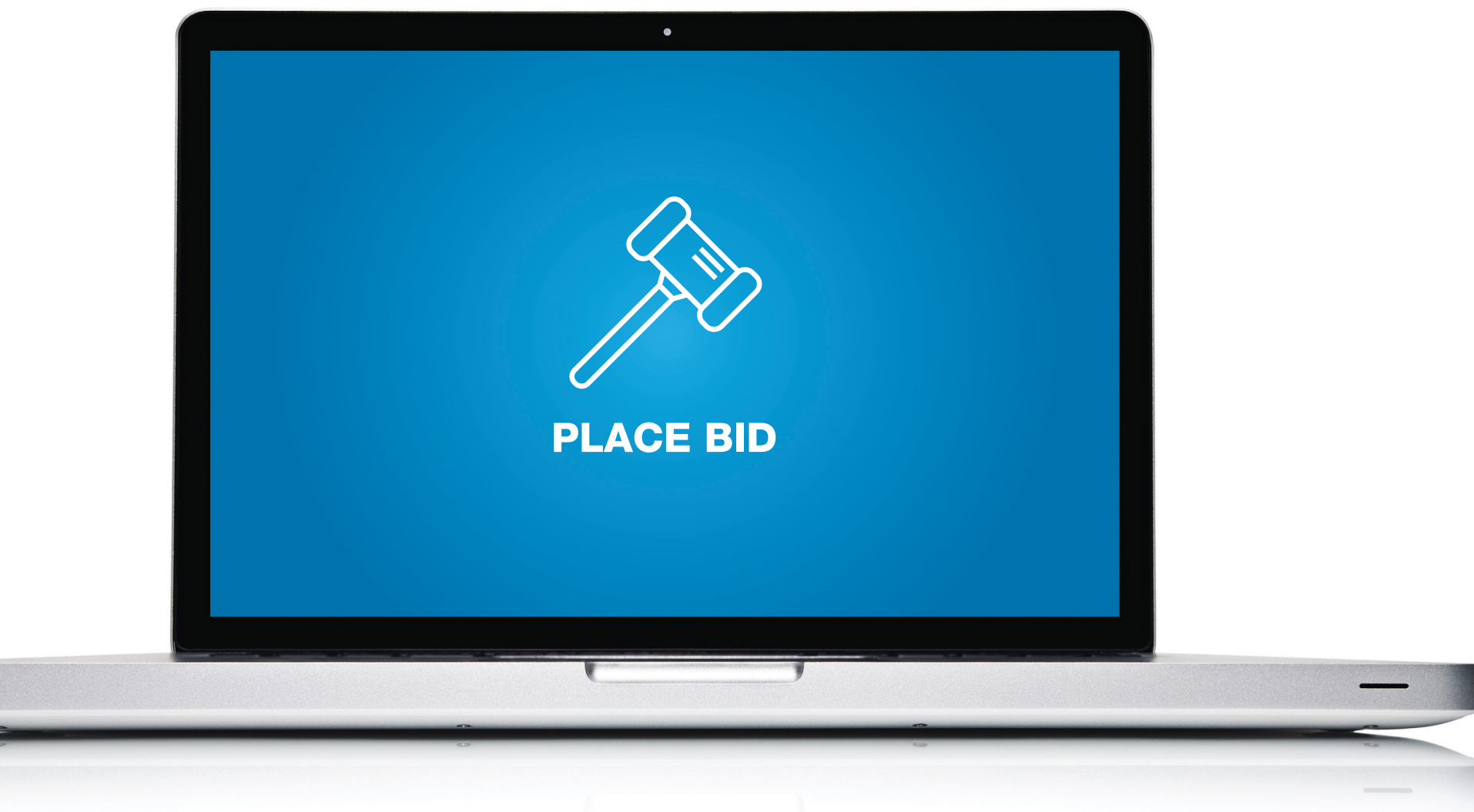




Better bankruptcy auctions



CRA's auctions and trading systems make complex transactions more efficient with better outcomes.

