

Emerging ABC Technology & Back-Office Services

Executive Summary

- Energy Aggregators, Brokers and Consultants (ABC) are benefiting from a host of new software and service providers that offer new tools and marketplaces.
- These tools promise to greatly increase transaction efficiency for both ABCs and suppliers, especially the quoting and contracting process.
- This paper profiles six of leading and innovative companies offering solutions to the ABC sector: Retail Energy Xchange (REX), Power Kiosk, Edge on Demand, Broker Online Exchange (BOX), Blue Hook Systems, and Collaborative Operations for Retail Energy (CORE).













- Examples of benefits these platforms provide to brokers include:
 - o End-to-End Digital Marketplace:

The Retail Energy Xchange (REX) platform (formerly EnergyWize) funded by NRG offers one of the most comprehensive feature sets, enabling brokers of any size the ability to immediately transact in over 20 markets. REX has invested in robust white labeling and agency management tools, along with a live conciergestyle deal support team. And because REX is often the broker of record, the platform automatically tracks and validates commissions and forecasts cash flows.

o Broker Automation Software as a Service (SaaS):

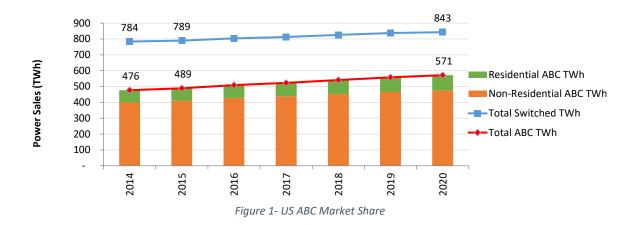
The CORE platform developed by Nate Richards in 2004, is one of the original providers in the space and counts many large brokers as clients. CORE and the connected Energy Frameworks give brokers tools to standardize their sales, quoting, contracting, and commission tracking processes leveraging the broker's existing supplier agreements and relationships. The platform is offered as a software license.

o Prospecting lists:

The Edge on Demand platform offers several features including their unique Eligible Customer Lists (ECL) Connect which provides broker clients utility lists for prospecting which show the customer's size, location and default vs. switched status.

Why the ABC sector matters

The retail energy sector in the United States contains an important indirect sales channel collectively referred to as Aggregators, Brokers and Consultants (ABC). ERCG estimates that ABCs will broker approximately 509 TWh of competitive sales volume in 2016, with revenues for the ABC segment estimated at \$1.7 billion. We project continued growth through the indirect sales channel over the next five years. By 2020, we estimate that ABC sales will reach 571 TWh and \$2.0 billion in commission based revenue.



ABC Sector and Business Process Remain Highly Fragmented

Although influential and growing, the ABC sector remains highly fragmented and diverse. Firms range widely in volume, number of employees, geographic footprint, and customer segments served. New ABCs enter the market daily. New entrants come from existing ABC shops, suppliers, multi-level-marketing agencies, professional services, entrepreneurs and many other industries where B2B selling occurs.

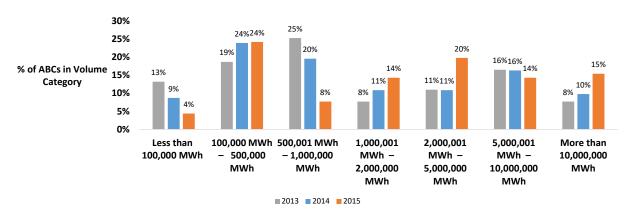


Figure 2 - ABC Firms Size by Annual Volume

This structural fragmentation and diversity of ABC firms is further complicated by a lack of standardization of retail energy markets and supplier business processes. An increasing number of ABCs do business in more than one state and often in more than one utility territory. In these cases regulatory requirements, tariff rules, metering procedures, and other market characteristics can vary greatly. Furthermore, in order to access retail energy products and pricing ABCs must often navigate a complex matrix of supplier account managers organized by state, customer segment, commodity and product type.

