

DR. ANNETTE ARNOLD

SUSTAINABILITY AS A MATTER OF PRINCIPLE

INTERVIEW: Andrea Mayer-Grenu

Climate change, digitalization, the consequences of pandemics – the major challenges of the industrial sector do not stop at medium-sized enterprises. Dr. Annette Arnold, Managing Director of Alfred Arnold Verladessysteme GmbH & Co. KG and an alumna of the University of Stuttgart, discusses how she tackles them whilst simultaneously making the business more family-friendly.

Dr. Arnold, how does one position a traditional family business to meet the challenges of the future?

ANNETTE ARNOLD We've been very conscious of the challenges posed by climate change for a long time, and we began actively addressing them very early on. I joined the company at the same time as I began my doctoral studies about 16 years ago and, after graduating, I was given the opportunity to manage the construction of our new company building, Stuttgart's first EU-certified "green building". Our fleet already includes two fully electric vehicles. And all this can only be a start.

Our vision going forward, for example, is to work in a holistically sustainable way whilst simultaneously reshaping the market segment in which we operate through continuous innovations to provide users with solutions that will ensure the best possible efficiency levels, safety and sustainability. Not a year goes by without our successfully launching new products and details for the loading zone. Many other discoveries remain to be made thanks to technological progress and changing framework conditions.

What challenges is Alfred Arnold Verladessysteme GmbH currently facing?

AA Like most people and companies, the Covid-19 pandemic has presented us with some hitherto unforeseen challenges. Our cross-border business in particular has been severely impacted by entry restrictions and quarantine regulations and we are still feeling the consequences in supply chains and assembly operations among other things.

We are simultaneously struggling to cope with the commodity escapades on the world market: whether it's foam, steel or electrical items, we are feeling the pinch of shortages everywhere as well as of such huge price increases that many things will have to be completely redesigned. Reliable cost and delivery time planning is a thing of the past.

What role does digitalization play in this situation?

AA The fact that we had already made good progress in the digitalization process prior to the pandemic has helped a lot. For example, all of our installation engineers already →



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Photo: Private

Annette Arnold studied mechanical engineering at TU Darmstadt and completed her doctorate at the University of Stuttgart's Institute of Mechanical Handling and Logistics (IFT) between 2005 and 2007. She has held various positions at Alfred Arnold Verladessysteme GmbH & Co. KG since 2004, and has been Managing Director there since 2017.

→ had digital access to our internal knowledge base and collaboration tools, so we were able to spontaneously expand our remote collaboration activities. Whenever we implement innovations to address some urgent contingency, we do so in such a way that we can continue to use them over the long term, so, the digitalization of our work flows is now even more thoroughgoing, which benefits process transparency and speed. It's a never-ending process.

The turbulence that is currently affecting the supply of raw materials also necessitates new controlling scenarios in procurement. We have to be extraordinarily flexible to be able to respond to these disruptive changes, and the better our automated data analyses and forecasts, the easier it is to do so. But the associated additional effort and cost of data maintenance is enormous.

Arnold Verladessysteme is also very active in the field of research and development. What projects are you currently working on?

AA Our priority at this moment is sustainability. We have always focused on durability and reparability, but to make significant resource savings and "go green," we will be faced with new issues.

For example, I led a research project many years ago in which we completely re-conceptualized the loading zone and presented all such tasks as lower body protection for trucks, truck stabilization and positioning in all three axial directions within a new overall solution, which saves time and resources and increases safety. This research, which was funded by the German Federal Ministry for Economic Affairs and Energy (BMWi), earned me the honor of being picked as one of the TOP 5 researchers at the 2013 German Future Prize event.

Yet not all users are able to implement this comprehensive solution, so we are working on the provision of sustainable responses for all detailed point solutions. →

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→What expertise that you gained during your doctoral research at the University of Stuttgart flows into your current work?

AA My doctoral thesis was about the field of logistics, so many aspects of it are naturally reflected in my current work. But, it seems to me that the mindset that one develops during such an endeavor is more important than the specific content: it's about learning to approach a complex problem in a flexible manner and from many angles, and to cultivate a sense of patience and perseverance in the full knowledge that solutions will not be found overnight. These are the experiences that help shape one's later work.

Despite many programs and initiatives, women continue to be underrepresented in engineering careers: what is the situation at Arnold Verladesysteme?

AA Half of our staff members are male and half female, but that's coincidental to some degree. However, I specifically encourage female students to work in our company. We generally do a lot to help our employees – whether mothers, fathers or family caregivers – to reconcile family life and work. Flexible work schedules and dependable working hours are both key to this. A culture of being seen to be present outside of regular working hours has been out of vogue for many years now: everyone can arrive at the daycare or school on time, turn up punctually for a private appointment or pursue leisure activities without having to fear disadvantages in their professional career development. Experience has shown that this is extremely important when it comes to the compatibility between the different areas of life.

You have mentored female students and doctoral candidates at several universities, including the University of Stuttgart. What advice do you give young women?

AA During the mentoring program I became familiar with the variety of long-term dreams and life situations of many young women. It seems particularly important to me that women should clarify the fundamental questions for themselves: who am I, where do I stand, where do I want to go? After that it is not usually so difficult to find the way there. The desire to pursue personal goals that contradict stereotypical roles often takes courage: the more individual and/or ambitious the goals, the more challenging the path to achieving them can be but that is precisely the point at which one mustn't lose faith in oneself. People who carry on in the face of adversity and actually achieve their goals usually live very happy lives as well as serving as role models for others.

As an entrepreneur, what would you like to see from science?

AA Knowledge should be more freely accessible. I'm concerned about the commercialization of knowledge – if individual ideas can only be used by individuals, then that hinders progress. Small companies would benefit hugely from financially independent research that doesn't rely on private sector income in the form of contract research or patent rights, as SMEs can often not afford the necessary basic research, which excludes them from certain developments right from the outset. If the knowledge gained through publicly funded research were made accessible to all people and businesses, we would all have made much more progress by now. →

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