Business Overview for Collective Decision Engines (CDE)

Founders:
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1. What CDE Does
CDE provides tools for collective decision-making that optimally integrate the information, priorities, and preferences of all participants. Its offerings improve the productivity and effectiveness of organizations: small to large; for-profit or not-for-profit; business or government. CDE’s products and services, offered on-line with full mobility, deliver a groundbreaking approach to information aggregation and decision-making called Quadratic Voting (QV).

Today’s best practices for collaborative decision-making rely on: consensus building; surveys that are analyzed by management; voting by majority or plurality rule; and public-opinion polling. These methods have value, but also severe flaws. They are too easily captured by tyrannical majorities, “gamed” by individuals who seek to control outcomes, or distorted by voters with limited interest. As a result, valuable input and vital information is lost, leading to poor decisions. By contrast, QV ensures that people who engage in collective decision-making truthfully reveal their values and interests to each other. Like the invisible hand of the market, QV guides self-interested individuals toward optimal group decisions.

QV can improve a wide range of decisions at many levels.

• Businesses that seek input from employees can use QV to ensure that employees provide information truthfully—for example, about which opportunities to pursue or which workspace enhancements to undertake. QV motivates employees to weigh in on the matters that they know best and care most about, and discourages “group think.”
• Stockholders can influence key management decisions, in which case QV can prevent company management from disregarding the interests of stockholders, while limiting the self-serving options available to a corporate raider.
• Positive and negative incentives akin to those cited in the cases above make QV superior as a means for:
  o users to select and shape offerings from a service provider
  o citizens to participate in approving government legislation
  o political candidates to ask citizens for collective guidance on issues to champion

2. QV Explained
Glen Weyl, Assistant Professor in Economics at the University of Chicago, discovered QV studying the strengths and weaknesses of group decision processes such as majority rule. QV stood apart from the alternatives studied because:
1. It is **adaptable** to a wide range of contexts and solves all of the standard problems faced by collective decision-making procedures.

2. It **reduces the power of popular and charismatic individuals**, putting a **premium on sound arguments that rest on accurate information**.

3. It is the only practical system that compels participants to consider their **priorities and how strongly they feel about each issue; and then to fully reveal this information through their voting**.

QV is simple, but powerful. Administrators frame a set of proposals, typically with “yes” or “no” answers. For example: “Should the Company develop Project X?” Participants vote for or against any of the answers, using Collective Decision Credits (CDC’s) that they hold in individual on-line accounts. Participants exchange CDC’s for as many votes as they choose for each proposal, until they have used up all the CDC’s in their account. For one individual voting on a specific proposal, the CDC cost of multiple votes is the square of the number of votes to be cast (hence “quadratic”). For example, one vote for or against a specific proposal costs one CDC, while five votes cost twenty-five CDC’s.

This procedure makes the cost per vote proportional to the number of votes “bought,” and thus causes individuals to buy votes in proportion to how much they know or care. No single person will spend all of his or her CDC’s on a single issue, because the cost of an additional vote on that issue will become prohibitive relative to the very low cost of the first vote on another issue. Furthermore, individuals will not spend many CDC’s on issues they know or care little about. This makes it impossible for a popular or charismatic individual to win over those who are uninformed, as they will want to conserve their CDC’s for future decisions that are more important to them. This, in turn, leads to substantive discussions aimed at shifting the informed views of those who really care about making each decision correctly.

Different businesses have different collective decision-making needs that CDE will customize its QV procedures to address. CDE will benefit from these refinements based on customer experiences, and from the wealth of data it collects as QV is applied.

**3. QV is the Best Collective Decision Mechanism Available**

CDE co-founder, Glen Weyl, has **shown mathematically that the best way for QV participants to realize their goals is to vote honestly**. The key insight is that if people must pay the square of the number of votes they cast, they will optimally balance their own interest in influencing the outcome against the cost that their favored outcome imposes on others who disagree with them. Therefore, the outcome of the QV process maximizes total return for all involved. In fact, Glen has shown that QV is the only practical system that achieves this, and is, therefore, the optimal procedure.

This has profound theoretical implications within the discipline of economics. A huge body of economics research proves that free markets are the best mechanism
for allocating private goods. QV can be shown to be a similarly optimal mechanism for allocating public goods, including collective goods that businesses produce for employees, customers, investors, and other stakeholders.

4. CDE’s Business
CDE intends to develop a **first-mover advantage and develop a brand that will make it the leading supplier of collective decision procedures.**

5. What CDE is Looking For
CDE’s co-founders seek one or two partners with business expertise and technical expertise who will lead the company as **CEO and/or Technical Partner.** It is **possible that a single person with the right set of skills could be sufficient,** but two separate positions are described below.

**CEO**
The CEO would have operational control of CDE. He or she would hire and fire employees; make financial decisions; manage customer relationships; and so on. In the earliest stages, the CEO would develop the business plan; find clients; manage client relationships; and raise capital.

**Technical Partner**
The Technical Partner would have responsibility to develop the QV software; analyze data that CDE receives from customers; and, with the CEO and other employees, customize and further improve the software in response to clients’ needs.

At the outset, it is expected that the CEO and Technical Partner will perform all their tasks directly. As the business grows, they should be able to delegate certain tasks to employees they hire. The partners will initially be compensated with equity. Once a compelling business plan is in place and the business begins to transition from Stage 1 to Stage 2, the co-founders are willing to provide working capital of up $50k to help sustain the business until seed capital can be raised. The co-founders are willing to provide guidance and consulting, but do not expect to be directly involved with operational control of the firm.