tool supports by considering the following criteria:

1. **Presents information in an engaging manner** through the use of visuals, such as info graphics, maps and videos.

2. **Two-way flow of information** should be supported by incorporating features that facilitate information gathering from citizens, such as opinion polls, discussion forums and asset mapping. Additionally, tools should give planners the opportunity to respond to citizen feedback.

3. **Various opportunities for input** should be provided to allow participants to choose the activity based on their comfort level, available time and interest.

4. **Ongoing participation** and discussion should be encouraged by highlighting the most popular topics, allowing participant ideas to be commented on and rated by other users and introducing new topics and activities periodically. This ensures participation is not a one-time event and aims to foster citizen dialogue and develop ongoing citizen engagement.

5. **Project updates** should posted on the website to inform users about news and upcoming public participation events. Participants should also be able to subscribe to a mailing list or newsletter to receive email updates and announcements.

6. **Links to social media platforms** allows participants to follow the process and spread the word by sharing it with their networks.
Category 5: Resources

Professionals are also interested in knowing what staff and financial resources are needed to implement online tools as part of a project. These practical criteria include:

1. **Setup and maintenance** requirements should suit the needs of planning organizations. Tools should be easy to setup with some assistance from the tool developer and staff should be able to complete basic maintenance and updates with basic training.

2. **Cost** should be flexible based on the level of service and features that are required.

3. **Reporting and monitoring** functions should be available and easily accessible by project administrators. Reporting should identify the number of participants, automatically summarize their feedback and provide demographic information.

2.5 Evaluation Tables

The four online tools were analyzed using evaluation tables adapted from previous studies by Jankowski and Nyerges (2001) and Aggett and McColl (2006). Evaluation tables provide a structured and systematic approach for collecting, analyzing and comparing the effectiveness of different online tools. The tables allow the strengths and weaknesses of each online tool to be identified based on the evaluation criteria. Table 3 provides an example of the evaluation tables used in this study.
### Table 3: Example Evaluation Table for Category 1: Usability.

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Score</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design and layout</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total (14)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Standardized Score (20)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A summary of these evaluation tables will provide an equally weighted score for each category and an overall tool score. The category and overall scores give a measure to compare the effectiveness of each online tool.

### 2.6 Rating System

A rating system was developed to measure each tool according to the criteria of the five evaluation categories. A numeric score for each evaluation criteria was assigned along a scale of 0 to 2 based on the researcher’s assessment. A rating of 2 was assigned if the tool sufficiently met the evaluation criterion. Conversely, a rating of 0 is assigned if the tool did not meet the criterion. A rating of 1 is assigned if the tool partially met the evaluation criterion. Due to the subjectivity of this scoring system, a qualitative justification was provided for each evaluation criteria.

To obtain an overall score, the category scores were standardized out of 20 to account for the variable number of criteria and give each of the five categories an
equal weight in the overall tool score. For example, usability has seven evaluation criteria and a maximum of 14 points, where as flexibility only has three evaluation criteria and a maximum of six points. Therefore, if Tool A earns 5 out 6 points for flexibility, it is assigned a standardized score of 17 out of 20. The tool’s scores for each category are then added together to get a overall tool score out of 100.

2.7 Data Collection
This study involved three types of data collection: 1) document review of project reports by municipalities and tool developers; 2) direct observation of online platforms; and 3) semi-structured interviews with key staff members. The use of multiple sources of data supports triangulation of information and strengthens the construct validity (Yin, 2009). Furthermore, study rigour was enhanced by applying the same evaluation criteria and data collection methods to each tool, and by asking interviewees to validate the report findings (Yin, 2009). Table 4, lists the four tools, data sources and selected cases. The cases were selected to represent a broad range of project types and purposes, including broad visioning exercises, site and project specific interventions and private land developments.

Table 4: Data Sources and Cases

<table>
<thead>
<tr>
<th>Digital Tool</th>
<th>Data sources</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>MindMixer</td>
<td>• Municipal project websites</td>
<td>• City of Guelph – Jubilee Park</td>
</tr>
<tr>
<td></td>
<td>• 1 interview with city planner</td>
<td>• City of San Francisco – ImproveSF</td>
</tr>
<tr>
<td></td>
<td>• MindMixer website</td>
<td></td>
</tr>
<tr>
<td>MetroQuest</td>
<td>• Municipal project websites</td>
<td>• City of Ottawa – Cycling Plan</td>
</tr>
<tr>
<td></td>
<td>• 1 interview with city planner</td>
<td>• City of Toronto – The Big Move</td>
</tr>
<tr>
<td></td>
<td>• MetroQuest website</td>
<td></td>
</tr>
<tr>
<td>EngagingPlans</td>
<td>• Municipal project websites</td>
<td>• City of London - Rethink London</td>
</tr>
<tr>
<td></td>
<td>• 1 interview with city planner</td>
<td>• Central Arkansas</td>
</tr>
<tr>
<td></td>
<td>• EngagingPlans website</td>
<td></td>
</tr>
<tr>
<td>PlaceSpeak</td>
<td>• Municipal project websites</td>
<td>• Fah Group – East St. Paul</td>
</tr>
<tr>
<td></td>
<td>• 1 interview with city planner</td>
<td>• City of Calgary – North Central LRT</td>
</tr>
<tr>
<td></td>
<td>• PlaceSpeak website</td>
<td></td>
</tr>
</tbody>
</table>
2.8 Interviews
The first-hand experience of planning practitioners in organizing and facilitating a broad range of participatory processes gives them an informed perspective of how online tools can be used to enhance participation, as well as some of the potential challenges associated with integrating these tools with traditional public participation techniques.

Semi-structured interviews were completed after a preliminary evaluation of each tool was completed. The aim of these interviews was to validate the preliminary evaluation findings. The interview questions focused on what functions the tool supported in the specific cases, as well as how the tools performed in terms of usability, flexibility, transparency, interactivity and resources. A brief description of each of these evaluation categories was provided and interviewees provided their view of how the tool performed. The interviewees were also asked open-ended questions about their experiences implementing the tools. This provided additional insights and recommendations that may not have been revealed by simply observing the online platforms.

2.9 Limitations
A significant limitation of this research study is evaluator bias. Due to the limited time and funding of this research study, the analysis was completed from the perspective of only one researcher. Several precautions were taken to mitigate bias. A written justification is provided to describe why each tool was assigned a specific score and all scores were not tabulated until the very end of the assessment. From a reliability perspective, the analysis findings were influenced by how the host planning organization utilized each tool in the example cases selected by this study. Multiple cases and alternative sources of data were therefore reviewed where possible to enhance the reliability. Professionals with experience implementing these tools were also asked to validate the preliminary
findings in order to mitigate research bias (Yin, 2009).

