

Benefits of a digital value chain

It might sound like bringing sand to the beach, but in the PV sector a lot of friction inside business processes is still accepted. Looking at business processes in PV, several fields and several players can be identified. We at PES were intrigued by this statement from Stefan Wagner, Head of Marketing & Sales at Levasoft and asked him to expand on this.

With the exception of the end-customer, all participants of a value chain in PV seem to accept a lot of friction inside the processes and thus an extended time-frame in delivering results.

Planners satisfied

When we started the development of Solar.Pro.Tool in 2010 at Levasoft, we were aware, that there was no integrated solution for project planners, to design and deliver one project with one tool. So, it was clear to us, that all demands of project design needed to be covered by features inside Solar.Pro.Tool. This tool still is the only white-label software, world-wide to offer this.

No matter what type of project and no matter what needs to be calculated or documented, planners using Solar.Pro.Tool need no an additional software for their project.

Just one part of the chain

Having reduced friction during the planning process, we could see how project planners and customers gained a lot of momentum. Skilled users can easily design 20 to 50 projects per day, which gives an enormous yearly number of projects. So, the next hold-up was identified: the transformation of leads to projects and the conversion of projects into orders.

Leads to customers

The transformation of leads to customers is the first sector of possible friction. Manual

transformation is always a source of errors – and doubling the process of manual input, the quota of errors simply increases. However, and no matter where the lead originally came from and how the CRM (Customer Relationship Management) solution may look, substantial information – such as contact data – needs to be transferred to a planning tool, as it serves as the base the information for proper project design. Bearing in mind that manual input extends the possibility of errors and accepting that manual transfer is a source of friction, a time extending process, automatic transfer from one system (CRM) to another planning tool is a necessity.

Project results to fulfilment

On the output side, things do not look as drastic as on the input side, as only some manual data input is necessary on processing the bill of materials and covering letter for a quote, for example.

Here, friction can be identified by looking into occurring and re-occurring processes. Fields in this area are quote generation, transformation (export) of data into other systems and project documentation.

On a process level, the decision for automatization depends mainly on the number of items in a certain time-frame. If the measured value is below a defined level, automatization might be questioned. However, scaling business should be regarded as a multiplying factor.

Digital value chain

The value chain starts with lead generation, a point which is maintained by your website and a point where potential customers might be served with a first estimation, based on few of their inputs. When interest is raised through pleasing results, being contacted and being presented with a personal quote, their data should be transferred to a lead qualification system, then into CRM. Notifications to partners, planners and the interest itself comes into play.

The next step probably is lead qualification, followed by entering project planning to have the BOM and documentation ready to create the quote. With an established digital value chain, there would be no need to start a blank project, as relevant data – such as project location, roof-type and available roof-area (guessed by interest) – were entered at the beginning..

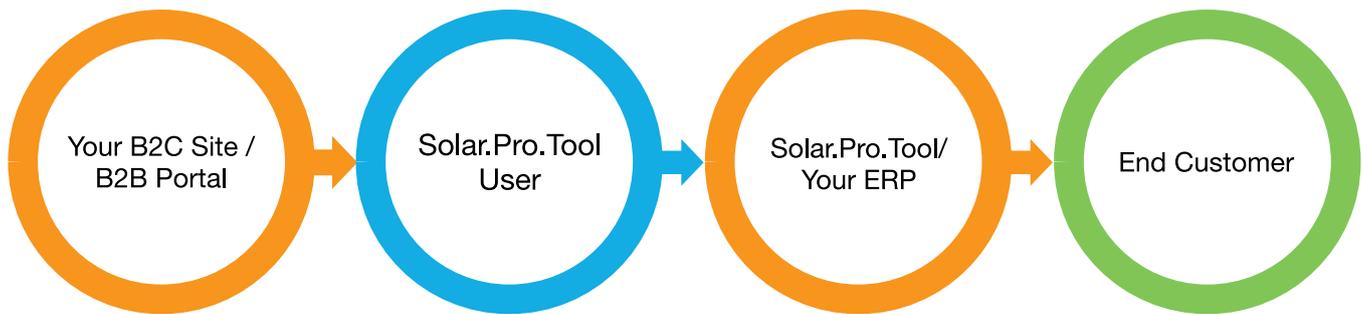
After completing project design, the BOM must be processed to generate a quote. Again, a digital and automatic process (background) is desired for quick and reliable data.

All parts of a quote, acceptance of order, invoice and scheduling of installation is a typical ERP task – the last digital asset inside the value-chain. So, the digital components of a possible value chain are web-site, CRM, planning tool and ERP.

The seamless background data transmission and correct interfaces are the link in this digital chain. A value chain like this can be easily scaled, because scaling means traffic and sizing/reliability of the integrated IT systems.

The substantial fuel to integrate different IT systems is the so-called web-service.

In a web service, the Web technology such as HTTP, originally designed for human-to-machine communication, is used for machine-to-machine communication, more



specifically for transferring machine-readable file formats such as XML and JSON.

Today, web service provides the opportunity for different software on different machines to interact with each other. Something that was almost impossible 20 years ago. APIs (Application Programming Interface) on each side offer methods and functions from the other side.

As a technical conclusion, all involved systems must have web-interface to be part of this value chain.

Business Partner relationship

While the issue of friction and scaling have been looked at above, there are some other benefits, which come with the digital value chain, or can be achieved with extra implementation on one of the involved IT systems.

In relation to commodity level, it would be good to look at the user-perspective of a partner, while stepping through the digital value chain. Where could a higher level of service lead to a higher level of commodity?

There are plenty of possible points:

- What if the business partner, after being authenticated at your B2B portal, was able to see all of his projects, generated inside the planning part of the value chain.
- What if he/she could just click to order the components, processed in the BOM /quote?
- What, if leads would be directed straight to him, based on specific metrics, so as to be instantly and flawlessly

processed as planned projects, by your business partner?

You see, the cases and opportunities of increasing the level of commodity are numerous and there are a many different ones.

Added value through extended service (for the partner)

Beside a high level of commodity, which is somehow the door-opener for users to adapt to a new technology, when a digital value chain is being established added value should be the background of all business strategies.

As a matter of fact, we humans are not too open to change and not really willing to give up a restrictive and passive standpoint – especially when it comes to new technology, new techniques and new processes. This is the biggest challenge, apart from the technical ones, to convince people to re-adapt their behaviours and traditions.

A kind of revenue should be present to the user, in a detailed, broad and easily identified manner. Maybe your customers feel in an insecure, rather than in a secure position. So, providing assets to improve their sense of self, would provide a change of this sense.

Summary

I want to open your mind to ideas, specific demands and frame conditions. It is just a door I want to open, an invitation to check if and how things on a variety of levels might be improved.

I also didn't want to bore you with figures

and statistics, as every digital value chain might have things in common with many others. However, to gain most potential and better results, a customised approach needs to be taken, to meet all possible desires, constraints and goals.

www.solarprotool.com

Solar.Pro.Tool

Solar.Pro.Tool, still the most complete white label planning software world-wide, entered the market in 2011. It is a web-based planning tool for all kinds of project types. One of the unique selling points is the calculation of statics and ballast as a background service.

Customers of Levasoft can be found on the manufacturers side of mounting components. For the last couple of years, our customers have been wholesalers, PV-module manufacturers and electricity companies.

Together with Levasoft, several of these customers have already established a digital value chain. These have always been done on a project base. The implementation details and specific feature sets are the exclusive property of our customers, as they have been developed entirely for each customer. However, Levasoft not only delivers code development, but has the internal understanding of being consultants to our customers, without transferring discreet knowledge from one customer to another.