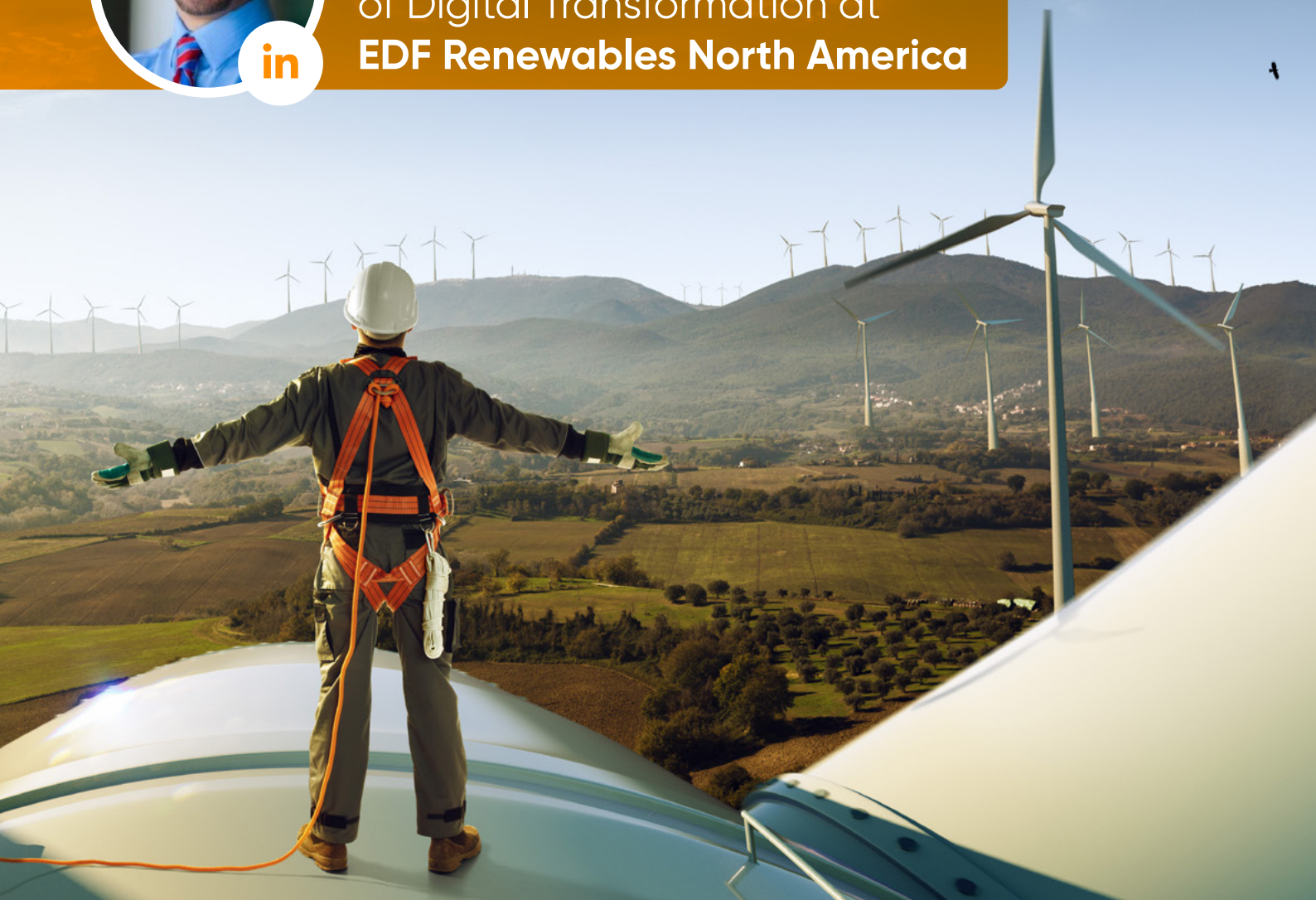
Avoiding Epic Failures By Developing Empathy for Users

Exclusive interview with
Remi Raphael, Vice President
of Digital Transformation at
EDF Renewables North America



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As companies ramp up their digital transformation efforts, it can be easy to get distracted by the latest technology fad or shiny piece of equipment. While machine learning, data analytics, augmented reality, wearable tech, mobility, and more, hold enormous potential to transform business operations, they must be adopted by users to realize the benefits.

