



Software Systems for Solar Energy Installation Companies



Mike Dershowitz - CEO

About ModSolar

ModSolar creates innovative systems that assist solar energy installation companies in the sales, marketing, financing, and management of solar projects, using software to help solve the industry's biggest problems.

Interview conducted by: Lynn Fosse, Senior Editor, CEOCFO Magazine

CEOCFO: Mr. Dershowitz, your website indicates ModSolar is changing the solar industry. How so?

Mr. Dershowitz: ModSolar is changing the solar industry primarily by making it much easier to actually sell solar than it used to be. Prior to ModSolar, if an installer wanted to sell solar, he would have to visit the site to do a design, come back later with a proposal, get the buyer comfortable with it, and ultimately try and get a contract signed. This process would take hours and multiple trips. ModSolar, through its system design and proposal generation technology has completely streamlined that process to take something that used to take eight to ten hours and reduce it to five minutes. Ultimately, not only is there a significant cost saving, but because we invented the ability remotely assess a site and then get a proposal from that assessment very easily, it enables new business models and new ways of doing business that have significantly accelerated the way that people are selling solar. That is really our mission: to help our clients achieve the scale that they want to achieve and that our society needs from the solar industry to generate our power more appropriately.

CEOCFO: What are the elements in the remote assessments?

Mr. Dershowitz: Ultimately, we were using GIS systems (which stands for "geographic information systems") along with evaluation systems and mathematical models that help a solar installer or a sales person evaluate a site through satellite imagery and do measurements very easily. It just involves clicking on an interface to do measurements on a roof--just by pointing and clicking. We have automated the process of actually designing a system as well as laying out the solar panels, so that when they click on a roof to tell the software where they want to put a system, it is automatically filled up with panels. That is a very important piece of functionality. That is exploiting automation to do things for the user so they do not have to do it themselves. This really enables people to scale, because a salesperson can then focus on the sale and has to focus less on the engineering knowledge that they may need in order to properly design a solar system to get a relatively accurate quote.

CEOCFO: How do you measure remotely?

Mr. Dershowitz: Basically, these days, satellite imagery that is available is GPS encoded. The precise location of every pixel that you look at on a satellite image is encoded in GPS. Through the GPS and taking into account the curvature of the earth and the trigonometry involved in the process, we are able to do accurate measurements, using the GPS information and a bunch of heavy math.

CEOCFO: When you are talking with prospective customers is there an aha moment when they actually believe it will work or do they not have skepticism?

Mr. Dershowitz: Folks in the industry are not so skeptical anymore. The product has been around for three years. We were the first to automatically layout panels on a roof, so I think there was some initial skepticism as to whether or not our layout was accurate. Usually what happens is that after they do a layout or two, they go to a site and assess it themselves using the old way they would do it, and they gain confidence. Then that word spreads. Now most of the US industry does some sort of remote design in some form whether it is with us or with another tool before they actually visit a site. In some cases they will not even visit a site; they will sell over the phone. The first time they actually get to a site is when they are ready to install. Initially it was pretty groundbreaking, but the tool's ability to show where panels will go on the roof really helps people see it and they believe it.

CEOCFO: *How are you reaching people?*

Mr. Dershowitz: The wonderful part I think about ModSolar's situation right now is that we have been around long enough and people have been pretty happy with what we are doing that 95% of our business actually comes through existing customers or existing contacts. Folks find us directly on the web and that has been very good for us. Now as we grow bigger, we are starting to spend more time and resources on more marketing and more PR in particular. We are mostly a technology company, so we like to let our products do the talking for us and that has been a very effective strategy for us. We are very successful and we find that people become proficient with our software in just a few days.

CEOCFO: *What is that market potential? How many people are involved in solar?*

Mr. Dershowitz: If we are talking US only, the best estimates in 2014 say that there are probably ten to thirty thousand actual software seats that could be sold for a tool like this, and we have much, much less than that. The market potential in the US alone is quite large. When you look at some overseas markets like Japan, Australia, the UK, Germany, the total addressable market then triples. That means that we have a pretty significant runway and of course we are not a one trick pony. The tool that we created initially was the beginning; we have continued to improve upon the basics and now we have added other functionality.

ModSolar has transformed itself from just a tool to help folks do their sales job better, faster and cheaper, to a platform company for a variety of functions. If you want options for financing solar systems, we function as what is called an originations platform. We can design a solar system, propose it, get a quote for financing, get a contract closed, get credit checking done, and really enable the solar business to do everything it needs to do. Finance is an important part of the solar business here in the US and the majority (I think the number is around 65%) of all solar systems sold in the US are financed, not bought with cash. It really means that we can enable people's businesses, enable them to be consistent, operate efficiently, effectively, and help them grow. That is why we get up every day. It is a great reason to get up and go to work every day to help your clients achieve their goals.