#### [Simple bankruptcy auctions are moving online.](#)

Online auctions have emerged to handle simple bankruptcies. These auctions for few or relatively low-value assets offer limited flexibility and use auction designs that do not maximize the value of the assets.

#### [Complex auctions are still conducted in person.](#)

Complex auctions, which typically involve multiple, high-value assets, for the most part still are conducted the traditional way because there has been no solution that is sophisticated and flexible enough to handle them. CRA is uniquely positioned to solve this problem for bankruptcies. As we have done for a range of industries for over 20 years, we offer an online approach for complex auctions that will benefit debtors, creditors, buyers, trustees, and all other parties involved.

# CRA's online advantage: Better outcomes, better process.

When designed properly, an online auction brings together sellers and buyers, and reveals fair market values through effective price discovery. Sellers achieve their objective to maximize value, and successful buyers are those who value the assets the most. All participants benefit from a process that is efficient and transparent.

## How do we achieve better outcomes?

### Maximize value

Our auctions are designed to maximize the value of assets. The design of the competitive bidding process encourages bidders to bid their valuations aggressively, and ensures that the bidder with the highest valuation of an asset wins that asset. A bidder would gain nothing by trying to game or manipulate the process.

### Attract participation

Our auction process makes participation easier and minimizes the cost to participate. What would motivate bidders to participate? We determine what barriers exist to participation and design the online auction to remove those barriers and to encourage bidder participation.

### Minimize information and transaction costs

Information dissemination before and during the auction can involve multiple communication channels. Our online auction process streamlines the flow of information and all authorized parties have timely access to the information and data.

### Increase efficiency and save time

Gathering all parties in the same location is expensive and difficult to organize. With our online auction, a company's bidding team and advisers can be in convenient locations across the globe. This facilitates participation by bidders, enables more real-time analysis, and encourages them to bid confidently.

### Ensure a fair, transparent processs

The auction rules are specified ahead of time and enforced equally for all bidders. Bidders have equal access to information and equal opportunity to bid on the assets and combinations of assets. Bidders appreciate the level playing field and know that to win they simply must bid the highest value.

## What makes our process better?

### Designed and managed by auction experts and practitioners

For over 20 years, CRA has provided extensive expertise in auctions and trading platform design,implementation, and participation for businesses, sellers, buyers, regulators, governments, and other market participants.

### Track record across 300+ auctions

CRA has designed and managed hundreds of successful auctions and trading events ranging from hundreds of thousands to billions of dollars.

### Tailored to the needs

We develop online auction processes tailored to meet your reporting needs as well as the needs of your buyers, sellers, and other parties.

### User friendly

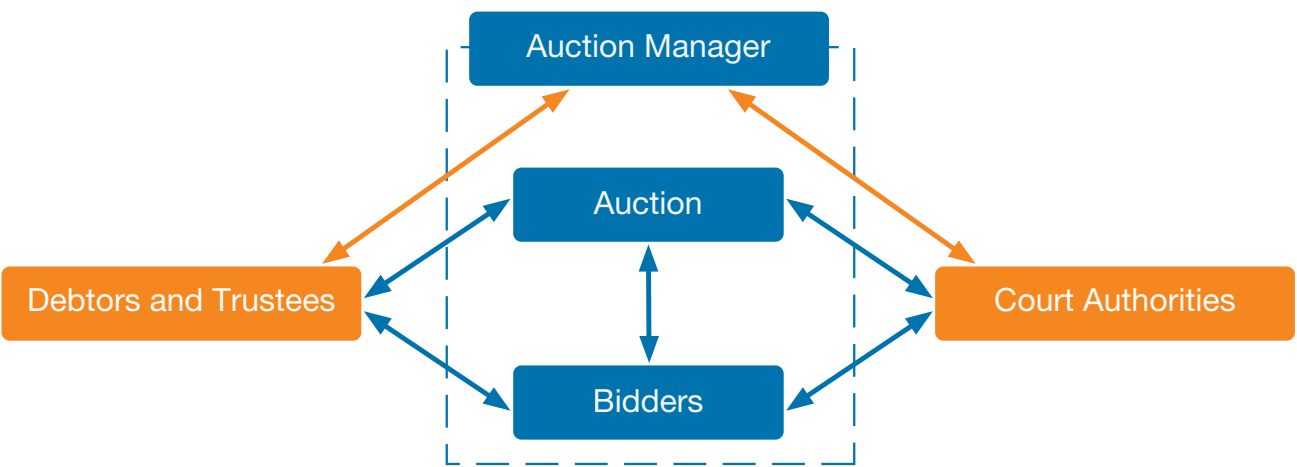
Our trading platforms are designed to make the auction process easier and more efficient for all stakeholders, with better information and lower cost.