Another limitation of this study relates to the fast rate of change related to communication technology. As a result, this study only represents online tools that were in use at the time of this research. New tools appear on a regular basis and may not be captured by this report. Additionally, existing developers update their platforms on a regular basis and may add or improve tool features in the future.
3.0 Analysis

The purpose of this chapter is to present the findings of the online tool evaluation. The analysis begins by assessing the range of functions supported by each tool. This is followed by an evaluation based on five categories: usability, flexibility, transparency, interactivity and resources.

3.1 Tool Functions

The analysis of tool functions considers the different capabilities of the four online tools. Table 5 classifies 13 tool functions based on four common public outreach goals and indicates which functions each tool supports. This table allows the capabilities of the different online tools to be compared and demonstrates their potential to support different public outreach goals.

Table 5: Tool Function Comparison Table

<table>
<thead>
<tr>
<th>Tool Name</th>
<th>Public Outreach Goals &amp; Tool Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inform</td>
</tr>
<tr>
<td>Engaging Plans</td>
<td>Information Delivery</td>
</tr>
<tr>
<td>MetroQuest</td>
<td>Information Delivery</td>
</tr>
<tr>
<td>MindMixer</td>
<td>Information Delivery</td>
</tr>
<tr>
<td>PlaceSpeak</td>
<td>Information Delivery</td>
</tr>
</tbody>
</table>
1) Informing

Each of the online platforms supports the goal of informing the public by allowing planners to post project related information. EngagingPlans and PlaceSpeak function similarly to any standard content-based websites and can provide as much information as needed by the planning organization. These sites typically serve as the primary information source for projects. On the other hand, MetroQuest and MindMixer serve as input gathering extensions to a main project website. As a result, they do not focus on posting extensive information as the content is geared towards supporting the objectives of the interactive activities.

Visual representations are another means of communicating planning related information and creating an engaging online experience. Each website platform supports the posting of visual content, but the degree to which these are integrated into the website varies. EngagingPlans effectively integrates infographics and maps into a number of its interactive features. MetroQuest also integrates a number of visual elements into its websites to graphically communicate information through maps and figures. MindMixer allows administrators to upload plans and images for any topic, but these are not integrated into the website as well as the first two platforms. Many of the images are too small to view finer details. The majority of the PlaceSpeak platform is text based with only a limited amount of visual information. PlaceSpeak allows for a main image and site location map to be posted on the homepage and for additional images and plans to be uploaded under a resources tab.

Each website platform supports some form of project updates by allowing planners to contact participants that sign up for a newsletter or mailing list. In addition to a mailing list, EngagingPlans highlights upcoming events by posting them on the homepage and displaying an interactive timeline that allows participants to review all the events that have taken place to date. PlaceSpeak has a topic tab that links to information about upcoming public events.
MetroQuest and MindMixer do not contain upcoming event pages, but this information is most likely posted on the main project website. All of the websites except for MetroQuest allow information and activities to be added or revised at any time by project administrators.

The *scenario exploration* feature is the most advanced level of information delivery because it educates participants in an interactive manner about the tradeoffs of different planning decisions. MetroQuest and EngagingPlans are the only online tools that support scenario exploration. As shown in Figure 2, participants are able to test the strengths and weaknesses of different ideas through unique features that allow participants to select their priorities, allocate funding and view the impacts of different policy decisions.

**Figure 2: MetroQuest Scenario Exploration Feature** (Source: Destination Erie)
2) Measuring Opinions and Prioritizing Actions

Tool features that allow planning organizations to measure opinions provide important element to ensure that online public engagement tools also support the flow of information from participants to planners.

Providing participants an opportunity to submit questions and comments is an essential element of public engagement websites. It allows citizens to voice their concerns and provides planning organizations with the opportunity to respond to these concerns. EngagingPlans and MetroQuest are the only two platforms that invite participants to submit comments and questions directly to the host planning organization through the website. However, MindMixer and PlaceSpeak do allow project administrators to post their contact information on the website so that participants can contact them by email.

Surveys and opinion polls are another important feature that provides citizens with an opportunity to contribute to the planning process by providing planners with information about the community and its priorities. EngagingPlans, MetroQuest, MindMixer and PlaceSpeak all provide survey or opinion poll features.

Similar to opinion polls, visual preference surveys and budget allocation features allow planners to obtain feedback by asking participants specific questions. Visual preference surveys ask participants to vote on a series of images that related to planning topics, such as building style or density. As shown in Figure 3, budget allocation features ask participants to allocate a fixed amount of funding for different plans and policies. EngagingPlans, MetroQuest and MindMixer offer visual preference and budgeting allocation features.
3) Collecting Ideas

In many cases, planners look to citizens for help in developing planning solutions. Therefore, online engagement tools that can collect detailed input from participants in a variety of ways provide a valuable resource for planners. EngagingPlans, MindMixer and PlaceSpeak all provide a *photo uploading* feature that allows participants to submit photos depicting their favourite places, areas in need of improvement, or design ideas they would like to see. All three of these tools also provide a *crowdsourcing* feature where planners can post questions or challenges and invite citizens to suggest ideas.

An especially valuable tool for planners is the *mapping feature* offered by MetroQuest and MindMixer. This feature allows participants to attach comments or ideas to a map and provides valuable spatially referenced information to
planners, which cannot be obtained by other features. The MetroQuest map feature, shown in Figure 4, allows participants to input focus points as well as routes.

**Figure 4: MetroQuest Mapping Feature** (Source: City of Ottawa)

4) Deliberating Issues
There are some situations where it is beneficial to engage citizens in an open discussion about complex planning issues. Online planning tools that feature discussion boards provide an opportunity to extend conversations to a time and place that is convenient for each participant. EngagingPlans, MindMixer and PlaceSpeak provide a group discussion feature where citizens are invited to respond to topics posted by the planning organization or respond to each other’s ideas. Discussion forums invite a wide range of ideas, but it is also important for planners to be able to identify which ones are the most broadly supported to give
a measure of consensus. MindMixer and PlaceSpeak support the measuring of consensus by offering an additional comment rating feature that gives participants the ability to rate other comments. MetroQuest does not provide any online discussion features.

In some cases, discussion boards can provide a forum for criticism or posting of false information by citizens. Therefore, planners should be cautious of using discussion forums on controversial issues because it is likely to attract negative feedback rather than facilitating constructive dialogue.

Figure 5: MindMixer Comment Rating Feature (Source: City of Guelph)
3.2 Tool Effectiveness
This section presents the analysis of the four online tools based on five evaluation categories: usability, flexibility, transparency, interactivity and resources. Each category is analyzed based on the criteria outlined in Chapter 2: Research Methods. The detailed evaluation tables that informed the tool ratings are provided in Appendix A to E.

