# At an Energy Hackathon in Brooklyn

Pam Roach, CEO, and Larry Glover, Partner,
Breakthrough Marketing Technology,
with PUF's Steve Mitnick at the AABE Hackathon,
at National Grid and
NYU Tandon School of Engineering

We met with Pam Roach and Larry Glover on the sidelines at the Hackathon they developed with the American Association of Blacks in Energy, partnered with the NYU Tandon School of Engineering, National Grid and other utilities and industry organizations (including Exelon, New York Power Authority, Public Service Electric and Gas, and Con Edison). Roach and Glover were passionate in our conversation about the competing student teams hacking ideas on our energy future and as passionate about their unique approaches to understanding what drives customers facing energy choices particularly those in minority communities.

**PUF's Steve Mitnick:** You're both playing a major role at this AABE Hackathon. How did you get involved and what are you doing here?

**Larry Glover:** We've been involved in the energy industry for quite some time, and we've seen the transition from focus on energy products to focus on end user engagement. AABE [American Association of Blacks in Energy] is our client and we talked to them about new ways to bring innovation to the industry. We used our experience with Hackathons, to build a program specifically for AABE.

We've modeled it after some of the better Hackathons that have been done around the country. We started building Hackathons with another colleague of ours at MIT.

What makes this Hackathon different is the ability to combine industry practitioners with other stakeholders around energy, whether they be community organizations, MWBE [minority and women-owned business enterprises] or policymakers. We were particularly sensitive in including our student universe. When you start to hack issues about workforce, for example, we must have students engaged, because they are the future workforce we're talking about.

When the challenge is making solar available in urban communities, those community partners must be part of the conversation because they are the end users. If we don't design it so that the end user understands and benefits from the exercise, it raises the question, is this academic for AABE and for this industry? It can't just be academic.

**PUF:** You give to this Hackathon, but your firm Breakthrough takes something from it. Describe this?

**Pam Roach:** What we take from it is a deeper understanding of the different end-user groups.

What drives customers is not just the demographics. A traditional starting point of energy companies, and even those outside the sector, is their sales data. They use it to learn about their customers. That tells you what and how much they bought, then paid, and it gives you information about their demographics.

To understand customers requires information beyond demographics. An age, where they live, their education, is not the whole story. It's not what determines their behavior. It's not what makes them receptive to an energy efficiency program.

Or decide to pursue a career in energy versus other careers for talented individuals.

What we get out of this is a deeper understanding of the communities. In fact, that is what one of the Hackathon winning teams did. At 7 a.m. on Saturday morning they went to a nearby New York Housing Authority housing project and interviewed residents. They collected data about their feelings and attitudes about energy efficiency and their utility.

**At 7 a.m. on Saturday morning they went to a nearby New York Housing Authority housing project and interviewed residents about feelings and attitudes about energy efficiency and their utility.**

Breakthrough uncovers information about the uses of energy. We ask. What are their aspirations? How do those aspirations relate to energy? What does the energy sector need to do to connect with them? Because every one of the energy companies, the utilities, is aware of the importance of being driven by the customer, by the marketplace.

But sometimes energy companies don't know enough about their customers, and don't know how to learn enough to meet their objectives. We see this as an opportunity, a challenge. Our approach is often new to them. We generate insights that help them refine what they offer customers and their communications to them.

**Larry Glover:** We think about this in two ways. It's input and output. The input is what we're able to gather, about the end user thought processes, and the new ideas that come from them. We make that information relevant to what the energy company can deliver. The output is the definition and communication about the new offers that are meaningful to the end user, to the customer.

**Pam Roach:** What we do at Breakthrough, is transform

Students and mentors at the Energy Hackathon of the American Association of Blacks in Energy listening to inspiring remarks by leaders like Telisa Toliver, a Chevron vice president, who said: "At its core, hacking is about change. How to recognize it and how to prepare for it. Using the Hackathon platform to explore solutions to energy industry challenges is novel and helps our industry and communities prepare for change."

data from static, demographic, psychographic, and sociology, to effective communications. It's how we engage our clients, so they are more knowledgeable, and understand what's required to take best advantage of these opportunities. We look at it as input and output. We are the output side. We create that connection to customers.

