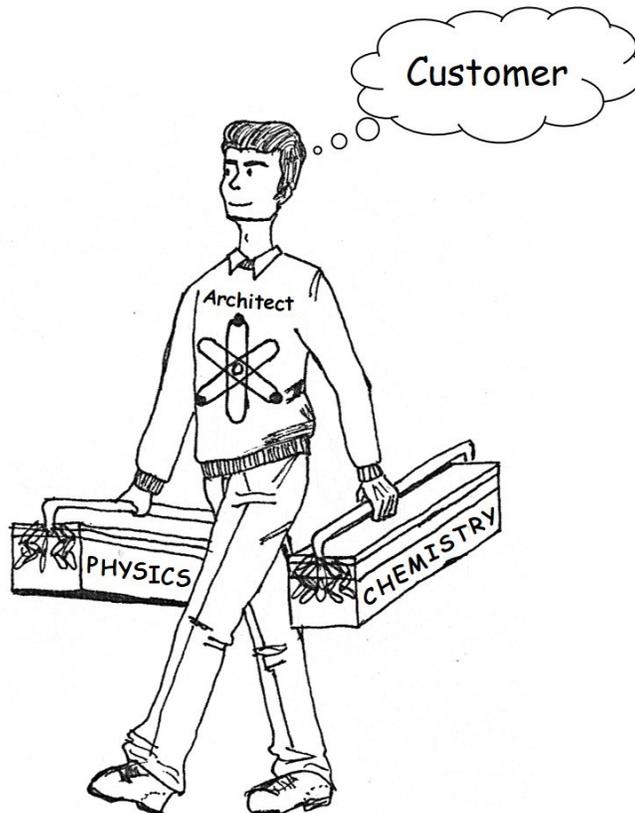


Architect!

In January 2014, [an article published on this site](#) predicted that:

The champion of the second nuclear era will be the Nuclear Energy System Architect.

Let's illustrate this idea - what might one of these atomic architects look like?



This person is dynamic and determined. He is moving forward, motivated by the desire to meet the needs of a **customer**, and by the enormous potential of the atom to solve the urgent problem of climate change.

He is happy because he has a **vision** of building a machine that will bring progress to humanity **and** to nature. He is carrying tools that, used together, will help him achieve that vision.

His customer needs a breakthrough technology that will produce clean energy cheaper than coal. Our architect is not a great physics or chemistry expert, but he knows how to bring these disciplines and others together to illustrate, defend and develop a **balanced concept** for a nuclear energy system, in terms of value, cost and time, which will be attractive to stakeholders such as the customer and investors.

In his thinking, he has rejected certain myths and beliefs from the first nuclear era, such as the idea that nuclear power is special or different from other industries, or that normal market rules don't apply to nuclear. He is open to solutions that are very different from traditional technology, such as **liquid** fueled molten salt reactors that allow him to take full advantage of the tools in his two boxes.

Physics + Chemistry > Physics

It's not always easy for him to work with his physics and chemistry colleagues. Scientific disciplines are mainly concerned with finding proposals for the creation of value (for a reactor physicist, cost and time are simply not the problem). But he's the one making the decisions, so he manages to bring them out of their world dominated by the **certainty** of scientific knowledge, towards the world of the architect, immersed in the permanent **doubt** of the best compromise between value, cost and time.

The nuclear energy sector has a governance problem. Impressed by neutronics, politicians have given physicists the power to decide which concept to develop. Architects would be better placed to defend stakeholder interests.

We started with one prediction - let's finish with another:

The second nuclear era will begin when politicians transfer power from physicists to architects.

Let's hope that this power transition will happen on good terms.

John Laurie, <http://fissionliquide.fr>, November 2017

Illustration: Alexia Laurie