THE SYMPOSIUM WILL START SOON...
QUALITATIVE DATA & ANALYSIS IN INSTITUTIONAL RESEARCH

Presented by the Mānoa Institutional Research Office
Meet MIRO

Mānoa Institutional Research Office

Mission
The Mānoa Institutional Research Office

Announcements
- Check out the 2020 Earth Day Survey

Did You Know?
- Most recent data showed, UH Mānoa's
Georgeanna Robinson, EdD
Associate Director for Qualitative Research, Grinnell College
OPEN-ENDED QUESTIONS AND SURVEY DATA TOOLS

Presented by the Mānoa Institutional Research Office
OUR MISSION

To support university decision-making for institutional effectiveness by making meaningful and actionable data more accessible among our faculty, staff, and administrators.
Data that can bring ACTIONS.
History

2016 Teaching and Learning National Institute
Why MIRO Chooses Open-ended Survey Questions?
Starting Point

MIRO’s Qualitative Data and Analysis Journey

- 2016 Supportive Campus Survey
- 2017 Campus Experience Survey
- 2018 Campus Experience Survey (Student Survey and Employee Survey)
- 2018 Earth Day Survey
- 2020 Earth Day Survey
- 2020 NSSE Survey “Additional Comments"
- 2021 Earth Day Survey
ROADBLOCK: Data Dissemination

How to organize and disseminate tens of thousands of pieces of qualitative data efficiently?
SOLUTION: Innovative

- Yang’s Dissertation Methodology
- IR/IT’s Linguistics Background
- Qualitative Data Web App
Approach to Managing Qualitative Data

**EFFICIENCY**
- Analyze data with standardized procedures.
- Provide meaningful results promptly.

**EMPOWERMENT**
- Visualize data to understand key issues quickly.
- Provide in-depth information of key issues.
- Facilitate data-informed decision-making.
KEYWORDS

- Read comments and pick out keywords
- Grounded Theory
- Comparative Analysis

THEME & INDICATOR FRAMEWORK

- Similar keywords are grouped by indicators
- Similar indicators are grouped by themes

WEB APP DESIGN & PROGRAMMING

- Theme and indicator framework, word cloud, and frequency of keywords
- Demographic and Academic Filters
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<th>Theme</th>
<th>Indicators</th>
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<td><strong>Academic Affairs (1747)</strong></td>
<td>Teaching &amp; Learning (1210)  Academic Units (368)  Courses &amp; Curriculum (276)  Class (274)  Library (158)  Academic Workload (153)  Academic Support Programs (108)  Research (19)  Honor Program (5)  class scheduling (2)  Other Academic Affairs (83)</td>
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<td><strong>Campus Climate (1560)</strong></td>
<td>Campus Atmosphere (1207)  Focus on Student Success (372)  Safety (207)  Diversity, Equity, &amp; inclusiveness (117)  Community (72)  Intellectual (34)  Hawaiian (31)  Student Voice (13)  School Spirit (11)  Engaged (7)  Sustainability (6)  Smoke/drug-free (4)</td>
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<td><strong>Student Affairs (800)</strong></td>
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<td>Resources &amp; Services (329)  Efficiency &amp; Professionalism (165)  Staff (146)  Accountability (68)  Accessibility/availability (45)  Administrators (10)</td>
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<td><strong>Personal (499)</strong></td>
<td>Interpersonal Relationships (190)  Stress (111)  Student Accountability (105)  Health (64)  Family Responsibility (25)  Homesick (18)  Skills &amp; Knowledge (15)  Relaxing &amp; Socializing (13)  Personal Pursuits (10)  Exploring the Area (9)  Long-term Engagement (2)  Other Personal Issues (13)</td>
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ROADBLOCK: Data Display

1. Inappropriate words
2. Data Display Errors
3. Confidentiality
We created an automatic auditing program that could identify and convert the inappropriate words, such as cursing, into more neutral expressions.
We created a program that could identify these text errors and replace them with the correct text that the respondent meant to type.
We used Natural Language Processing to identify names or words in survey responses and convert data to protect confidentiality.
### Data Conversion