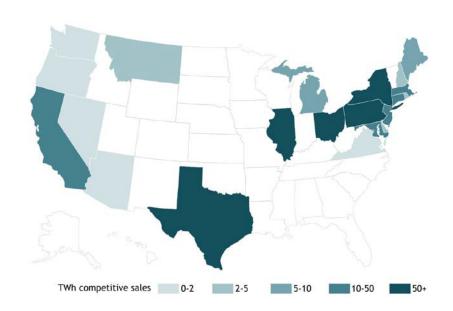


Figure 3-Retail Electricity Markets

For suppliers, the growing number of active ABCs and diverse market rules place an even greater operational cost. Suppliers must respond to an increasing number of requests for pricing, refreshes and customer services issues. Serving more brokers often means hiring more account managers and has sometimes reduced response times for existing broker customers. Several suppliers invest in proprietary technology such as broker portals designed to address their own business process inefficiencies. However, broker adoption of such portals has been mixed since the ABC must self-service on each supplier's portal.

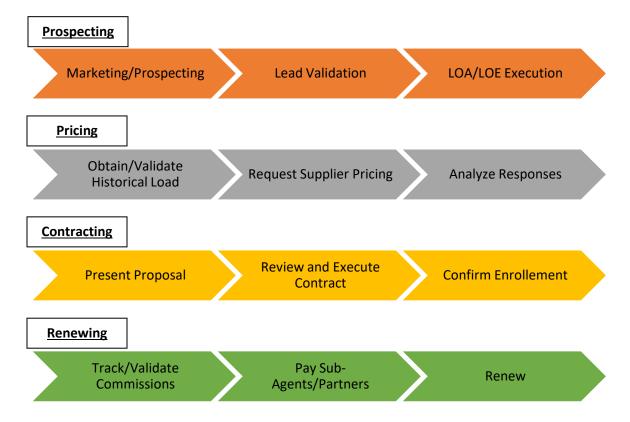
To address these challenges, a host of new and innovative service providers are providing technological solutions to both ABCs and suppliers.

Technology Categories

Technology and service providers can roughly be organized by the ABC business process value chain which is organized into four main categories: prospecting, pricing, contracting, and renewing.



Within each segment of ABC commercial activity, new technology offers specific functionalities to assist ABC win business:



Provider Profiles and Comparisons

ERCG evaluated the feature set through a series of live demonstrations with each of the broker technology platform providers covered in this analysis. Market statistics were provided through interviews conducted with senior leadership of each vendor. The table below summarizes the most common capabilities by category and market penetration of each provider. Detailed profiles of each platform are covered in the following section.

Broad Category	Capabilities	Retail Energy Xchange (REX)	Broker Online Exchange (BOX)	Power Kiosk	Blue Hook Systems	Edge on Demand	CORE
Company information	Year started	2011	2013	2013	2014	2013	2004
	Ownership	Public (NYSE: NRG)	Private	Private	Private	Private	Private
	Quote management	✓	✓	√	✓	✓	
	Proposal/contract/ renewal management	✓	√	✓	✓	✓	√
Services	CRM features	✓		√		✓	✓
portfolio	Accounting services	✓	✓	√		✓	√
	Agency management	✓		✓	✓	✓	✓
	Support services and training	✓	✓	√	✓	✓	✓
Supplier choice and availability	# of markets	21	26	19	4	Not applicable	Not applicable
	# of suppliers	60+	70+	50+	30+	Not applicable	Not applicable
	# of broker users	300+	250+	250+	20+	15+	35+



Top Platforms by Service Portfolio







Retail Energy Xchange (REX), Power Kiosk, Edge on Demand

Currently only three providers offer service features in all categories of the ABC business process value chain described above: Retail Energy Xchange (REX), Power Kiosk, Edge on Demand. As shown in the "Technology Categories" section above, in order to transact on an ecommerce platform, brokers need the tools to be able to prospect, price, contract, and renew deals. BOX, Blue Hook Systems, and the top three providers have these e-commerce platform capabilities. However, REX, Power Kiosk, and Edge on Demand present an enhanced set of broker solutions by adding cloud-based customer relationship management (CRM) and broker agency management tools. These enhancements allow the broker firm to fully outsource the back-office function, an add-on that potentially creates a lot of efficiency and value to a wide range of broker organizations.

