CONEY

A CONversational survEY Toolkit

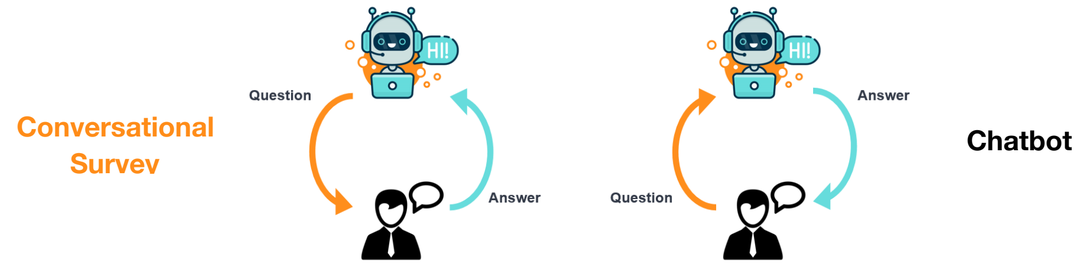
Damiano Scandolari (damiano.scandolari@intern.cefriel.com), **Gloria Re Calegari** (gloria.re@cefriel.com),
Mario Scrocca (mario.scrocca@cefriel.com), **Irene Celino** (irene.celino@cefriel.com)

To try **CONEY** scan the QR code or visit bit.ly/try-coney

WHAT IS CONEY?

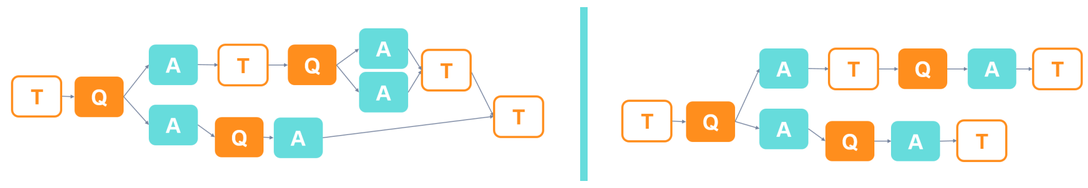
Coney is an innovative approach *to enhance user experience in survey completion* through a **chat interaction pattern**.
Coney is a complete toolkit to digitally **design, administer and analyze results of conversational surveys**.

Chat-like surveys to mix qualitative and quantitative approaches



Differently from usual chatbots interaction, Coney administers surveys having control over the conversation flow, it asks questions and the user replies. Coney lets users experience **questionnaires as a message conversation with another human** (qualitative style) **still collecting quantifiable information** on answers (quantitative style).

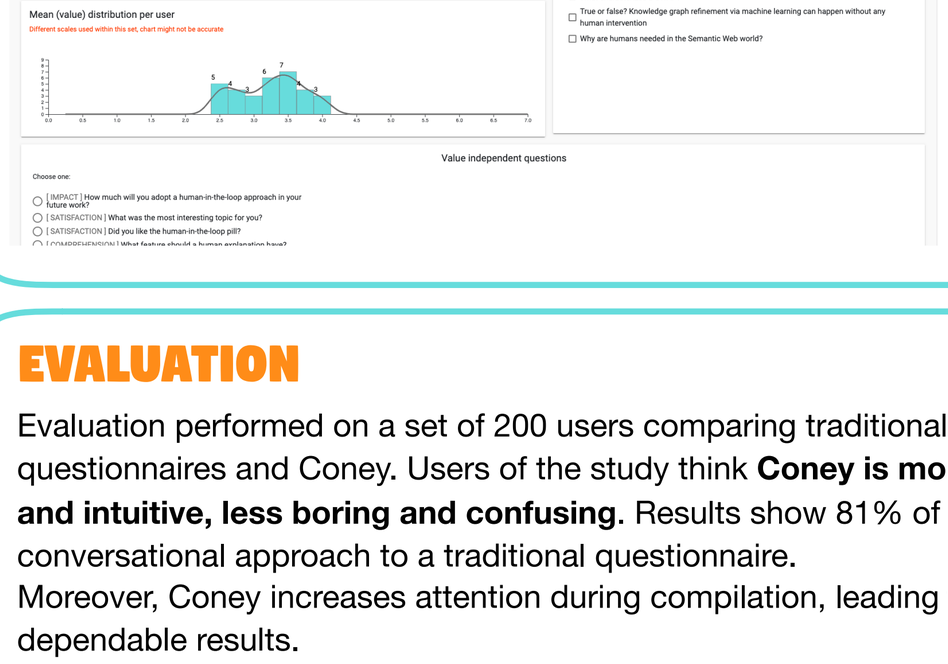
Storytelling approach to enhance user engagement



Coney allows questionnaire designers to build an **interactive storytelling** that results in a natural chat experience for survey compilers through the inclusion of **colloquial and multimedial content** (question, text, image and link). Coney allows different branches to model different **sequences of message exchanges** with respect to answers provided by the user.