Category 1: Usability
All of the online engagement tools support a moderate to high level of usability. The summary of tool usability evaluation is provided below and summarized in Table 6.

Table 6: Usability Evaluation Summary Table

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Engaging Plans</th>
<th>MetroQuest</th>
<th>MindMixer</th>
<th>PlaceSpeak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Registration</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Ease of Use</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Design &amp; Layout</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Instructions</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Information Management</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Language</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total (14)</strong></td>
<td><strong>12</strong></td>
<td><strong>13</strong></td>
<td><strong>12</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td><strong>Standardized Score (20)</strong></td>
<td><strong>17</strong></td>
<td><strong>19</strong></td>
<td><strong>17</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Accessibility
All four of the online tools are accessible with an internet connection and standard internet browsing software\(^3\). As a result, these tools provide the majority of citizens with the opportunity to get informed and participate in the planning process.

\(^3\) An emerging consideration for website design and usability is meeting the accessibility requirements set out by governments, such as the Accessibility for Ontarians Disability Act. As of January 2014, public sector organization websites in Ontario must to conform with the World Wide Web Consortium Web Content Accessibility Guidelines 2.0. These requirements mean that a screen reader has to be able to recognize all webpage content and images much have captions. This was not a requirement at the time these websites were launched or in the geographic jurisdiction of each project, but web accessibility will be a growing trend in the future.
process 24 hours a day. However, the 17% of Canadian households that do not have internet access and individuals that are not familiar with computers will have difficulty participating in this manner (Statistics Canada, 2012). MetroQuest was the only tool that provided alternative opportunities to the online access through the placement of kiosks at public events and facilities.

With an increasing number of users accessing the internet on their smartphones and tablets, these web platforms should also be compatible for use on these devices by modifying the website layout to suit differing size screens. EngagingPlans and MindMixer were the only tools designed to be easily viewable on smartphones and tablets. Users will have greater difficulty reading the content and navigating the MetroQuest or PlaceSpeak pages when using smart devices.

**Registration**

Each of the tools make all of the content and comments posted by the planning organization and users publicly accessible so that any member of the public is able to review this information without registering. However, each tool requires varying levels of registration in order to verify the identity of users and permit them to contribute feedback. EngagingPlans makes some of their interactive activities open to anyone, but requires users to register in order to participate in online polls and discussions. MetroQuest does not require any registration to navigate the various screens and submit input. However, the final page allows the planning organization to collect some basic information about the user. MindMixer requires participants to register in order to participate in online discussions. PlaceSpeak’s registration process is the most demanding because of the tool’s focus on validating the geographic location of participants. Therefore, citizens must submit their address and telephone number if they wish to participate in online polls and discussions.
Ease of use

EngagingPlans, MindMixer and PlaceSpeak websites are easy to use and navigate. They function like standard websites with a homepage and tabs that link to additional topics. The MetroQuest interface is unique and functions similar to a book by allowing users to flip between different screen. This creates a logical and linear structure that is easy to use and allows participants to return to previous screens at any time.

The basic functions of each platform, such as comment posting and participating in polls and surveys, are generally intuitive to use. However, the more sophisticated features offered by EngagingPlans and MindMixer, such as uploading photos and attaching comments to a map, are more challenging and may deter some participants with limited computer knowledge from using these features. MetroQuest maintains an intuitive functionality for more complicated features, such as mapping and budget allocation.

Design and layout

Each of the four online tools provide a website layout that is clear and well organized by linking various topics through navigation tabs. EngagingPlans provides the most advanced level visual effects and graphic design, which helps create an aesthetically pleasing and easy to read website. Conversely, some of the MindMixer topic pages appear cluttered and there is not enough distinction between text and hyperlinks that connect to more information. The PlaceSpeak website, shown in Figure 6, is clearly laid out, but the company logo appears at the top of every page and emphasizes the company’s brand over the project and host planning organization.
Instructions

Each of the online platforms provides sufficient instructions to guide users through the public engagement experience. The information-based websites require little instruction because users are simply browsing and reading the content. Each tool gives planning organizations the option to provide an explanation of how the tool works, how input will be used, answer frequently asked questions and list the contact information of project staff or the tool.
Information Management

The website platforms vary in their purpose and management of the information. EngagingPlans and PlaceSpeak serve as the primary information source for projects and provide a greater amount of information as a result. While this information can be overwhelming to citizens, it is well organized and can be distributed among many pages. The MetroQuest and MindMixer websites serve more interactive and idea-gathering purposes. As a result, they are complimentary to a primary project website and their content is carefully selected to support learning about planning issues and interactive participation. This information is well organized and supplemented by links to more detailed plans.
and reports. However, in some cases this information appears hidden on MindMixer and is difficult for participants to see.

Each website provides opportunities to integrate multi-media resources. However, due to the standardized layout and structure of these tools, only EngagingPlans and MetroQuest successfully integrate text with images and videos.

Language

The content and language of these websites is generally determined by the host planning organization and is not influenced by the tool. However, MetroQuest and MindMixer work with planners to present their content in an engaging and understandable format based on previous project experience. Each tool also supports translation to multiple languages in order to encourage participants from diverse backgrounds to participate.
Category 2: Flexibility

The flexibility of online tools varies from low to high based on their level of customization, integration of external applications and the ability to support subsequent stages of public engagement. The evaluation of tool flexibility is provided below and summarized in Table 7.

Table 7: Flexibility Evaluation Summary Table

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Engaging Plans</th>
<th>MetroQuest</th>
<th>MindMixer</th>
<th>PlaceSpeak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customization</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Integration</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Support Subsequent Stages of Public Engagement</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total (6)</strong></td>
<td><strong>6</strong></td>
<td><strong>5</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>Standardized Score (20)</strong></td>
<td><strong>20</strong></td>
<td><strong>17</strong></td>
<td><strong>7</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

Customization

Each of the online tools provides varying degrees of customization in terms of features and layout. EngagingPlans websites, shown in Figure 8, offer the greatest flexibility in designing a unique website layout and matching the appearance to the overall branding of a project or organization. This tool also allows planning organizations to select among a wide range features to support their public engagement objectives or to work with the tool developer to created customized tools. MetroQuest offers a similar degree of customization of tool features to suit public engagement objectives, but does not provide the same level of customization in layout and appearance because of the highly structured configuration. Additionally, both of these platforms will work with planning organizations to develop specialized features that may not currently be offered. MindMixer and PlaceSpeak are more standardized in their approach, allowing planners to select from a small range of features and provide only few options for changing the websites appearance and layout, such as through color schemes and images.
Integration

In many cases, online tools need to be integrated with other tools and websites to support a broader range of tasks. EngagingPlans has been designed to integrate the broadest range independent tools, such as SlideShare and IdeaScale, through plugins. While MetroQuest and PlaceSpeak are not as compatible with independent tools, they can be embedded into the websites of the host planning organizations. MindMixer does not support independent tools or plugin to other host websites.