Even in the top three, as the detailed profiles in the following section show, there are some notable differences in richness of feature set. REX appears to have invested the most in the broker agency management functions, and offers unique services that integrate into the broker's email server and provides an impressive array of administrative capabilities to oversee the agency, contracts, and agents. Power Kiosk is the only provider that has an e-commerce platform that a broker's customer can use to transact directly with the supplier, which takes the concept of deal transparency and price discovery to another level. Edge on Demand offers a one-of-a-kind customer prospecting tool called ECL Connect, which takes advantage of utility business process rules to identify the Eligible Customer List (ECL) in certain jurisdictions. As many of these platform providers believe, the more business processes that they can automate, the better it is for all market participants -- most importantly, the end use customer.

Top Platforms by Popularity







Broker Online Exchange (BOX), Retail Energy XChange (REX), Power Kiosk

Equally important to service feature capability (and likely correlated to it) is the market penetration of each platform provider, which we measure by the number of jurisdictions, suppliers, and brokers. The top platforms each cover at least 15 markets and have at least 50 suppliers and 250 broker firms transact on the platform. These leaders have clearly invested significant resources in order to achieve these totals: including a) marketing and outreach to promote their solution to a wide array of brokers and suppliers, b) regulatory expertise to get licensed and up to speed on local utility and state operating rules, and c) technical skills to develop a platform that can scale from a few markets or users to many. As one provider explained, "if you are proposing to be a universal solution, you need to be available universally."

BOX, enabled by Energy Engine (the proprietary technology developed in the UK by their partner Online Direct), has the highest number of available markets and suppliers on their platform. REX is the longest running broker transactional platform, having launched in 2011 as EnergyWize and then rebranded in 2016 as Retail Energy Xchange, under new NRG ownership. REX has over 300 broker firms and has the lead in Texas, the biggest retail market in the US. Chicago-based Power Kiosk is particularly strong in Midwest markets but trails BOX and REX in overall popularity statistics, though all three have separated themselves from the pack.

Other Factors and Considerations: Strategy Tradeoffs

While platform capabilities and market penetration are the most useful methods to identify leaders in this developing space, there are multiple solutions available to brokers in the market today. This is not yet a mature industry, and niche players may have success in serving brokers with different preference sets.

Here are some of the platform strategy tradeoffs that broker firms may consider in their choice of platform provider:

- 1. *Control*. The most popular platforms assume the "broker-of-record" status on a deal since they hold the licenses in multiple jurisdictions and maintain the various supplier relationships. Brokers often want to maintain as much control as possible, especially when it comes to interactions with their end use customer. To address this desire, some platforms offer white labeling services that brand all customer-facing collateral and contracts with the client ABC firm's brand.
 - Brokers that value their broker-of-record status can forego the benefits of the exchange/marketplace and instead work with the platform providers that offer outsourced back-office and CRM software services (CORE, Edge on Demand). Blue Hook Systems offers a hybrid approach in their matrix pricing platform whereby deals can be executed on the system but the broker retains broker-of-record status. Two of the most popular platforms, REX and Power Kiosk give brokers the option to pay a licensing fee to use the back-office features only without executing deals through the exchange/marketplace.
- 2. *Deal support*. Given the fragmentation in the broker industry, there is no one-size-fits-all approach. While many broker firms have the in-house experience to handle the diversity of customer use-cases, other firms may benefit from a service that provides guidance as they target customers in unfamiliar jurisdictions. Not surprisingly, the platforms ranked highest in popularity -- BOX, REX, Power Kiosk -- each have a dedicated team of energy product and market experts to address this potential need. REX's Market Operations Desk (MOD) is the most advanced deal support team, which offers assistance and even participation in sales meetings with customers upon request from the broker firm.
- 3. *Price*. For those platforms that take a share of the broker's commission on a deal through the exchange/marketplace, the broker firm must weigh the exchange's benefit of access to more markets/suppliers with the lost portion of commission. Alternatively, the broker organization could pay a flat fee to a back-office outsourcing platform with the primary

goal of freeing their sales agents to spend more time on what they do best: sell. Fees for both types of platform pricing models vary significantly, and they reflect a range of strategic decisions from the platform providers themselves -- centrally, are the platform providers focused on near term profits or do they want to drive traffic to the platform for a longer term goal?