But therein is the challenge for many companies. How do you make sure users get on board?

Start by designing for them, says **Remi Raphael, Vice President of Digital Transformation at EDF Renewables North America**, adding that you have one shot to make a 'technology first impression.'

In this interview, Raphael shares some of the lessons learned from his experience on epic failures and how they've inspired a radically new way of engaging with the business by putting empathy with users at the forefront of digital transformation.

Diana Davis, Oil and Gas IQ:

Can you tell me about your role at EDF Renewables?

Remi Raphael, EDF Renewables: We built our digital transformation organization from scratch almost three years ago starting with a digital vision to address the disconnect between the IT organization and the business.

We started this organization by removing barriers between the technology team and the people doing the work. The digital organization that we have built empowers the business units to make decisions about digital transformation. We didn't want to centralize decision making; we wanted to have digital leaders across the company that are pushing the banner of digital forward.

We want people who say: "I have this need or problem." Then they work with us to find a solution. Do we need to buy a solution? Build one? Empower users? That's what we do today; my role is to synchronize these efforts across the business.

Diana Davis, Oil and Gas IQ:

You mentioned decentralization and having the people within the business units themselves, what are other ways that your team structure differs from a traditional IT organization?

Remi Raphael, EDF Renewables: In traditional IT you have an organization that owns the governance and project management and in which all decision making about technology is centralized.

That's not to say the model we have adopted is fully decentralized decision making, however we offer a degree of flexibility to the business units. They can tell digital team what they need, and we will work with them to find the right solution.

We build solutions in a cross-functional team. In the past, a project manager would come from the IT organization, or a vendor would come from the outside. With that model, every once in a while you would check in with the business to make sure they're happy and you move forward. This is not how we do it. Now, the business is the "product owner" of the solution and the project managers are also from the business and are very active in every part designing and implementing the solution.

It was important to make the business the owner of the solution because they have the experience. They have the day-to-day interaction with their people.:. They know the activities tasks in the field. We're going to support you and offer multiple solutions but the decision will be with the business to determine which solutions is best. They are involved in the process early on.

Diana Davis, Oil and Gas IQ:

It sounds like you've just structured it completely differently so that you're getting pull right from the beginning of the process. Where are you now with your Connected Worker strategy overall?

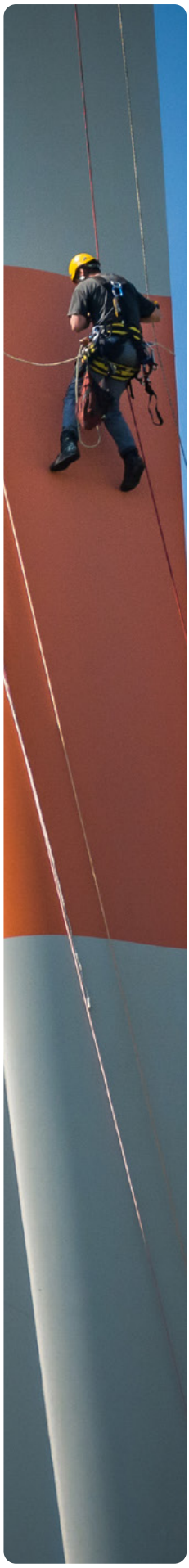
Remi Raphael, EDF Renewables: We've had a start and a failure, and we have changed direction. Before we adopted this new model that I've been speaking of, we deployed a Connected Worker solution in a more traditional IT project management approach. It was an epic failure and I think the lessons learned from that failure are so valuable.

What happened is that high level management was looking at our database – the ERP – and they wanted workers to fill in more fields in the system. So, they requested that we develop an application where the fields are mandatory because it's useful for us as an organization to know certain details of equipment monitoring and evaluation.

We built a solution and put this requirement in place: the fields were now mandatory. We put the solution on a tablet and gave it to the guys in the field.