All of the tools integrate external maps, such as Google Maps, to provide spatial information or support more interactive features. Both EngagingPlans and MindMixer allow participants to upload photos of treasured places and link these photos to specific locations on a map. EngagingPlans and MetroQuest can
incorporate existing GIS shape files by overlaying them on interactive map displays. Maps can also be used in more advanced ways to gather feedback. MetroQuest provides the most useful mapping application by allowing participants to attach comments to specific locations. In the City of Ottawa Cycling Plan application, planners invited citizens to share their cycling trips and identify areas in need of improvement. The City then collected these comments and used them to support spatial analysis and the development of the final Cycling Plan. Lastly, PlaceSpeak allows administrators to trace a project boundary on a map and display the locations of online participants on the website’s homepage.

Support Subsequent Stages of Public Engagement

Website platforms that support continuous public engagement can incorporate different features at subsequent stages in order meet evolving public outreach goals and grow the number of participants. The EngagingPlans and PlaceSpeak platforms typically serve as the primary information source of projects. This purpose encourages citizens to check back regularly for new activities and information. EngagingPlans also provides a flexible foundation that can be adapted by adding new features to meet the evolving needs of a project. PlaceSpeak does not support this same level of flexibility because it requires planning organizations to create a new website, at an additional cost, for subsequent stages.

The MetroQuest platform is highly flexible and offers diverse features that support the initial scoping phase by allowing participants to identify issues and set priorities and goals. This can be followed by an options phase, in which a new configuration is developed to explore and select among alternative plans. MindMixer is also well suited to supporting continuous engagement by posting new topics and questions in order to obtain different types of feedback as a project progresses. For example, the City of Guelph posted an initial topic to
gather ideas about what types of elements citizens would like to see in a park. These ideas were then be used to develop different design alternatives. These alternatives were then shared on the website and participants were invited to select their favourite concept and provide additional feedback.
**Category 3: Transparency**

The transparency ratings of online tools was generally lower than other evaluation categories with the exception of MindMixer. The evaluation of tool transparency is provided below and summarized in Table 8.

**Table 8: Flexibility Evaluation Summary Table**

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Engaging Plans</th>
<th>MetroQuest</th>
<th>MindMixer</th>
<th>PlaceSpeak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback and Contacts</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Background Information and Purpose</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Comments and Poll Results</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Outcomes and Documentation</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Authentication &amp; Security</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total (10)</strong></td>
<td>5</td>
<td>2</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td><strong>Standardized Score (20)</strong></td>
<td>10</td>
<td>4</td>
<td>18</td>
<td>12</td>
</tr>
</tbody>
</table>

**Key Contacts and Comment Form**

Each of the online tools provides an opportunity for participants to contact the project facilitators. EngagingPlans and MetroQuest embed a comment form directly into the website under a contact tab. A follow up email is then sent to participants confirming that their feedback or questions have been received and will be responded to within a specified period of time. The PlaceSpeak website allows the planning organization to list the contact information of one key staff member or the lead department on the homepage. MindMixer platform provides the most transparent contact information through a feature called “who’s listening?”. The “who’s listening” feature, shown in Figure 9, shares the names, contact information and photos of key staff and is posted on most pages including the homepage. This feature provides the greatest level of legitimacy and accountability by giving a face to the project and planning organization.
Background Information and Purpose

The general focus of the EngagingPlans and PlaceSpeak websites allow planning organizations to provide substantial background information about the planning initiative and their organization. PlaceSpeak provides detailed background information on a homepage that participants see right away. EngagingPlans provides a brief description about the project with links to more detailed information. The MetroQuest and MindMixer platforms serve more specialized roles. Their focus on interactive activities and obtaining citizen input means that only a limited amount of background information is usually provided. More detailed information is available through links to the main project website.
In addition to background information, it is essential for planning organizations to clearly communicate the purpose of the website, provide an explanation of what the results of the exercise will be and how citizen input will influence the outcome. While the host planning organization is generally responsible for providing this information, the online tools can be designed to make the purpose more clear by highlighting it in prominent locations. The general focus of EngagingPlans and PlaceSpeak means that their purpose is often more focused on informing citizens about the issues, but they also include posts on the homepage that invite citizen input, such as “Have Your Say”, “Did We Hear You Right?” and “How You Can Help?” The more focused nature of the MetroQuest and MindMixer websites make their purpose more clear. The goals of these websites are stated on the homepage and subsequent pages ask direct questions aimed at gathering citizen input.

**Comments and Poll Results**

Posting the comments and the results of polls enhances transparency by sharing participant input where other citizens can see and providing an measure of consensus. Most EngagingPlans websites favour the private submission of citizen comments over discussion boards. Citizens can also view the number of 'likes' a comment has received, but cannot see the results of online polls. MindMixer and PlaceSpeak publicly display the ideas and comments of citizens to specified topics. PlaceSpeak allows registered users to post comments anonymously, which can reduces the sense of transparency by hiding the identities of who is providing comments. Participants can respond and vote on each other’s comments and see the number of people that agree or disagree with different comments. Discussion boards encourage community dialogue, while the idea rating feature provides a democratic approach to identifying the most popular ideas by assuring planners that these ideas are broadly supported and not the voices of the loudest individuals. MetroQuest is the most closed of the
four online tools and does not support discussion or comment rating. However, MetroQuest does give participants the option to compare their preferences and choices with other participants by sharing the results of polls.

**Outcomes and Documentation**

Planning organizations should also follow online engagement initiatives by presenting the results and showing citizens what was done with the input they provided. Each of the online platforms allows planners to give citizens continued access to the website after the formal participation period has ended. The documents and discussions that are posted on EngagingPlans, MindMixer and PlaceSpeak websites provide a continued trail of evidence that enhances accountability and legitimacy, and displays the participant input that should inform the final plans and policies. These three websites also give planning organizations the option to post the outcomes or summary of the participation process. However, the length of time that these websites remain online depends on the hosting fee charged by the tool developer and generally do not remain posted beyond a year after the formal participation period has ended. The MetroQuest platform does not provide sufficient documentation of the participation process, but this information should be posted on the main project website.