### Tracked electronically

All bidding activity is tracked and logged automatically. Summary and detailed reports are tailored to the needs and requests of the parties.

### Reputation

CRA has extensive experience designing auctions and trading systems that meet guidelines and requirements set by state, provincial, regional, federal, and international agencies and organizations.



Our process streamlines communications in real time to facilitate both complex and simple auctions.



## Case study: GlobalDairyTrade Online Marketplace

**\$20+ billion** transacted since 2008

### Challenge and opportunity

Fonterra, the world's leading dairy exporter, wanted better price transparency, price information, and price risk management.

### Solution

CRA designed and developed the electronic trading platform, GlobalDairyTrade (GDT), which includes both a public information site and a secure bidding site. CRA is also the independent Trading Manager in charge of GDT's trading events.

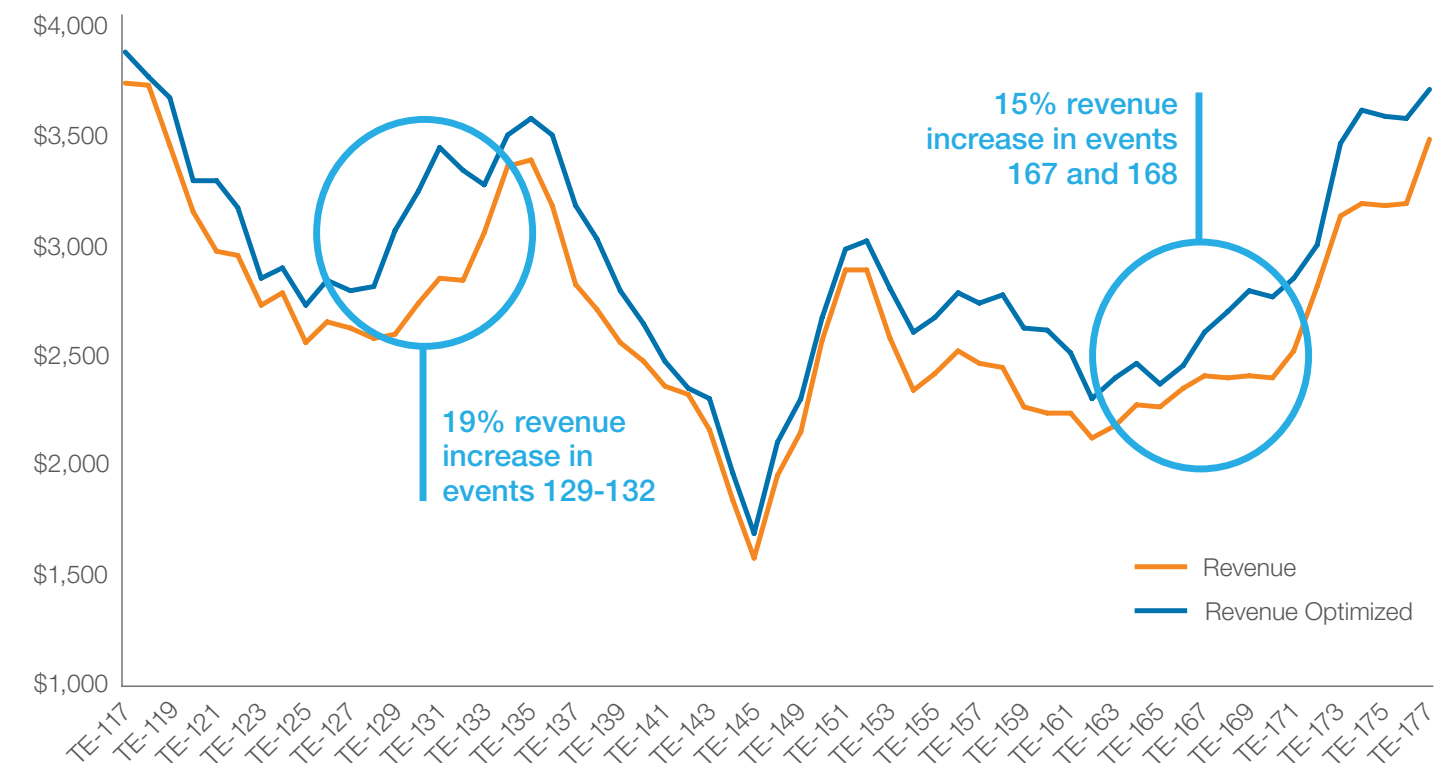
Since 2008, GDT has grown into a multi-seller, multi-buyer platform. Hundreds of participants from around the world have participated in GDT's twice-monthly trading events trading about 100 products in each event. GDT generates benchmark prices that are used throughout the international dairy industry, and futures and financial contracts are traded based on the prices and outcomes generated by the platform. Over \$20 billion of internationally traded dairy products have been sold on this growing marketplace.