<table>
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<th>Responses</th>
<th>Method of Conversion</th>
<th>Examples</th>
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<tr>
<td>Disrespectful comments</td>
<td>Take out cursing words and replace them with [...] or less negative words</td>
<td>(1) Close mindedness, annoying tests, and [...] grading systems.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2) Parking is [hard].</td>
</tr>
<tr>
<td>Mention someone’s name negatively</td>
<td>Take out the name and replace it with [Name] or [Position]</td>
<td>Have you not read [Name]’s racist comments about Hawaiians?</td>
</tr>
<tr>
<td>Participants / People mentioned can be identified</td>
<td>Convert the specific information to be more general (e.g., de-gender)</td>
<td>I had one counselor that kept asking about the relationship between [the counselor] and I, even though I thought it was a completely professional one.</td>
</tr>
</tbody>
</table>

**PURPOSE:** maintain as much information as possible after data cleaning
The Manual Process is Unavoidable...
Open-ended Survey Expansion

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Lacked sufficient knowledge and experience to develop the theme and indicator frameworks for those new surveys.
We relied on our campus partners who have specialized knowledge and are interested in seeing and using the survey results.

SOLUTION: Develop New Frameworks
ROADBLOCK: Data Compiling

Tedious and inefficient process to compile data from multiple survey web apps and questions.
We created a “combined survey web app” to allow users to see related comments from all surveys and all questions.
“Search Keyword Web App”

We created a “Search Keyword Web App” to help users search for any word in all surveys.
WEB APP DEMONSTRATION
How can we spread the word so more people know about our qualitative data tools and make use of them?
Solution

- “Reading clubs” & work-together sessions
- Presenting at meetings & conferences
- Advocate qualitative data and tools
- Talk about it at this symposium
MIRO met with several transfer advisors and read transfer students’ comments together. Advisors were very inspired and came up with ideas on what to change and plans to take action right away.
USER Feedback: Sustainability

- Sustainability Curriculum Planning
- Sustainability Initiatives and Proposals
- Facility improvements
"The Student Experience Survey provided an opportunity for us to "query" the student body without actually initiating our own engagement effort. Starting with the MIRO data tools, we were able to use natural language processing, word frequency analysis, and other methods to "ask" students about housing, social activities, and a plethora of other topics that we needed to inform the Framework plan. The data tools shared by MIRO enabled us to glean a tremendous amount of knowledge from the UH Manoa student body that we otherwise would have struggled to learn. In other words, the Student Experience Survey and MIRO's data tools helped to give students a greater voice in campus planning activities than otherwise would have been impossible."

Josh Jackson, Former Senior Associate @MKThink
"The campus experience survey is a good gauge on what is successful and where there are areas that need further attention...... It reinforced the areas needing to be reviewed and addressed on campus, hope we will see a reduction in certain concerns and questions as we act upon these changes."

Ann Sakuma, CampusHELP Director
“The qualitative data is much broader and richer. It allows us to be more responsive than just having numerical data. It’s more nuanced, and it’s the kind of information and data that I’m looking for to drive my decision making and my work in my office.”

Amrita Mallik, Former Campus Climate Initiatives
Benefits of Qualitative Data

- Phenomena or issues that are hard to be measured by numbers
- Overlooked or Emerging issues
- Help to interpret and use quantitative data.
- Help to develop solutions that are tailored to a particular issue or program.
Q & A

Georgeanna Robinson, EdD
Associate Director for Qualitative Research, Grinnell College

Kelly Jung-ts Lin
Institutional Research Analyst, University of Hawai'i at Mānoa
Q1: Can you share some insights or suggestions of designing interview questions?
Q2: How does MIRO design open-ended questions? Do you use more general questions or specific ones?
Q3:
Can you share your tips for transcribing Interviews, especially data from group Interviews?
Q4:
What do you do to generate conclusions or find distinct themes in qualitative feedback without bias?
Q5: Can you talk about what software you use in your qualitative study, if any?
Q6:
Can you talk about what methodologies do you use for coding qualitative data?
Q7:

How do you comment on the phenomena of devaluing qualitative data both in the university management and in higher education research.
Q8:
Do you find the campus community receptive to your data gathering efforts and resulting research?
Q9: How do you organize and present qualitative data in a clear and concise manner, without sacrificing the variety/breadth of information presented?
Q10:
What’s important to report on once the qualitative analysis is completed.
Q11:
We find the turnaround time for producing qualitative analysis is often prohibitive. Any tips on how to be effective but still systematic?
Q12: How do you find time to do qualitative research?
Bring Humanity out of the Numbers
Comments and Questions
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