**Authentication**

EngagingPlans, MindMixer and PlaceSpeak require participants to register and provide their name and email address before posting on discussion boards. This authentication process is beneficial because it helps prevent ballot stuffing and discourages negative and abusive posts by prohibiting anonymous comments. MetroQuest allows participants to provide feedback privately without registering or providing any personal information. They use a number of effective safeguards to prevent abuse and attempts to swing the results, including tracking IP addresses, time stamping and pattern recognition.
PlaceSpeak offers an additional level of authentication that requires participants to confirm that they live within the geographic boundary of the defined study area. This feature provides planning organizations with verifiable feedback and evidence that they are hearing from citizens that will be affected by specific planning decisions and policies. However, it can exclude citizens that live outside the defined boundary so the feature may only be desirable for certain types of projects. MindMixer provides an alternative approach to obtaining citizen feedback based on location while not excluding citizens from outside a defined area. By asking participants to provide their postal code as part of the registration process they can filter and analyze all the data spatially and give the most weight to resident within a certain area if they choose. Lastly, none of these tools do not prevent citizens from providing a false address or postal unless more advanced security features are used, such as ID numbers from a mailed postcards and phone numbers.
Category 4: Interactivity

The interactivity of online engagement tools varies from moderate to high as summarized in Table 9. The evaluation of tool interactivity is provided below.

Table 9: Interactivity Evaluation Summary Table

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Engaging Plans</th>
<th>MetroQuest</th>
<th>MindMixer</th>
<th>PlaceSpeak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presents Information in an Engaging Manner</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Two-Way Information Flow</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Various Input Opportunities</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Supports Ongoing Participation</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Project Updates</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Links to social media platforms</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total (12)</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Standardized Score (20)</td>
<td>17</td>
<td>15</td>
<td>13</td>
<td>12</td>
</tr>
</tbody>
</table>

**Presents Information in an Engaging Manner**

All four platforms use text supplemented with images to communicate planning information. While this basic approach provides citizens with necessary information, it does not fully utilize the potential of technology to communicate information in an interactive manner. EngagingPlans and MetroQuest go beyond this basic level by offering more sophisticated features to educate citizens. These platforms utilize interactive techniques and games, as shown in Figure 10, to invite participants to explore planning issues and select from a list of alternative scenarios. This allows participants to compare the impacts and tradeoffs of different planning decisions through maps and figures that update in real-time.
Supports Two-Way Flow of Information

The four online tools support varying degrees of information gathering from citizens. EngagingPlans and websites tend to focus on information delivery, but it also offer a number of interactive features to gather ideas and opinions. Similarly, PlaceSpeak emphasizes information delivery, but it offers a narrower range of information gathering features. On the other hand, MetroQuest allows planners to provide a wide range of screens whereby participants answer survey questions and select their preferences. All three of these platforms provide limited opportunities for direct discussion with planners and decision-makers. MindMixer also provides various information gathering features, but it separates itself from the other tools by allowing planners and decision-makers to label participant
ideas and attaching a status to them, such as “under review” or “implemented”. This feedback loop provides validation that citizen ideas have been listened to and encourages further participation.

**Various Input Opportunities**

In addition to supporting two-way flow of information, it is important for tools to provide multiple ways for participants to provide input based on their comfort, available time and interests. As discussed above, all four platforms provide basic features for gathering feedback, such as polls and discussion boards. EngagingPlans and MetroQuest offer the most features, which gives citizens and planners the greatest opportunity to contribute and collect pertinent information. The MetroQuest platform is highly structured and limits the total number of screens to six. This focused approach means there are limited opportunities to provide input, but planners are able to get more focused and relevant information. MindMixer and PlaceSpeak offer only a limited number of input gathering features and do not offer any advanced features.

**Supports Ongoing Participation**

Online tools can encourage ongoing engagement by ensuring that online participation is not a one-time event and fostering citizen dialogue about planning issues. EngagingPlans and PlaceSpeak support ongoing participation by allowing planning organizations to add new topics and activities. They also allow participants to respond to each other’s posts. MindMixer takes these features one step further as part of its crowdsourcing approach. Topics are framed in a way that encourage participants to generate ideas that respond to specific challenges. New challenges can be continuously posted by the planning organization and participants can filter ideas by most recent or most popular and add comments to build on other ideas. MindMixer also offers a rewards option that encourages participation and creativity by giving users points for completing actions and contributing the most popular ideas. The highly structured approach of
MetroQuest means that once participants complete all of the screens, there are no more opportunities to participate unless an additional configuration is developed by the planning organization in later phases. However, the highly engaging experience is likely to generate excitement about the overall planning project and may encourage participation through other means.

**Project updates**

EngagingPlans and PlaceSpeak allow upcoming and past events to be posted on the homepage or an events tab. Additionally, all four platforms offer features that allow participants to sign up to receive project updates by email by automatically build a mailing list for the planning organization. A unique feature offered by PlaceSpeak is an option where citizens can sign up to be automatically notified about any future projects or public engagement initiatives in the area, even when it is unrelated to existing project. This can enhance the number of citizens that are reached if PlaceSpeak has large database of users in a specified area. However, this option can violate the privacy agreements of some governments and only works if future projects also use PlaceSpeak.

**Links to social media platforms**

All four of the tools integrate various social media platforms that allow participants to follow the host organization for updates, and share the project with their networks. These features are an excellent strategy for spreading the word and attracting more participants.
Category 5: Resources

The resources required to implement online tools varies from moderate to high based on their setup and maintenance requirements, cost, and reporting abilities. The evaluation of tool resources is provided below and summarized Table 10.

Table 10: Resources Evaluation Summary Table

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Engaging Plans</th>
<th>MetroQuest</th>
<th>MindMixer</th>
<th>PlaceSpeak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setup and Maintenance</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cost</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Reporting and Monitoring</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total (6)</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Standardized Score (20)</td>
<td>13</td>
<td>17</td>
<td>20</td>
<td>17</td>
</tr>
</tbody>
</table>

Setup and Maintenance

The four online tools offer planning organizations varying degrees of support in setting up and maintaining a public engagement website. The EngagingPlans, MindMixer and PlaceSpeak packages include a range of ready-to-use features designed to simplify the setup process and allow planning organizations to take the lead. EngagingPlans also offers consulting services if planners require more advanced features. MetroQuest also takes this collaborative approach, working closely with planning organizations to scope and setup a website that meets their specific needs. The in-depth information presented on MetroQuest requires some additional work by planners to communicate complex and technical information in a manner that citizens will understand. MindMixer also provides planners access to a library of successful example topics used by past projects to assist planners that are new to setting up online platforms.

From a maintenance perspective, each tool provides ongoing technical support, but allows the planning organizations to update and revise their own content as needed. All content can be easily managed using a dashboard feature that is accessed from a standard internet browser. The maintenance required by these
tools means that some additional training of staff is required during the early stages, but afterwards planning organizations can efficiently make changes to the pages without having to go through the tool developer.