## How GDT helps raw milk suppliers optimize revenue

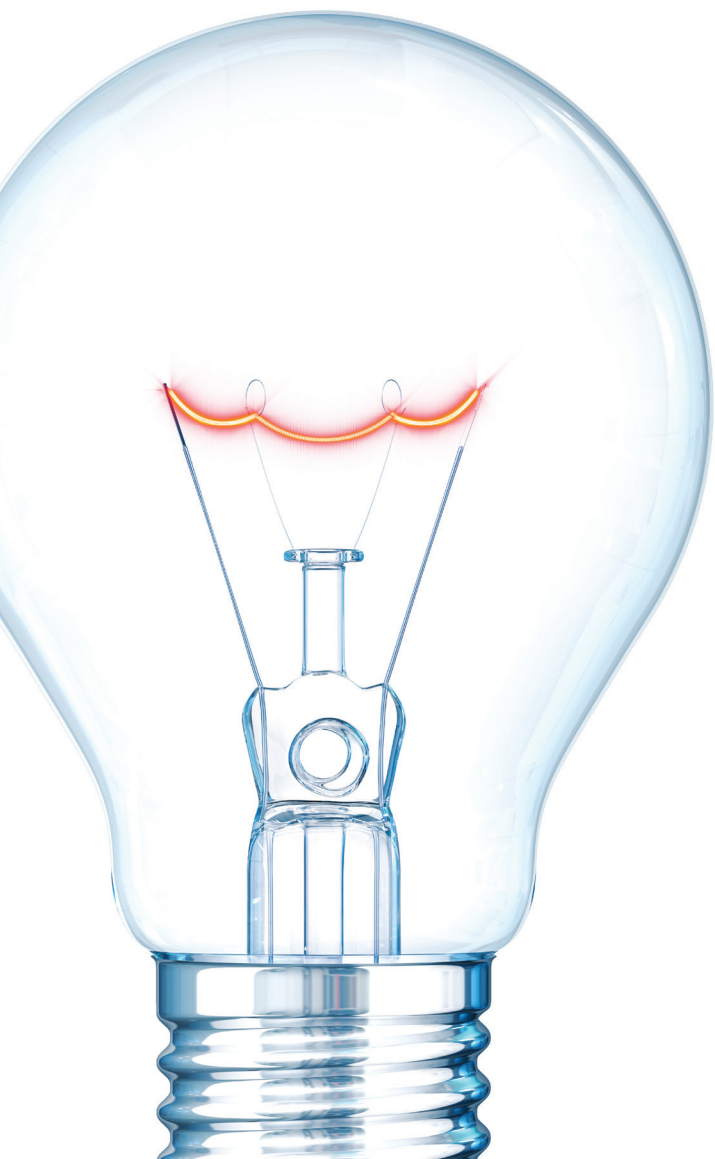
Raw milk can be processed into various combinations of intermediate dairy products. The price signals from GDT trading events enable suppliers to respond to market conditions and select the optimal mix for production.