- 4. *Financial stability*. For any broker who invests time, money, and effort in evaluating a solution to support their business objectives, the long-term viability of a platform provider is critical. CORE is the longest running provider (2004), followed by REX (2011). Another important consideration is whether the provider is well-capitalized to make necessary and continual enhancements to the platform. As described in more detail in the profiles below, REX, BOX, and Edge on Demand appear to be the best positioned financially. REX is the only platform that is owned by a publicly traded firm (NRG).
- 5. *Independence*. Brokers may value platforms that allow them to transact with minimal interference. The paradox of a platform owned by a broker to help their broker competitors could appear to be a conflict of interest to some. CORE is the most independent platform but is the least developed exchange/marketplace (a beta version exists today). Edge on Demand and Blue Hook, while they have a high level of independence in the transaction, are affiliated with broker businesses.

Retail Energy Xchange Profile



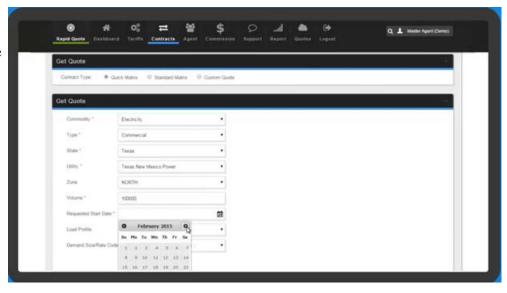


Category	Platform Details
Ownership	Publicly traded company: subsidiary of NRG Energy; managed by Scott Hart, President of REX
History	Began in 2006 as web-based software solutions company. In 2011, launched EnergyWize marketplace. In 2015, acquired by NRG. In 2016, company renamed to Retail Energy Xchange (REX).
Vision	 Provide brokers with a universal, scalable platform to manage agencies and multiple service territories To become a clearinghouse of information needed to perform an energy deal in order to bring transaction efficiency to the space e.g. avoiding repeated processes by multiple parties for the same information and ultimately bring standardization to marketplace Re-engineer retail energy business processes to increase sales productivity, lower costs, and improve customer satisfaction
Pricing model	0.1 - 1 mil/kWh fee based on various deal criteria
Market availability	21 states: California, Connecticut, Delaware, Florida, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Texas, Virginia, Washington DC, West Virginia
Supplier count	60+ suppliers (power and gas) are on the platform
Brokers	300+ unique broker firms use the platform
Current services	 Quote management: matrix pricing, custom pricing, automated daily price refresh, apples-to-apples comparisons, side-by-side quote comparisons, multiple term length requests, calculation of broker margin CRM: data import, task management, customer data management, meter management, historical usage (HU) management, email management, reporting Agency management: white label option, agent activation/deactivation, user permissions, proxy capabilities, customer reassignment, email history, reporting Proposal/contract/renewal management: automatic generation of electronic proposals and contracts, e-signature option, ability to make notes and recommendations by supplier, supplier analysis, automated system alerts, electronic workflow Accounting services: commission statement consolidation, reconciliation of supplier payments, data analysis, forecast for expected future payments Support staff: IT support, energy product and market experts

