



SAEL

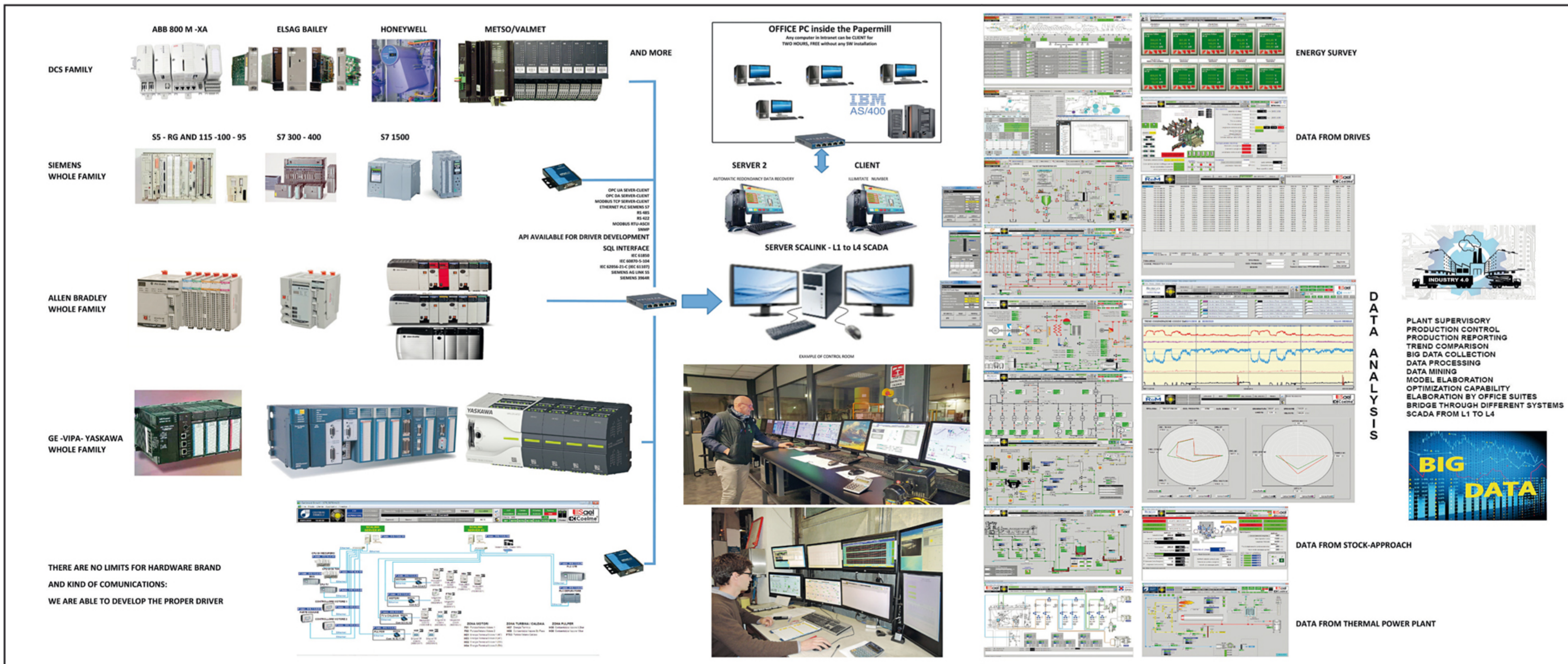
approaches to the new paper mill management

“READI” Industry 4.0.
System Data Collection,
Processing, Archiving...

by: SAEL Srl

Production reports, raw materials, bobbins, winder and sheeter production cycles, steam, energy, gas, and so many other crucial parameters... Most of the time, these important variables being collected for cost controlling and management

reporting, are processed in a semi-automatic or in a manual way, or most frequently using different software and other tools. But how to avoid transcription errors, computing, as well as getting all the data faster, easier and in a smarter and reliable way from the local working stations? How to get back to the main software used? Several PLC and DCS of the plant are connected to the system through an operator friendly interface, allowing the paper mill to acquire all the data from different machines. The Scalink® SW architecture shows its potentials by fulfilling and providing all the information required to the ERP plant platform, stepping up the entire system, enabling all the analysis and calculations. Eventually the system supports different protocols used (owned-office PLC-DCS-HW). Our Scalink® platform, made for paper mills' systems networking, without specific I/Os, was eventually the best choice for the customer. Based on a SCADA philosophy, easy to program and practice, Scalink® can be totally integrated to the Windows system, exploiting all the potentials arising from communication among native office stations. The real challenge is, and will be, to facilitate operators by providing them one simple tool versus all the rest different ones which they use today. Even though Scalink® is a customized solution for multiple and specific needs of each paper mill, it is not suitable as a system BRIDGE only but as a global management platform, as well. Any single value even of a relatively larger scale size can be stored, historicized, and showed in a report way, independently to the original source - all related to the Hard Dick capability, of course. Every variable can be treated by Excel or Access Windows programs, and resubmitted as a new variable after the calculation (production specific, energetics, etc.). This is why our Scalink® system has no barriers, computation wise.



we show you the way

READI-data mining Scalink®
 exportation
 preparation
 configuration
 data analysis

Industry 4.0
 ISO 9001 certification
 Big Data Analysis (costs/benefit)



Which is the paper mill industry future?

The new upcoming frontier is the so-called "Big Data Analysis" providing a useful tool both to Top Management and to other managerial stuff, needed according to the strategic goal setting of each mill. Within the few following years, all the production processes will be digitalized. Industry 4.0 won't be a target to achieve, but a more of a new way of making business and manage companies.

This is exactly the Big Data frontier. All those huge amounts of data, managed by an A.I., and applied to a predictive analysis in real time, will be the basics for a smart maintenance program, as well as a better/efficient products engineering: efficiency and cost effects, in other words. There is no doubt that data will play a

strategic role in the modern industry, since they are becoming larger size & amount wise and of different characteristics, such as:

1. Design data: data regarding designing machinery and products.
2. Operation data: in relation with the equipment functionality and their components, as well.
3. Efficiency of labor data.
4. Costs data.
5. Logistics data.
6. Environmental and climatic conditions data (internal/external temperature, humidity, noise).
7. Fault and system health monitoring data.
8. Quality product data (% of defective production).
9. Product's life cycle data (reparation, warehouse availability).
10. Customers data (market targets, feedback from product usage, design suggestions).

Thanks to the Data Mining (the decision maker information) it is possible to understand if there are some engineering errors; machines and components life cycles; production faults or mistakes; efficiency; job monitoring; customers preferences and needs, and so on. Starting from these real time information, the companies can go far beyond the simple manufacturing process: they can aim to the global service. ●

“ The spirit of **improving** solutions, technology and innovation ”

SAEL SRL
 Via dei Genieri 31 36040 Torri di Quartesolo (VI) - Italy

■ **website:** www.sael.it
 ■ **phone:** +39 0444 582499
 ■ **contact person:** Paolo Andrighetti - Domenico Forestan
 ■ **e-mail:** paolo.andrighetti@sael.it - domenico.forestan@sael.it