Suppliers optimize their profits and improve their bottom line by processing raw milk into the highest-value products. In cases where production flexibility is limited, the value differentials inform investment in processing capabilities. Buyers benefit from increased supply offered for products in highest demand.

The GDT platform produces fair, credible, competitive prices used as benchmarks by the rest of the industry







Case study:  
**Auctions of Intellectual Property Assets**

**Maximize the value** of patent portfolios and applications

**Challenge and opportunity**

Clients were concerned that a traditional auction approach would not maximize the value of their IP assets (e.g., patents, trademarks), so they retained CRA to develop an optimal solution.

**Solution**

CRA designed and implemented an auction process to maximize the value of our client's IP portfolios. Combinatorial bidding strategies are particularly important when you are selling bundles of assets such as IP portfolios because each combination of assets will have different values to different bidders. CRA worked with our client to combine their assets into different packages – while also enabling bidders to create their own packages – in order to both attract interest and encourage bidders to bid their highest valuations.

Moreover, CRA made information and documents readily available via an information Website, facilitated the qualification process via CRA's online bidder qualification portal, minimized the time and cost of participation, streamlined the overall process, and hosted bidder information webinars. Participants have appreciated the process as fair, transparent, and efficient while ensuring a level playing field.

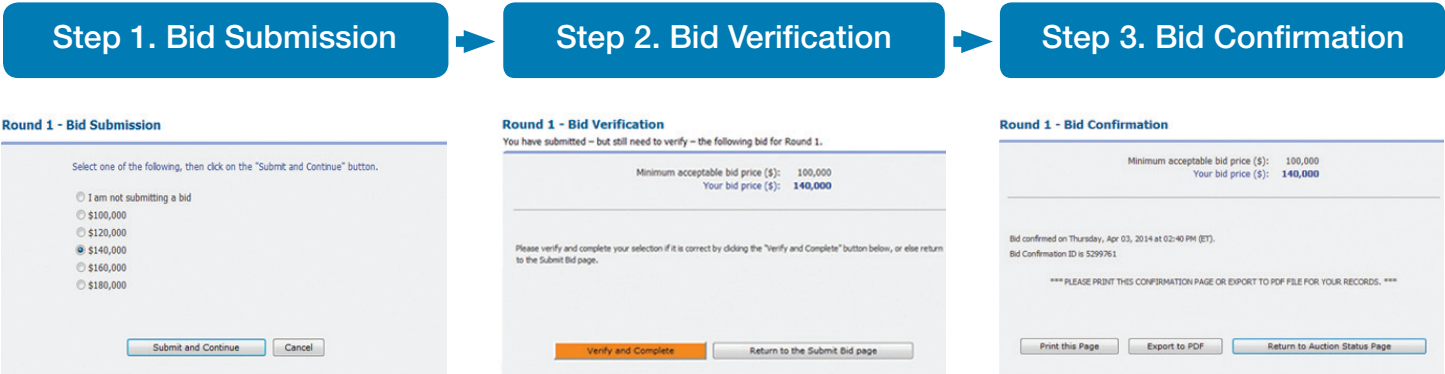
How an online auction to maximizes the value of IP assets

CRA tailored its auction designs and secure Bidding Website to increase participation and maximize the value of the assets. Bidders submit bids in scheduled bidding rounds. In order to continue bidding in subsequent rounds, a bidder must submit a valid bid in the current round.

At the end of each bidding round, CRA's proprietary algorithms process the submitted bids, determine the current best bids, establish new, higher prices for the next round, and disclose relevant information to the bidders via the Bidding Website. Bidding continues round by round until the highest possible prices have been achieved, at which point bidders are informed of what they have won (or if they have not won) and at what price. A winning bidder wins simply because it bid a better price than other bidders and other bidders had the same opportunity to bid that price or better than the winning bidder.