Broker Online Exchange Profile







Category	Platform Details	
Ownership	Privately held: US-based ownership team, managed by Arthur Gruen and Benji Coomer;	
	technology partnership with UK's Online Direct (owners Pank Jethwa, Gary Styles)	
History	Broker Online Exchange was founded in 2013. Online Direct, the UK-based company which	
11150019	developed the pricing platform EnergyEngine, was founded in 1998.	
Vision	 Make it easy for suppliers to start using BOX platform (no customization required) Transaction efficiency and high close ratios are top goals of the platform: give brokers as much access to pricing data as they need in order to know "where they are" in the market; then, when they are ready to transact with suppliers, communications between supplier and broker are streamlined 	
Pricing model	Flat 20% of sub-broker's commission on each deal	
Market availability	26 states and provinces: Alberta (CA), Arizona, California, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, Nevada, New Hampshire, New Jersey, New York, North Carolina, Ohio, Ontario (CA), Pennsylvania, Rhode Island, Texas, Virginia	
Supplier count	70+ suppliers (power and gas) are on the platform	
Brokers	250+ unique broker firms use the platform	
Current services	 Quote management: matrix pricing, custom pricing, automated daily price refresh, applesto-apples comparisons, side-by-side quote comparisons, multiple term length requests, calculation of broker margin Proposal/contract/renewal management: automatic generation of electronic proposals and contracts, ability to make notes and recommendations by supplier, supplier analysis, electronic workflow Accounting services: commission statement consolidation, reconciliation of supplier payments, data analysis, forecast for expected future payments Support staff: IT support, energy product and market experts 	
Services in development	CRM white labeling e-signature	
	commission financing	

Power Kiosk Profile



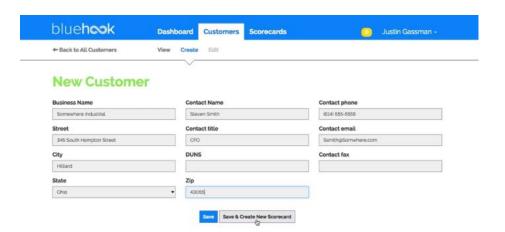


Category	Platform Details		
Ownership	Privately held: Hamed Babai, Founder and CEO, and Eddie Gordon, VP		
History	Chicago-based Power Kiosk began in 2013		
Vision	 Provide brokers and end-use customers with an energy price discovery and e-commerce platform to enhance transparency and efficiency, with a unique direct-to-end-user site where broker customers can select and enroll with suppliers Provide brokers the option of back-office services only (no sub-brokering) 		
Pricing model	Licensing fee plus share of commission: 50% of sub-broker's commission on each deal, which decreases to a minimum of 25% of sub-broker's commission as deal volume increases; various licensing fee options are available based on number of agents		
Market availability	19 states: California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Texas, Washington DC, Wisconsin		
Supplier count	50+ suppliers (power and gas) are on the platform		
Brokers	250+ unique broker firms use the platform		
Current services	 Quote management: matrix pricing, custom pricing, automated daily price refresh, apples-to-apples comparisons, side-by-side quote comparisons, multiple term length requests, calculation of broker margin CRM: task management, customer data management, meter management, historical usage (HU) management, reporting 		
	 Agency management: white label option, agent activation/deactivation, user permissions, reporting Proposal/contract/renewal management: automatic generation of electronic proposals and contracts, e-signature option, ability to make notes and recommendations by supplier, supplier analysis, automated system alerts, electronic workflow Accounting services: commission statement consolidation, reconciliation of supplier payments, data analysis, forecast for expected future payments Support staff: IT support, energy product and market experts 		



Blue Hook Systems Profile

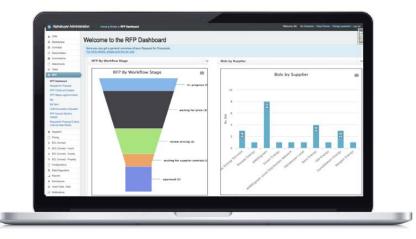




Category	Platform Details		
Ownership	Privately held: Founders Greg Bechert and Susanne Buckley		
History	Ohio-based Blue Hook Systems began in 2014		
Vision	 Provide brokers a platform to transact quickly and efficiently in the "matrix" space in order to enhance broker productivity and increase the number of supply options available to the customer Allow brokers option to transact on platform while retaining their "broker of record" status 		
Pricing model	Licensing fee, which varies based on number of users		
Market	4 states:		
availability	Illinois, Massachusetts, Ohio, Pennsylvania		
Supplier count	30+ suppliers are on the platform		
Brokers	20+ unique broker firms use the platform		
Current services	 Quote management: matrix pricing, automated daily price refresh, side-by-side quote comparisons, multiple term length requests, calculation of broker margin Agency management: white label option, agent activation/deactivation, reporting Proposal/contract/renewal management: automatic generation of electronic proposals and contracts, ability to make notes and recommendations by supplier, supplier analysis, automated system alerts, electronic workflow Support staff: IT support 		