All four platforms offer online training and tutorials in order to assist planning organizations with setup or maintenance tasks. This training can be completed in a few hours and does not require any advanced web development skills.

**Cost**

Each of the four online tools varies in cost based on the level of service and features that are required by the planning organization. EngagingPlans’ pricing varies based on the needs of planning organizations, but generally ranges from $5,000 for the most basic package to over $15,000 for more advanced features and customization. MetroQuest pricing begins at $12,000 for the first project phase and an additional $9,000 for each subsequent phase. MindMixer pricing begins at $1,000 annually and supports an unlimited number of projects and phases. PlaceSpeak offers a basic package beginning at $2,000 annually and a premium package for $10,000 annually and charges an extra fee for additional topics.

**Reporting and Monitoring**

All four platforms provide reporting features that support monitoring of participation levels and the analysis of feedback. Reports and summaries can be automatically generated through the management dashboard. Additionally, MetroQuest, MindMixer and PlaceSpeak support more detailed analysis by breaking down participant feedback based on age, gender and location. This feature allows decision-makers to compare the priorities of different neighbourhoods and interest groups. MetroQuest also allows map-based and spatially-referenced input to be aggregated and analyzed using Google Maps or ArcGIS.
Figure 11: MindMixer Reporting (Source: City of Guelph)

**What is your vision for Jubilee Park?**

**Participants**

**AGE**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-17</td>
<td>0.0%</td>
</tr>
<tr>
<td>18-24</td>
<td>7.9%</td>
</tr>
<tr>
<td>25-34</td>
<td>11.6%</td>
</tr>
<tr>
<td>35-44</td>
<td>44.2%</td>
</tr>
<tr>
<td>45-54</td>
<td>32.6%</td>
</tr>
<tr>
<td>55-64</td>
<td>2.3%</td>
</tr>
<tr>
<td>65+</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

**GENDER**

- Male: 38.7%
- Female: 61.3%

**Engagement**

**TOPIC DETAILS**

*What do you want to do in this park? What do you want this park to look like? What features do you want to have?*

**ACTIVITY**

- Interactions: 327
- Comments: 69
- Ideas: 33
- Shares: 0

47 Ideas Closed
Tool Effectiveness Summary
The category and overall scores, shown in Table 11, provides a comparative summary of the four online tools based on five evaluation categories. EngagingPlans, MetroQuest and MindMixer all obtained ratings within five points of each other, but their distribution of scores differed across the five categories. PlaceSpeak received slightly lower scores on average and overall.

Usability and resources were the highest scoring categories and all tools performed well in this area. The four online tools also scored from medium to high in terms of flexibility and interactivity, but most tools still have some room for improvement in these categories. Lastly, transparency was the lowest scoring category of the four online tools with the exception of MindMixer.

Table 11: Summary of Tool Ratings (equally weighted out of 20)

<table>
<thead>
<tr>
<th>Tool Name</th>
<th>Usability</th>
<th>Flexibility</th>
<th>Transparency</th>
<th>Interactivity</th>
<th>Resources</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging Plans</td>
<td>17</td>
<td>20</td>
<td>10</td>
<td>17</td>
<td>13</td>
<td>77</td>
</tr>
<tr>
<td>Metroquest</td>
<td>19</td>
<td>17</td>
<td>4</td>
<td>15</td>
<td>17</td>
<td>72</td>
</tr>
<tr>
<td>MindMixer</td>
<td>17</td>
<td>7</td>
<td>18</td>
<td>13</td>
<td>20</td>
<td>75</td>
</tr>
<tr>
<td>PlaceSpeak</td>
<td>13</td>
<td>10</td>
<td>12</td>
<td>12</td>
<td>17</td>
<td>64</td>
</tr>
</tbody>
</table>
3.3 Interviews
The interview section presents the insights of professionals for choosing and using online tools. The interviewees consisted of four professionals who have implemented one of the four online tools for a planning project, including ReThink London (EngagingPlans), the City of Ottawa’s Cycling and Pedestrian Plan (MetroQuest), Jubilee Park in Guelph (MindMixer) and the Fahr Lands in Winnipeg (PlaceSpeak).

Each interviewee cited similar reasons for why their organizations decided to use online tools. There was general agreement that the current channels of communication with citizens were not as effective as they could be and that most people are unable or not interested in attending public meetings. Online tools were seen as an opportunity to increase accessibility to the planning process and attract a greater number and diversity of participants while using less resources. Interviewees also mentioned that online tools provided a mechanism to engage a specific segment of the population, particularly members of the younger demographic that consume the majority of their information online. The professional using PlaceSpeak added that one of the main reasons for selecting this specific tool was its ability to confirm the location of participants. As the Fahr Lands was a development project, they wanted to ensure that they were hearing from residents that lived in the specified area.

Each project shared the overall goal of increasing the number participants by using online public engagement tools. This was achieved by each project except for the Fahr Lands project, which could be a result of it being located in a more rural community, less technologically inclined citizens or the extensive registration requirements. Table 12 compares the number of citizens that participated in-person versus online. In addition to attracting more participants, the professionals also found that the websites helped promote the process and raise the profile of the project. Furthermore, despite the larger proportion of
online participation, all the interviewees mentioned the importance of in-person communication and suggested that online tools can augment in-person techniques, but should never replace them.

**Table 12: Comparison of In-Person and Online Participation Levels**

<table>
<thead>
<tr>
<th>Project</th>
<th>In-person</th>
<th>Online Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rethink London</td>
<td>4,000 people</td>
<td>Approximately 10,000 online participants/views, 1203 online comments</td>
</tr>
<tr>
<td>Pedestrian / Cycling Plan</td>
<td>Not applicable</td>
<td>5817 views, 2624 map input</td>
</tr>
<tr>
<td>City of Ottawa</td>
<td>5 large public meetings, 73 workshops</td>
<td></td>
</tr>
<tr>
<td>Jubilee Park</td>
<td>50 People</td>
<td>3866 views, 506 interactions, 38 ideas, 119 comments, 349 votes</td>
</tr>
<tr>
<td>City of Guelph</td>
<td>4 public meetings</td>
<td></td>
</tr>
<tr>
<td>Fahr Lands – East St. Paul</td>
<td>Approximately 400 people, 2 public meetings</td>
<td>1300 views, 30 participants, 26 comments</td>
</tr>
<tr>
<td>Fahr Group</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The specific objectives of the public engagement varied for each project along with the tools’ benefits and limitations. The ReThink London project used EngangingPlans as part of a broad visioning exercise to update its official plan. While the interviewee was satisfied with the EngagingPlans package, they felt that it only provided basic features, such as asking question and having citizens post comments. The interviewee emphasized the importance of making online engagement more interactive through mapping features and using videos to present planning documents and policies in short snippets. One drawback of the tool was that the photo sharing feature was onerous for participants because it required them to upload a photo and email it to the planning organization. As a result, this function may not have been used as much as it could of.

