Interview: Donal Oâ??Callaghan â?? MD, Callaghan Engineering, Ireland

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Donal Oâ??Callaghan, founder and CEO of Callaghan Engineering, an Irish engineering and construction firm, tells us what motivated him to break into the pharma market in 1990, the changes in the industry he has seen, and his ambition to position Callaghan Engineering as an engineering house of choice.

You founded Callaghan Engineering in 1990. What is the story behind that decision?

In the 1990s, we identified a niche for an engineering consulting company that catered to small to mid-sized projects while still offering a high-quality and personalized service. While the big international players like Jacobs were very present in Ireland, along with a number of Irish companies like PM Group, we thought there was space for a company like us to break into the market. This is where we have focused in the past two decades and I am happy to say that we have been quite successful in winning business from the top pharma and medtech companies.

While we began as a service provider for the pharma sector, specifically API plants in the 1990s, we have diversified significantly over the past few years. The 2008 recession saw a fall in life sciences investment in Ireland, so it was necessary for us to identify other markets that we could move into. We are now also serving the data center sector as well as the food and beverage sector. Nevertheless, the life sciences sector still represents a significant and strategic component of our operations.

How have you seen the industry change in the past two decades?

The industry has opened up significantly in the past twenty years; Ireland now has a well-deserved reputation for collaboration and cooperation. I am involved with the International Society for Pharmaceutical Engineering (ISPE), which seeks to promote industry knowledge and the sharing of ideas. For instance, within Ireland, we organize trips to different plants and manufacturing facilities to exchange best practices. This has played a role in building that sense of camaraderie and openness within the industry.

There are naturally confidentiality issues and patents that companies wish to protect but generally speaking, there is a great sense of collaboration within the industry and people are willing to share their expertise and experience. Being a small country, everyone knows everyone in the industry, which fosters that collaborative atmosphere.

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On the pharma manufacturing side, we have seen many exciting developments, particularly with the latest biopharma revolution. The industry is really emphasizing flexibility and agility, so things like modular design and single-use disposable technology are becoming very popular. A notable example is the GE Healthcare Biopark investment down in Cork, for instance. This trend will impact engineering companies like us because design engineering is part of our product offering and the point of having these ready-to-go facilities is to reduce or eliminate the resources needed to set up a new facility. That said, there is no reason we cannot be involved with modular design as well and in fact, some of our ongoing projects at the moment involve some modular components.

From a broader perspective, I am not sure how this will affect Ireland, Inc. and Irelandâ??s position as a global pharma manufacturing hub. A facility that can so easily be uprooted to a different country may not necessarily be the best in terms of building the overall pharma ecosystem within Ireland.

Given your international experience, what would you say is the worldâ??s perception of Ireland, Inc.?

Within Europe, there is clear recognition that Ireland has a strong life sciences ecosystem. Most of the top companies operate here and the skills the local industry has accumulated through working with them are invaluable. For instance, most of the plants here would have gone through FDA inspections and established a successful track record â?? very few of them would have had a Form 483 filed, for instance. This translates into the European market: when these pharma companies need partners across Europe, they approach their Irish partners first.

We have a great relationship with the US as well, what with the Irish diaspora over there. In the Brexit aftermath, we are now also the only English-speaking country in the European Union (EU), which is another advantage. We have a lot of foreign direct investment (FDI) and incidentally, 60 to 70 percent of that would come from American companies. In the life sciences industry particularly, that track record of success is critical.

More broadly, our investment promotion body, IDA Ireland, has done a superb job of branding Ireland globally. In addition, our supply chain of engineering houses, contractors, and top class universities producing high-quality students is a definite advantage.

What do you think Ireland can learn from other countries and vice versa?

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Having lived in the US for a number of years, I am a strong admirer of their can-do attitude. As a young engineer in California near the start of my career, I remember speaking to people and marveling that I was able to speak directly to the inventor of a particular equipment or software. Elsewhere, you would be meeting with the agent of an agent. The environment there was highly innovative and very stimulating. What really cultivated this was their attitudes toward failure. In the US, if you fail, you simply picked yourself up to try again.

On the other hand, Europe places a strong emphasis on work-life balance, which is a healthy attitude to life. There is still a lot of innovation in Europe, of course, but in perhaps a less aggressive sense than in the US, partly because of this focus on maintaining that work-life balance.

Ireland has a reasonable work week, around 37 to 40 hours, but it differs from other European countries in that, when push comes to shove and it becomes necessary to put in more time, we are willing to do it. The Irish people have a great work ethic and a real commitment to putting the shoulder to the wheel and getting the job done. I know companies that had transferred their operations from Ireland to Eastern Europe in search of cost savings, but subsequently had to bring them back to Ireland because the quality was not up to standard. Ultimately, it is more cost-effective to get the job done right the first time round!

We spoke about the biopharma revolution earlier. With the shift from API production to biologics production, how difficult has it been for Callaghan Engineering to change its service offerings?

To be perfectly honest, the transition has not been that difficult. Many of our clients are in the biopharma space now, having shifted from API production in Ireland, so we are very exposed to biologic facilities; the future of the sector in Ireland is definitely in biopharma.

What is interesting is that from a design point of view, the old API plant was actually very complex **â??** the most complex, indeed, in my 26 years of experience. There were so many elements to consider, from the pressure relief to the piping systems, particularly given the highly-flammable environments. Biologic facilities are complex in their own way but there is less risk of a fire breaking out as biologic production tends to be water-based. That said, it brings in additional components like containment, filling classifications and environment control, to name just a few.

We do continue to work on a number of API plants in Ireland. It is a bit like going back to where we started, which is nice. Generally speaking though, we would have grown alongside our clients as they themselves moved from API to secondary to biopharma production, maturing with the sector. That itself is a testament to our ability to adapt and evolve to continuously meet our clientsâ?? needs. As an example, we recently completed a project in Ireland for Amgen with Fluor Corporation, which went very well. That led to a number of other similarly-sized projects with them. It is ultimately all about building and retaining client trust.

There is a focus on continuous improvement and training at Callaghan Engineering. We keep up with the latest technologies, attend industry conferences and fund training courses for our staff. We now have a very strong Building Information Modelling (BIM) department, which combines with the latest process engineering software to put us at the forefront of engineering technology for biopharma facilities. Given our work with all the leading pharma and biotech companies, there is a lot of expertise and experience we can bring to the table â?? without breaking any non-disclosure clauses, it goes without saying.

What do you think sets Callaghan Engineering apart from other service providers?

Our focus on mid-sized projects guarantees that we will always offer you our A-team. Bigger companies may not be able to do that because they will send their A-teams to the billion-dollar projects. I am still personally involved with a number of projects too and we do really emphasize the personalized approach; I am always available should a problem arise on a project. We are also selective about our projects so we keep our focus and resources targeted.

As a company, I think we are also quite personable. We want to get on well with our clients because that is a win-win situation. There are also many really experienced people in the company that have worked in the pharma sector for a number of years, so they are bringing along that invaluable experience.

Looking forward, what would you like to achieve for Callaghan Engineering in the next few years?

I would like to grow the business to a certain level without sacrificing any quality or other positive aspects. It is very important that we grow sustainably. We want to be known as an engineering house of excellence.

The greatest reward for me is not financial but personal: having someone say to me, â??that was a job well doneâ??, and being able to take pride in your work. This is why I still enjoy getting up in the morning at 6.30 to go to work after nearly three decades.

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