Using Real-Time Insights to Address Pandemic Challenges

The COVID-19 pandemic is producing an unprecedented need for rapid short-term and longer-range actions on the part of government agencies, foundations, grantees, service providers, and other stakeholders. Fast, effective, and cost-efficient decisions require insights into a range of critical needs, but part of providing solutions is knowing what the challenges are. Where are food and other supplies scarce? What is the full scope of coronavirus symptoms and the availability of testing? What are the economic impacts people are facing? What is the potential long-term impact of school closures and distance learning on students?

Actionable insights can be derived by combining existing information available from a range of sources with real-time data collected “on the ground.” The latter is necessary to fill gaps and can be acquired by connecting with households, nursing homes, work places, military quarters, or any other targeted population of interest. The knowledge generated can provide critical baseline measures on key issues of importance to the community or populations an organization serves, enabling them to develop action plans and policies, target resources, and effect positive change.

Abt COVID-19 Assessment & Tracking Tool (CATT)

Abt Associates has developed a web-based assessment tool, built on AWS, that helps organizations collect that essential COVID-19-related data from individuals during and after the pandemic. We’ve used our digital resources, significant questionnaire development expertise, and an internal and growing database of more than 1,250 COVID-19-related questions to identify the right areas to assess and the means to collect data. This combination of resources can help stakeholders develop valid assessment questions quickly and in many cases with external reference points for comparison.

WHY A WEB-BASED TOOL?

A web-based approach provides a viable and effective means for obtaining critical COVID19-related information as a vast majority (90%) of Americans now have access to the Internet. From a household as well as study perspective, such an approach accommodates:

- Convenience
- Multiple Languages
- Accuracy and Quality
- Rapid Analysis
How CATT Works

Abt’s COVID-19 Assessment & Tracking Tool (or CATT) is built on a combination of three simple, scalable concepts: a customizable landing page, a set of 25-30 questions based on your organization’s interests, and a dynamic dashboard for daily reporting:

The CATT landing page serves as the client’s online portal and can be customized to include the organization’s logo and links to other useful information and resources. The portal is accessible by any internet-enabled device, such as a desktop or laptop computer, tablet, smart TV, or smartphone. From that portal, visitors can take a self-administered survey.

The questions used in the survey component are customizable. By way of example, the questionnaire in our CATT Demonstration module (see link below) contains a range of 30 COVID-19-related questions that address health, coronavirus testing, employment impact, food security, housing status, and, for those with children, items related to school disruption. The survey takes just 5 minutes to complete.

All data collected are updated to our FISMA Moderate-level security data system and are then accessible to clients daily via a web-enabled dynamic dashboard reporting tool. This web-based interface provides standard and customizable views of data, including response mapping, charts and trends, and listing of key contact information for follow-ups.

Custom analyses to further support action planning also can be conducted, with data adjusted to match population totals:

The COVID-19 pandemic is like nothing we have seen in the past 100 years and will certainly lead to a world that will differ in a variety of ways from the pre-pandemic period of just a few months ago. We are already seeing these changes, and they include families and communities upended by lives lost and a host of health issues from coronavirus-related complications. There are also short and long-term effects on mental health and emotional well-being, employment status, economic downturns, threatened housing status, decreased food security, and disruptions to the child care, K-12, and higher education systems.

Why is it important to collect information now, during the pandemic? Because time is of the essence. We need to have an understanding of what is happening on the ground and in real time. How are individuals,

Visit the CATT Tool
Visit the CATT Dashboard

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households, service providers, program managers, facilities operators, etc., dealing with the range of issues they are facing? What is the extent of their challenges? How do experiences and needs differ across variables such as geography, race and ethnicity, socio-economic status, household size and make-up, family structure, population served, and program type? Baseline measurements such as these are required to understand the impact, measure variations over time, and ultimately develop effective policies and actions, marshal resources, and measure progress to help those in need.

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<tr>
<th>CHALLENGE</th>
<th>HOW THE CATT SOLUTION CAN HELP</th>
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<tbody>
<tr>
<td>A client does not have the baseline data required to make decisions based</td>
<td>Collect, analyze and report real-time, web-based information to establish a baseline and then</td>
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<td>on comparisons with aggregate or future data.</td>
<td>follow-up cross-time to measure progress toward achieving goals and meeting needs.</td>
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<td>A client needs additional data to supplement gaps in existing data.</td>
<td>Customized web survey questions can fill essential gaps and in many cases be combined with</td>
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<td>existing data by our experts in data science and statistical analytics.</td>
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<td>A client needs to quickly and accurately analyze, present, and base</td>
<td>The web-based solution can be accessed quickly from any internet-enabled screen. Data are</td>
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<td>decisions on existing and new data.</td>
<td>available immediately upon completion of the assessment and can be loaded into dynamic dashboards</td>
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<td>on a regular basis to allow for rapid analysis and actionable insights.</td>
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About Abt
Abt is a recognized expert in all aspects of survey research, data capture, management, analysis, and dissemination, including research and questionnaire design, assessment development, statistical modeling, data visualization, machine learning, and natural language processing.

Our world-recognized subject matter experts in the areas of health, housing, homelessness, education, environment, food security, and governance assist state and local governments, foundations, and other not-for-profit organizations with all phases of strategy, design, analysis, and interpretation of findings.

Contact:

Michael Link  | Division Vice President
Data Science, Surveys, and Enabling Technologies
Michael_link@abtassoc.com
770.342.9732

abtassociates.com