“In solar, you can get up and go to work every day and know that, yes, you are a business person and you are trying to make money, but the change that you are trying to effect is really what our planet and society needs.” - Mike Dershowitz

CEOCFO: *Do many of your clients take advantage of the full range of your services?*

Mr. Dershowitz: The full range of services is really only available to some of the larger clients, although some of that is changing. If you look at it from just an actual number of clients standpoint, about 90% use what we call the basic functionality, and 10% use the more advanced. That number is changing. Last year that number was more like 99% and 1%. If you look at the overall activity on the platform or the number of users, it is actually 50/50. Furthermore, we expect number of people using the full range, including the origination functionality, to continue to increase, and that is one of our fastest growing sectors right now.

CEOCFO: *What is the revenue model? Are people licensing your technology?*

Mr. Dershowitz: People are licensing our technology. It is a standard “software as a service” license model and that seems to work out pretty well. Many of our larger clients do require customization, especially if they are going to deploy their own financing inside of our platform. A portion of our engineering team is dedicated to working on client customizations to get their financing to calculate correctly or to create a proposal in just the way that they want it. We do not really see that slacking off. The revenue mix in that is fine. The challenge is, of course, managing the development roadmap so that we get the things done that we want to build as well as those that our clients want us to build. In improving the software, we have to balance custom requests with what the existing clients need. It has been a nice ride that way and it has been fun, but those are basically the two biggest revenue streams: subscriptions to our standard product, and custom development work.

We have products in the pipeline that will start to add to that and we constantly come up with new elements. That is very important to us. I would always advise any business owner to start out with one thing, be very focused. Then, when you are getting comfortable and you look to expand, I think revenue stream diversity is very important for any enterprise. That is especially the case in the solar industry because the solar industry is very volatile; it is still a very new industry, basically just now getting out of the early adopter phase and on our way to rapid growth to maturity. Diversity is the key and this is one of the reasons why ModSolar is looking at the international markets right now. They are a change from what is happening in the US market and we do not want to be beholden to the ups and downs of the US.

CEOCFO: *What have you learned from previous business experiences that have been helpful in this venture?*

Mr. Dershowitz: There have been certainly many people along the way who have been incredibly helpful, both customers and partners and what not. One of the things that I love about the solar industry is that there are so many people here

who are on a mission to do good for our planet by deploying more solar, which the planet needs to help limit climate change and help our clients move towards a sustainable energy production future.

I was in banking and banking is a critical industry to our economy, there is no doubt about it, but the mission is not the same. Their mission is to help their clients and to make money. Sometimes those two things may not be very much in balance; but in solar, you can get up and go to work every day and know that, yes, you are a business person and you are trying to make money, but the change that you are trying to effect is really what our planet and society needs. Everyone in the industry believes that, so they are much more willing to help you. There have been a couple of critical clients that have played a huge role in our success. In some cases, the things that they were doing may not have had a direct financial return for their business but they did it anyway because they believed in what we were doing and our role in helping to advance the industry. I would have to say if I had to point out anything, it would have to be the people in this industry. I can think of three or four people off the top of my head without whom ModSolar would not be where it is today.

CEOCFO: *Put it all together for our readers, why does ModSolar stand out?*

Mr. Dershowitz: It stands out because we are committed to changing the industry through good technology and through attacking and solving the hard problems that our industry has, whether it is in business process or other areas. I think we are a dynamic organization that is going to continue to bring solutions and products to the market and solve the big problems. We are small but we are not afraid of the big problems. Our perspective is not to put out just one product and do just one thing; our perspective is to get the industry where it needs to go and we are incredibly committed to that. In some cases, we will make decisions that may not be the best in the short term but certainly are best in the long term. We are here to stay. I would be very happy if we were sitting here in 2020 and ModSolar is still here, doing good things for the industry. That is really why we stand out and it really comes through in our products because we create great products that people can use. They are simple, easy and they can really help folks achieve their goals.

BIO: While attending a home show in downtown Philadelphia with his new wife at the time, Mike was struck by the lack of sales technology being employed by the home improvement industry. After inviting a dozen or more solar installers in to discuss the details of solar for his own home (as an avid supporter of renewable energy), Mike continued to be surprised at how little sales technology was being used.

It was a confluence of these events and an innate entrepreneurial spirit that led him to start ModSolar with the vision of helping solar installers become more advanced in their sales and marketing efforts. That idea has grown into the sophisticated technology Platform that ModSolar is today.

Before founding ModSolar, Mike was a Design Manager at JPMorganChase, the largest bank in the U.S. There, he established the mobile design department, where he led a team of amazingly talented individuals and together, created award-winning, industry changing products for the banking industry.

Prior to JPMorganChase, Mike founded his first company, Lexient, a source-code analysis tool, used by many large-scale development organizations and government agencies that helped developers understand and analyze complex and very large code bases.

Mike is a graduate of George Washington University with a B.A. in International Affairs and a concentration in International Economics.

When Mike's not thinking about the solar industry, he's enjoying time with his family and friends, good food and wine, traveling, home renovations, and playing with his two dogs, Hamilton and Roosevelt.



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