The Ottawa Cycling and Pedestrian Master Plan used MetroQuest to get pedestrians and cyclists to tell planners, where they went, how far, what was their level of comfort and where connections were missing. They found that reaching out to the public provided suggestions that planners would not have
received otherwise. The interviewee also noted that MetroQuest’s experience and support allows for advanced customization beyond other tools. However, this requires the right level of expertise and greater staff resource from the host planning organization to provide MetroQuest with the appropriate content. In particular, the project required one project manager, two cycling planners, two pedestrian planners and GIS staff from the City to help define the tasks and provide appropriate content for the platform. Lastly, the interviewee added that the tool was very useful for this application, but may not be suitable for all types of projects and public outreach objectives.

The MindMixer interviewee noted that the tool was used to develop a vision for a park by gathering citizen ideas and opinions and then voting on a preferred design concept. However, they noted that such an open tool may not be used on more controversial projects because it would likely attract negative comments rather than constructive discussion. Additionally, they found that the feedback they received online was much richer because people could comment and build on the ideas of others. Lastly, MindMixer provided clear evidence of how much citizen support there was for each participant’s idea, unlike at public meetings where a person provides an idea that gets written down, but it is difficult to measure how many other people support it.

The interviewee involved with PlaceSpeak believed the greatest advantage of this tool was placing all the information and comments in one location. The interviewee confirmed that while requiring participants to sign up and provide their names and addresses ensures the validity of responses, but it likely deterred some citizens from participating. They believed it would be beneficial if the extensive registration of PlaceSpeak was more flexible or not required for some interactive features, such as polls, so that participants could more easily submit their preferences. They also wished that PlaceSpeak offered the option to post multiple poll questions at the same time.
Each planning organization worked closely with the tool developers during the initial setup phase. As noted by the MetroQuest project, more advanced tool customization requires greater time, expertise and dedicated staff. The ReThink London interviewee noted that information based websites also require staff resources to continually update the websites content in order to keep people interested. After the online tools were setup, all of the interviewees believed that the training provided by the tool developers was beneficial because it allowed their planning organization to efficiently update information or access summary reports to analyze participant feedback.
3.4 Overall Tool Evaluation Summary

Planners desiring to use one of these online tools for a project can select the most appropriate tool by considering their public engagement goals, as well as what type of information they wish to share or obtain. Table 13 presents a synthesis of the tool evaluation based on the optimal fit of each tool for achieving specific public engagement goals, as well as their key strengths and limitations.

Table 13: Overall Tool Evaluation Summary Table

<table>
<thead>
<tr>
<th>Online Tool</th>
<th>Suitable Public Outreach Objectives</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>EngagingPlans</td>
<td>-Inform citizens about planning project by serving as the main information source.</td>
<td>-Attractive and easy to use interface.</td>
<td>-Advanced features require additional coordination and cost.</td>
</tr>
<tr>
<td></td>
<td>-Support in-depth learning about planning issues.</td>
<td>-High degree of customization in website appearance and features.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Measure opinions and prioritize actions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MetroQuest</td>
<td>-Support in-depth learning about planning issues.</td>
<td>-Clear and well organized layout.</td>
<td>-Closed platform limits transparency by not sharing input among citizens.</td>
</tr>
<tr>
<td></td>
<td>-Measure opinions, prioritize actions and allocate funding.</td>
<td>-Concisely structured helps ensure input is focused and relevant.</td>
<td>-Customized features require greater resources to setup.</td>
</tr>
<tr>
<td></td>
<td>-Collect spatial input through mapping.</td>
<td>-Features and activities are highly customized.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Most interactive platform with many advanced options for gathering citizen input.</td>
<td></td>
</tr>
<tr>
<td>MindMixer</td>
<td>-Measure opinions, prioritize actions and allocate funding.</td>
<td>-Standardized approach simplifies setup.</td>
<td>-Information can appear hidden, such as images and closed topics.</td>
</tr>
<tr>
<td></td>
<td>-Collect ideas through images, discussion and mapping.</td>
<td>-Highly transparent features; comment rating, archiving past topics and “who’s listening?”</td>
<td>-Limited options for customization.</td>
</tr>
<tr>
<td></td>
<td>-Deliberate issues through group discussion forums and comment rating.</td>
<td>-Most affordable tool at $1000/year for unlimited topics.</td>
<td></td>
</tr>
<tr>
<td>PlaceSpeak</td>
<td>-Inform citizens about planning project by serving as the main information source.</td>
<td>-Clear and well organized layout is easy to navigate</td>
<td>-Extensive registration requirements for all input features can create a barrier to participation.</td>
</tr>
<tr>
<td></td>
<td>-Collect ideas through images and discussion.</td>
<td>-Standardized approach simplifies setup.</td>
<td>-Limited options for customization.</td>
</tr>
<tr>
<td></td>
<td>-Deliberate issues through group discussion forums and comment rating.</td>
<td>-Emphasizes reliable feedback by defining project boundaries and verifying participant’s location.</td>
<td>-Only supports one poll question at a time.</td>
</tr>
</tbody>
</table>
EngagingPlans websites generally serve as the main information source for planning projects. The platform allows planners to share extensive background information through an attractive and easy to use interface and it offers the greatest level of customizing the website appearance. The standard website package provides some basic features for measuring opinions, prioritizing actions and collecting ideas. Planners looking to incorporate more advanced features, such as scenario exploration and budget allocation, will need to undertake additional coordination with the tool developer at a higher cost.

MetroQuest websites generally serve as extensions to a main project website that are geared towards interactive activities. The platform supports in-depth learning by exploring the tradeoffs of different planning decisions and can assist planners measure opinions and prioritize actions through surveys, polls and budget allocation features. Furthermore, as planning decisions often rely on spatial information, MetroQuest provides the best-designed mapping feature that links citizen input to specific locations. MetroQuest platforms are also concisely structured and highly customized to ensure that participation is interactive and feedback is focused. One major drawback of MetroQuest is that its closed structure can limit transparency by not sharing input amongst participants.