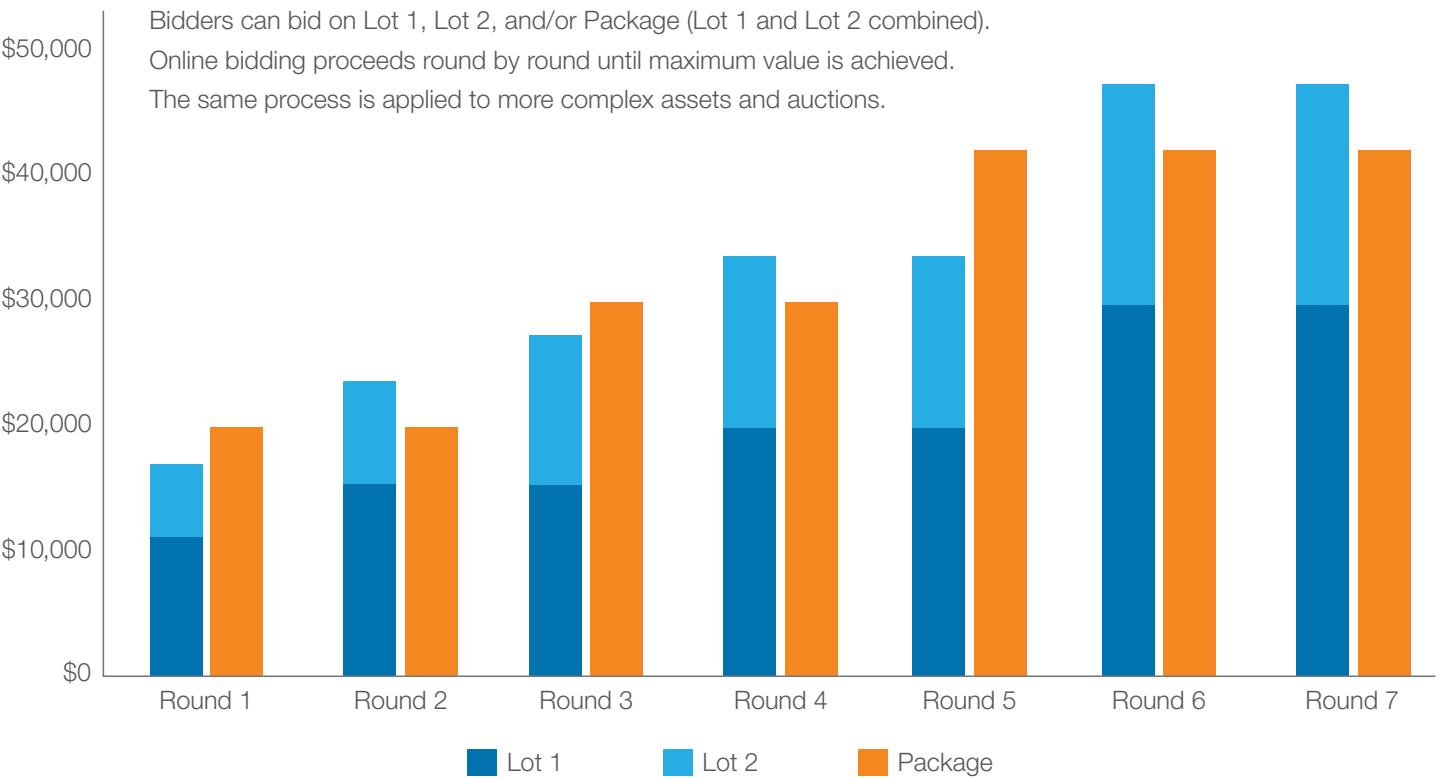
Complete details about the bidding and the results are recorded and logged automatically, and reports are made available to the authorized parties.

CRA tailors its auction designs to increase participation and maximize the value of the assets



# How it works

1. Bidders submit bids online in a bidding round
2. Bids are viewed by auction monitors
3. New, higher prices are set for the next bidding round
4. Round-by-round, price discovery takes place objectively in accordance with the rules
5. At the close of the auction, results are confirmed and disclosed



# About CRA International, Inc.

CRA (NASDAQ CRAI) is a leading global consulting firm that offers strategy, financial, and economic consulting services. Headquartered in Boston, the firm has over 600 professionals around the world. CRA has served major law firms, corporations, and governments for more than fifty years, and has worked with 98 percent of the Am Law 100 law firms and 81 percent of the Fortune 100 companies.