Edge on Demand Profile





Category	Platform Details		
Ownership	Privately held: Founders Kevin Johnson and John Raisch, plus a round of venture capital (5 investors, including one institution)		
History	Began in 2010 as group-buying energy platform Alphabuyer. In 2013, pivoted the platform to serve energy brokers as Edge on Demand.		
Vision	Provide a suite of software solutions to enable energy brokers to manage their business across a broad range of customers		
Pricing model	Monthly SaaS licensing fee		
Market availability	Not applicable: available in all open markets, based on jurisdictional licenses of broker using the platform		
Supplier count	Not applicable: customized for each broker using the platform, based on the number of supplier relationships the broker has		
Brokers	15+ unique broker firms use the platform		
Current services	 Quote management: custom pricing, side-by-side quote comparisons, multiple term length requests, calculation of broker margin CRM: data import, task management, customer data management, meter management, historical usage (HU) management, reporting Agency management: white label option, agent activation/deactivation, user permissions, reporting Proposal/contract/renewal management: automatic generation of electronic proposals and contracts, ability to make notes and recommendations by supplier, automated system alerts, electronic workflow Accounting services: commission statement consolidation, reconciliation of supplier payments, data analysis, forecast for expected future payments Support staff: IT support 		
Services in	Matrix pricing engine (forthcoming in Sep '16)		
development	Deep Energy Analytics module for large C&I customers (forthcoming in Dec '16)		

CORE Profile





Category	Platform Details		
Ownership	Privately held: Founder Nate Richards		
History	Entrance Software founded in 2003. CORE development began in 2004. In Feb '14, Energy		
	Frameworks began, built around CORE, the company's flagship product.		
	• Energy Framework's mission is to be on the cutting edge of the energy industry in order		
Vision	to develop state-of-the-art technology solutions		
V ISIOII	• CORE is a broker platform designed to help a broker firm maximize revenue, shorten the		
	sales cycle, and manage their clients		
Pricing model	Monthly SaaS fee (base fee plus per meter fee)		
Market	Not applicable: available in all open markets, based on jurisdictional licenses of broker using the		
availability	platform		
Supplier count	Not applicable: customized for each broker using the platform, based on the number of supplier		
	relationships the broker has		
Brokers	35+ unique broker firms use the platform		
	CRM: data import, task management, customer data management, meter management,		
	historical usage (HU) management, email management, reporting		
	Agency management: white label option, agent activation/deactivation, reporting		
Current	 Proposal/contract/renewal management: automatic generation of electronic proposals and 		
services	contracts, e-signature option, ability to make notes and recommendations by supplier,		
	supplier analysis, automated system alerts, electronic workflow		
	 Accounting services: commission statement consolidation, reconciliation of supplier 		
	payments, data analysis, forecast for expected future payments		
	Support staff: IT support		
Services in	Beta version of CORE Marketplace exists today to facilitate broker and supplier online		
development	transactions for power and gas		

About ERCG

Energy Research Consulting Group (ERCG) provides business intelligence and consulting services to energy market participants on entry strategies, investment opportunities, and market & policy dynamics. For more information about ERCG's experience, research and consulting offerings please visit: www.ercg-us.com. Some of ERCG's most recognized research and consulting products include:

- North American Retail Power ABC Survey (Annual)
- U.S. Retail Gas ABC Survey
- Online Retail Supplier ABC Portal Study
- Retail Supplier Benchmarking Services (Quarterly)
- Supplier and ABC Market Entry Consulting
- Other Custom Research and Consulting

White Paper Methodology

ERCG evaluated the feature set through a series of live demonstrations during July and August 2016 with each of the broker technology platform providers covered in this analysis. Market statistics were provided through interviews conducted with senior leadership of each vendor.