Next Generation "Content to Rules" Capability

A Proposal to

Crowd Source a Step Change in the Corporate Secret Sauce Kevin Boettcher June, 2020

Business Context





Government Sources of Sales Tax Content Corporate Secret Sauce Tax Calculation Engine with executable tax rules

Inside the Secret Sauce



- Situation: non scale-able, largely manual process, subject to errors to map tax law to executable rules
- Challenge: existential threat to business viability

Proposal

- Plausible Hypothesis:
 - Natural Language Processing and Machine Learning technologies are capable of finding and transforming tax content into executable rules
- Approach:
 - Put the question to the Crowd
- Elements of proposal outlined in the following slides:
 - Problem Formulation
 - Governance
 - Incentives

Problem Formulation

- Givens:
 - 1. Content Sources: dozens of URLs that point to jurisdiction taxability specifications
 - 2. Corresponding tax rules, represented in excel table format

• Challenge Task:

 Produce the excel table for the content sources using machine processing only



Governance

- Constraints on Contestants
 - Non-disclosure of proprietary excel format for tax rules
 - IP ownership of winning solution(s) is with contest sponsor
- Explanation assistance available on excel format for tax rules, with questions and responses shared with all contestants
- Contest period: 90 days
- Judging Criteria
 - Performance with content sources provided (65%)
 - Performance with content sources that are similar jurisdictions but are held back, and for which there are known tax rules (25%)
 - Performance on new content sources (10%)

Incentives

- Cash prize of \$500K (TBR)
- Awarded to two best performing submissions
- Minimum performance required:
 - 90% on content sources provided

Contest Design Challenges yet to be Addressed

- Non-disclosure risk
- Finding the right crowd to present challenge to
- Right-sizing the incentives