The mobility of the tablets at first were received positively, but quickly we realized that efficiency was compromised as it took the technicians three or four times longer to close a job because of all the mandatory fields..

Additionally, we introduced a different device to do the same work that could be done on a computer. When the technicians experienced challenges with the new technology, it was just easier to go back to what was familiar.



In effect, we gave them an incentive to revert to the previous process. The epic failure is that we deployed nearly 500 tablets in the field, and today less than 10% are still in use. Field workers went back to using the old system on, shared computers.

This was a huge disappointment for us. In retrospect the outcome is predictable because we didn't understand the problem to solve and therefore did not satisfy our customer's needs.

In fact, the real problem, from the technician's lens: how to digitize the manual process for completing service inspection checklists. This workflow optimization feature was not operational for our initial rollout. We built what we wanted to build for us as leaders and as technology people, not as technicians that need to get the job done.

In my opinion, this comes down to a lack of empathy. Leadership was looking for a way to gather more data to run machine learning. And the solution came at the expense of making the life of the technician miserable. That's where we lost the empathy. We disconnected with the business – with our customers-. Their response was an emphatic rejection and our tablets are now collecting dust.

Here's another example of what happens when you don't pay attention to the people who do the work:

We are a renewable energy company and many of our technicians climb high wind turbine towers to calibrate or repair the turbines. Many times the technician will need to climb with a laptop installed with dedicated manufacturer software..

When we gave them a tablet, we essentially asked them to carry two devices. Not an ideal situation for a strenuous climb, and therefore the tablet was left behind to lighten the load.

It seems so obvious now. If we had just observed the daily routine and understood their job, we would have saved time, money, and digital reputation. We were thinking from a siloed lens of how great tablets would be for mobility.

We also didn't think through the connectivity issues inherent at remote sites. Technicians can be in the Mojave Desert or in the middle of Kansas. Wireless connectivity doesn't exist in all these places with the bandwidth necessary to run the application And once you've given your technician an application that doesn't work when they click on it, you've lost your audience the first day. That was our one chance to win the users and we blew it.

Diana Davis, Oil and Gas IQ:

So, what are you doing differently how to get better results?

Remi Raphael, EDF Renewables: From these failures, we built a set of lesson learned. There are a lot of layers to it, but it comes down to empathy and focusing on the right things.

Traditional project management tends to measure success in terms of "on time and on budget." But what about user adoption and added value? If the key performance metric is to get it done, a digital solution can easily waste a significant amount of money. We want to make sure that we're adding value and people are using the applications.

Diana Davis, Oil and Gas IQ:

User adoption is a great metric but how do you balance with competing priorities like on time and on budget? You want to get a great solution for the users, but not at any cost, right?

Remi Raphael, EDF Renewables: Agile project management offers a lot of capabilities for us. Instead of thinking about all features that we want right at the start like in the traditional Waterfall approach, we focus on fewer sets of features needed to create the MVP [minimum viable product]. We then add features to the MVP incrementally once we have established that they are creating value.

At a certain point in application development, you start to see diminishing returns. The value of the feature is worth less than what it will cost to build. When we hit the point of diminishing returns, we start to look closely at additional features. There are lots of cool technologies we could use but what is the benefit? How are people going to use it?

If the feature passes muster and the value is higher than what it will take to implement - and it is desirable, feasible and viable for us - then we'll add it. But we are not going to start with a cool technology and look at ways to revamp our processes. For instance, I think augmented reality can offer some great benefits. Our technicians in the field could use it when they're looking at a switch for instance, and they can overlay a device and make sure the wiring is connected properly. That's a valuable use case but not to the place to start on day one.

Everything comes back to feasibility, viability, and desirability. We're going to build with empathy for the users. We're making sure that we appreciate the differences in our workforce. We need to address different groups of people with different things. There are some who love technology and others who are very skeptical of it.

Then we build personas associated with each group of our users. Based on those personas we try to understand them and identify their essential needs and. requirements.

As a technology leader, I think it's important to be humble and work with the people that are going to use the technology. Failing to do this is the heart of many mistakes. We want to build the desirability by design to avoid another epic failure.