MindMixer websites also serve as extensions to a main project website that are geared towards interaction between citizens and planners. Although the features are basic, they are well designed for measuring opinions, collecting ideas and deliberating issues through surveys, polls, budget allocation features and discussion forums. MindMixer is also the most transparent and affordable platform. Additionally, the standardized approach can simplify the setup process, but the layout and legibility of the websites tend to be below average and there are few options for customizing the appearance.
Lastly, PlaceSpeak websites allow planners to create a primary online information source for planning projects. It offers a range of basic features for measuring opinion, collecting ideas and deliberating issues through polls, surveys and a discussion forum. While the standardized approach can simplify the setup process, the basic features are not as advanced as other platforms. PlaceSpeak is unique in that it was designed to provide planners with reliable feedback by verifying the location of participants. Unfortunately, this means that the extensive registration requirements can create a barrier that limits the number of participants.
4.0 Recommendations and Conclusion

This chapter provides recommendations for improving online tools, as well as several strategies and lessons for planners looking to use online tools for public engagement. These recommendations are based on the findings of the analysis and interviews with professionals that have used online tools.

4.1 Recommendations for Planners

**Recommendation 1: Match the tool to the goals of the public engagement initiative.**

This study has highlighted that each online tool has different features and functions designed for achieving specific public engagement goals. Therefore, planners must first consider what kind of information they want to share and receive from the public and ask which tool would be most effective at achieving this goal. For example, a tool that helped raise awareness of a planning issue for one project will not necessarily work for planners looking to gather information about safe routes to school. This report highlighted some of the most common public outreach goals and identified which tools offer features that can help accomplish these goals (see section 3.1).

**Recommendation 2: Consider the availability of staff resources and the level of customization that is needed.**

The most interactive online tools continually add new topics and activities in order to build public interest and achieve ongoing participation. Therefore, planners should keep in mind that online tools require dedicated staff to regularly provide new content and respond to citizen input in order to keep people interested. The availability of staff resources also relates to selecting the most appropriate tool. Standardized platforms, such as PlaceSpeak and MindMixer, can be setup quickly and easily by planning organizations and will meet most of their general needs, including posting background information, surveying opinions and
gathering ideas and comments from citizens. Alternatively, planners with specific needs can select more customizable tools, such as MetroQuest. This approach requires the expertise of staff to coordinate with the tool developer and provide them with relevant information.

**Recommendation 3: Fully utilize web-based technologies.**

Many of the websites implemented by planning organizations and reviewed in this study emphasized information delivery to the public using text. This typical approach does not fully utilize the potential of web-based technology and fails to engage citizens in a fun and meaningful way. If planners are serious about attracting more participants to the planning process, it is important that they understand what types of interactive elements are available and recognize that people consume online content differently. They desire shorter bits of information that are presented concisely, in plain language and supplemented with images or videos. Furthermore, online engagement is not a one-way street, so information should always be complimented with fun and interactive opportunities for participants to provide feedback.

**Recommendation 4: The registration process should allow users to begin participating quickly.**

Each of the online tools offered varying levels of registration to balance easy participation with verifiable input. Requiring citizens to provide extensive personal information can create a barrier to participation if users feel that this will take too much time or if they prefer not share their personal information. At the same time, planners may like to verify the identity and location of participants while collecting demographic information to support further analysis. Therefore, it is always important that planners consider how they will use the input gained from different features, such as polls or discussion forums, to determine what level personal information or registration is needed. Requiring users to sign up may not be necessary for websites focused on educating participants or measuring general
opinions on planning issues. Conversely, registration is more important in cases where the feedback will be used to make decisions or to compare population groups and neighbourhoods. Lastly, if participants are submitting comments in a public forum, registration helps ensure that participants are accountable for their actions.

**Recommendation 5: Integrate applications that citizens already use.**

Some of the more advanced online tool features were not well used because they can be onerous for participants. At the same time, the input that planners are looking for may be suited to applications that many people already use. This approach capitalizes on people’s familiarity with existing applications and a well-established user base. These applications can also increase the range of functions by integrating external tools, such as mapping or photo sharing applications. For example, Instagram provides an opportunity to develop a community asset map using the “geotagging” option to attach locations to photos. Social media platforms can be another effective mechanism for spreading the word of planning initiatives by encouraging participants to share the website through Facebook, Twitter and other platforms.

**Recommendation 6: Document the online feedback and share planning outcomes.**

The transparency of many online tools is diminished when planning organizations remove the website from the internet after the formal public participation period has ended and do not share the results and final planning outcomes. Websites provide documentation of what participants said and planning organizations can validate that they listened by posting the outcomes and final plans alongside the feedback of participants. Long-term planning projects and initiatives can also benefit and encourage a sense of community ownership by maintaining websites to receive feedback and track progress with the help of citizens.
Recommendation 7: Actively promote the tool and recruit participants.

Even the most sophisticated online tool will not be effective if citizens do not use it. Therefore, the use of any online engagement tool should begin by carefully thinking about how to recruit participants and how citizens not immediately familiar with a planning issue will discover the process. Promotion can combine both in-person and online recruitment strategies to generate awareness of the process. Traditional recruitment methods can include postcards, flyers, signs and advertisements. Larger projects can also benefit from additional promotion at public events or by working with local media to run stories about the project. Another effective strategy mentioned by one research interviewee is to target well-connected groups that will help spread the word efficiently through their established networks.

4.2 Conclusion

This report examined the functions, strengths and limitation of four widely used online engagement tools. The evaluation framework was adapted from previous research studies and applied to EngagingPlans, MetroQuest, MindMixer and PlaceSpeak using case examples from around North America. Each of these tools provides varying features that support the common public outreach goals of planning organizations. Planners should be aware of the differing tool functions when choosing online tools in order to select the most appropriate platform for their needs.

Further evaluation of the strengths and limitations of online tools found that most platforms were widely accessible and provided a user-friendly and intuitive interface. Additionally, the setup, maintenance and cost of these tools met the capacity of most planning organizations. However, the focus on simplifying the setup has led to a standardized approach by some tools that limits the level of customization and availability of advanced features. Alternatively, planners can
work with tool developers to create custom websites, but this can require planning organizations to spend extra time and money. Another significant shortcoming of online platforms is their ability to support a transparent planning process. Planning organizations can improve transparency by providing clear lines of communication with project staff, stating the purpose of online tools, sharing the feedback they receive and posting the final plans and policies.

Moving forward, online tools will play a growing role in the public engagement process because of their ability to connect with a much larger audience in an efficient manner. However, online engagement is a new and evolving aspect of planning and professionals need to understand how online engagement differs from traditional in person participation techniques. Rather than replacing traditional face-to-face engagement, the web has added new tools to the planner’s toolkit, each with its own strengths and limitations. While the current suite of online tools provides an excellent starting point, planners and tool developers should continue to look for and share new ways to advance the interactivity and transparency of online platforms to create successful and lasting civic engagement experiences.
References