**PUF:** You've studied segments of customers and communities.

**Larry Glover:** We have a lot of experience understanding communities of color, and low-income communities. We have experience with African-American communities, Latino communities, and Asian communities.

Within those ethnicities, there are a number of sub-segments that determine how people behave, how people respond to the offers they receive from energy companies. The way we collect end user information, is by engaging the end user. We go and spend time with them in-person and digitally.

We do interviews. We do fieldwork to observe. Then we're able to understand, not just what end users say, but what's underneath. How they think? How they feel?

We can capture the words to use to be motivating, to get them to adopt a new energy related behavior. That, in the long run, is in the best interest of the end user. Because it resonates with their long-term objectives.

When you talk to companies who have a footprint in a region with one or two or three million customers, they need to know how do you discern the differences between them?

It's not just how you define their differences. But how to define their ability to participate in the process.

Take for example solar. We understand that there are two communities that are affected, the haves and the have nots.

Today it is the haves who have the ability to take advantage of the solar opportunity. But, when they go off conventional usage on the grid, the have nots now have to shoulder a great share of the support of the grid, because it's a static cost.

As we help the companies understand who these groups are and what their needs are, it also is imperative to share those insights in our conversations with legislatures and policy makers. Because they are now responsible for balancing the needs and opportunities of everyone to ensure that solar is not disproportionally affecting low income or the "have nots".

That's part of what we bring to our clients and to our companies. Understanding not just their customers, but how their business impacts each of us.

**PUF:** How did you decide to do that?

**Pam Roach:** It was partly the evolving needs of the market. Fundamentally, as a marketer you must understand your target customer and find a way to communicate to them with a context that they understand.

**Within those ethnicities, there are a number of sub-segments that determine how people behave, how people respond to the offers they receive from energy companies.**

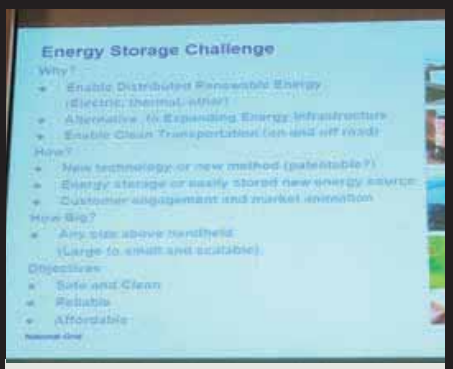
The more you know about them, the better you can communicate. Just like the more you know about your spouse, the better you can communicate with him or her. It's the same principal, on a larger scale.

When it comes to trying to understand how to learn about your target customer, that's where data science comes in. That's where big data comes in. That's where descriptive statistic come in. It's a tool to help us figure out how to communicate more effectively to motivate new behavior.

The only reason all that technical stuff matters is that it is the way energy companies can achieve end user relevance. PUF

# AABE Hackathon

Back to Brooklyn. PUF's Steve Mitnick, who began with an electrical engineering degree from Brooklyn Tech High School, returned a couple of weeks ago, to near the Brooklyn Bridge, to observe the first Energy Hackathon of the American Association of Blacks in Energy. National Grid headquarters in Brooklyn hosted the Friday evening session and across the street the New York University Tandon School of Engineering hosted the Saturday session. Ambitious students from NYU and other regional colleges came to compete, each on one of the teams, to innovate solutions for emergency recovery, energy storage in cities, energy efficiency in low-income communities, etc. Opening the Friday evening session was National Grid president and chief operating officer for transmission, generation and energy procurement, Rudy Wynter. He's speaking in the photo that's below. In the other photos on these pages, check out the passion of our industry's up-and-coming.


## Hackathon Challenges

- Using technology to improve emergency preparation and recovery
- Energy and transportation e-mobility
- Innovations in customer service engagements
- Workforce integration
- Energy storage for urban communities … without batteries
- Using data to improve residential impact on building performance
- Improving energy efficiency programs for low-income communities
- Using Blockchain technology for energy transactions
- How to make solar accessible to urban communities
- Powering the future: SMART Communities