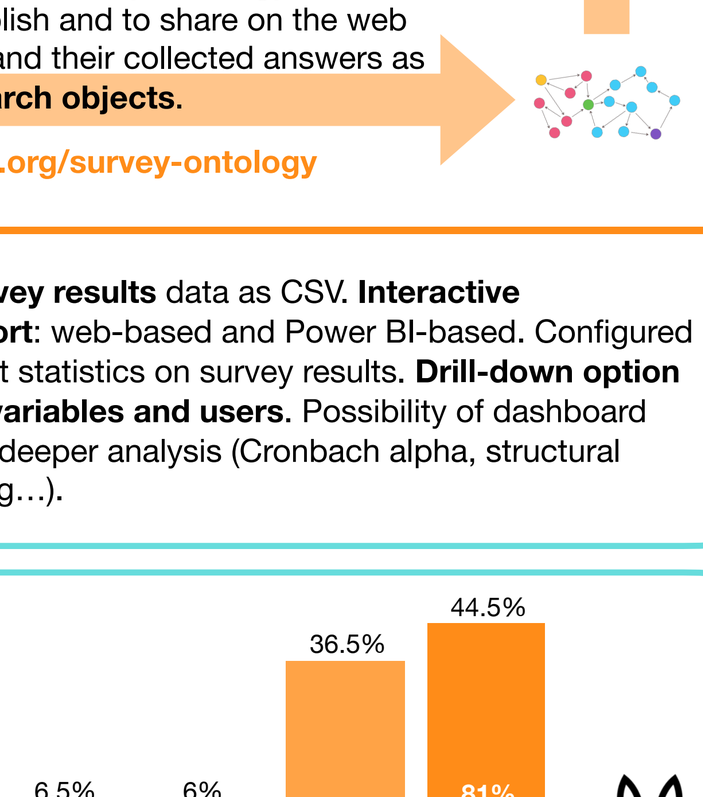
CONEY Create

Intuitive **visual drag & drop editor** for survey design. Different **question options** with different visualizations. Question annotation for **identification of investigated latent variables** to support result analysis.



CONEY Chat

Web-based user interface for survey administration through chat: textual area and custom interaction patterns (emoji, stars, slider, options, dropdown, checkbox).



CONEY Collect

Graph-based data model to appropriately represent the arbitrary acyclic graph of interaction flows. Graph database to efficiently store and query the survey data.

To implement FAIR principles, we offer the model of Coney as a **survey ontology**.
This allows to publish and to share on the web both the surveys and their collected answers as **linked data research objects**.

Ontology at: **w3id.org/survey-ontology**

CONEY Inspect

Download of survey results data as CSV. **Interactive visualization report**: web-based and Power BI-based. Configured with most frequent statistics on survey results. **Drill-down option based on latent variables and users.** Possibility of dashboard customization for deeper analysis (Cronbach alpha, structural equation modelling…).

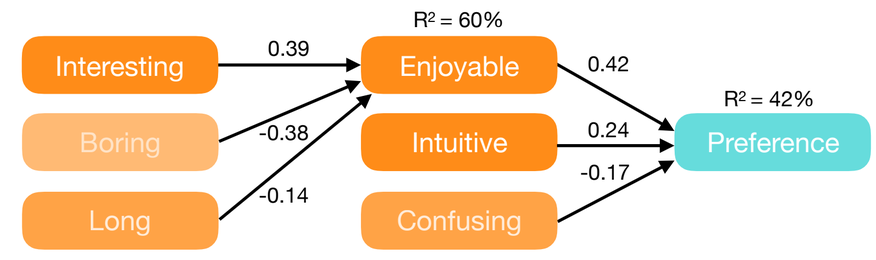
EVALUATION

Evaluation performed on a set of 200 users comparing traditional online questionnaires and Coney. Users of the study think **Coney is more interesting and intuitive, less boring and confusing**. Results show 81% of users prefers a conversational approach to a traditional questionnaire.
Moreover, Coney increases attention during compilation, leading to more dependable results.

«A very novel way of answering a survey, it certainly held my attention better than a regular check box style survey. I would suspect as it was formed more like a message exchange I felt I should engage more and I wasn't able to have a predetermined answer ready as I didn't know what question was next. I liked it.»

1. *Likert-scale survey method preference.*

2. *Factors influence on method preference*



Cefriel
POLITECNICO DI MILANO
Knowledge Technologies Group
viale Sarca 226, Milano, Italy
www.cefriel.com

The presented research was partially supported by the ACTION project (grant agreement number 824603), co-funded by the European Commission under the Horizon 2020 Framework Programme.

ACTION