

STORING LAB FINDINGS ELECTRONICALLY

The laboratory notebook is like a researcher's bible; a log book where all notes, sketches, diagrams, images, results and methods are collected. In the scientific community it has become increasingly important to be able to document/record methods and results in a perspicuous, comprehensive and safe way. This is essential for example for quality assurance and patent issues/inquires. Electronic Laboratory Notebooks have proven attractive compared to the traditional hardback laboratory books, saving both valuable time, improving quality and facilitating the sharing of data.

The pioneer in this field is the Swedish company Contur Software and their Electronic Laboratory Notebook (ELN) system ConturELN.

"We see a constant increase in the number of users all over the world. In 2017-2018 I think the market will be completely mature for this technology," says Martin Wattin, CEO of Contur Software.

Still around 70-80% of all laboratories, academic and industry, use hardback laboratory notebooks. This could be due to needs for computer software to satisfy the requirements for authenticity. It is very important that results can be proved and verified, in particular in patent disputes or inquiries. For example, in the US the "first to invent" concept makes the laboratory notebook extremely important in infringement issues and patent disputes.

"However, this is really not a concern anymore. The system can today provide completely authentic recording and data. Documents can be signed properly by using electronic signatures and there are also systems for printing PDF: s and signing them by hand, so-called hybrid systems," says Martin Wattin.



Performing academic research today requires both efficient and accurate data handling

An electronic signature is any legally recognized electronic means that indicates that a person verifies the contents of an electronic message. In many countries electronic signatures have the same legal consequences as the more traditional forms of issuing documents.

Up in the clouds

Contur software was founded in 1999 and started out as a consultancy company, with their first commercial customers being the Swedish biotech company Biovitrum.

"Our first project was to develop a system for handling their laboratory data electronically. We tailor-made the system in close collaboration with their researchers and staff, and this project led to our first electronic laboratory notebook system, ConturELN," says Martin Wattin.

In 2004 the company switched and became a software company and today they develop, enhance, sell and support software for R&D laboratories. Clients are distributed throughout North America, Europe and Australia and include for example Dystar, Octapharma, Phadia, Plexxikon. The software is also widely used within prestigious academic institutions such as the Karolinska Institute (KI) and the Mount Sinai School of Medicine.

"The demand is equally large from small academic institutions as it is from larger pharma and biotech companies," says Martin Wattin. "Performing academic research today requires both efficient and accurate data handling. Electronic laboratory notebooks are an advantage for fulfilling requirements for receiving grants and for publishing results in journals. They are also helpful when there is a turnover of staff in the lab and in international collaborations."

The company has also developed ilabber; an electronic laboratory notebook which does not require a server (so called cloud computing) for smaller laboratories, both companies and research groups at Universities, and single users who have no IT support.

"Cloud computing means that the software is distributed over the Internet and clients may connect to the system from any computer they want. This service does not require hardware or specific IT competence and we do all the backups and store the data. Our clients pay a fee each month for this service," says Martin Wattin.

ammonium bicarbonate	0.67
monocalcium phosphate	0.67
Total	1.7665

Sample #	Lot #	1234/234/A			1234/234/B		
		Parts	%	g	Parts	%	g
C1734	LN0617345	150	75.00	117.50	78.00	90.00	
C2345	LN0623456	25	12.50	30.75	25	10.00	15.00
Solvent	LN0638667	25	12.50	30.75	75	30.00	45.00
TOTAL		200	100.00	150.00	250	100.00	150.00
Active ingredients		60.25			65.00		

Screenshots, iLabber.

Local but global

Contur Software today has 20 staff located in Stockholm. Although there are high expectations for the future and the ambition to expand, Martin Wattin and his colleagues plan to remain in Stockholm and not become distributed over several local offices yet.

"We operate globally, but without having physical offices around the globe. We enable customer meetings to be held as web meetings and we provide our services 24/7 using the web," explains Martin Wattin.

The company's business strategy is to use this new technology to reach, attract and support customers all over the world, and continue to develop and expand.

"We aim to continue to develop our services and provide our clients with complete and tailor-made solutions. From my experience, packing software with too many functions does not help the user. So we strive to keep our products and their structures as easy to use as we can and as pure/refined as possible, we try to think modularly. An inexperienced person should be able to quickly learn how to use the system and work with it on the same day that they are introduced to it." ●