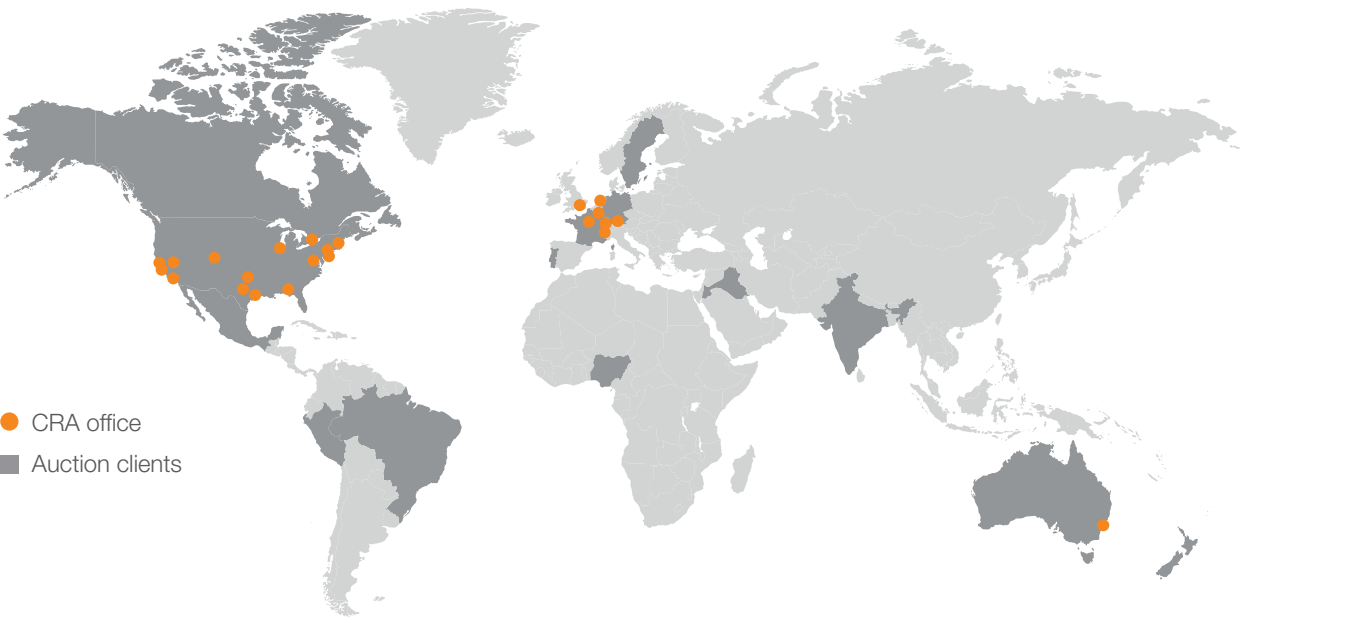
## Advisory services

- Market analysis and forecasting
- Business, commercial, and regulatory strategy
- Investment evaluation and risk management
- Antitrust and competition economics
- Policy impact assessment
- Expert testimony

## Auction and competitive bidding experts

- Experts in the design and execution of structured sales and procurement processes
- Worked in a wide range of industries and applications around the world
- Successfully managed and hosted hundreds of auctions, RFP processes, and trading events
- Extensive bidder training and support
- Dedicated in-house software engineering and IT services

## Global presence



**Brad Miller**

CRA International, Inc.  
200 Clarendon Street  
Boston, MA 02116  
+1-617-425-3384  
bmiller@crai.com

**Margarita Patria**

CRA International, Inc.  
200 Clarendon Street  
Boston, MA 02116  
+1-617-425-3368  
mpatria@crai.com



**[auctions.crai.com](https://www.auctions.crai.com)**