

#42012

INFOCUS:

MORE SPECIALISATIONS,
NICHES?

COMPETENCE
DEVELOPMENT
AND RESEARCH

BIGGER
RESPONSIBILITY

LONG TERM
RELATIONS

CUSTOMER
DEMANDS



FUTURE DEMANDS
ON THE VALUE CHAIN

THE FUTURE?

SCANDINAVIA?

WHICH COUNTRIES
WILL FOCUS ON
DEVELOPMENT/
PRODUCTIONS?

COLLABORATION BETWEEN
PRODUCT OWNER AND
PRODUCTION PARTNER



↑
INCREASED
PRODUCTION
VOLUMES

OUTSOURCING?



Looking to the future: Western Europe

– great prospects for a smart electronics industry

As suppliers of key components to the electronics industry, it is extremely important to understand where this sector is heading. This, of course, applies to technical developments, the way suppliers in the industry interact with each other, as well as where and how development and manufacturing takes place. To try and answer some of these questions, this issue of “In Focus” has turned to two interesting names within the Nordic Electronics market: Mikael Joki, Managing Director of Eskilstuna Elektronikpartner and on the board of the Swedish Electronics Trade Association, as well as Mats Andersson, Sales Director at Data Respons.

Mikael Joki has gained a wealth of experience, both in his role on the board of the Swedish Electronics Trade Association and as Managing Director of the EMS company, Eskilstuna Elektronikpartner. Here, he shares his thoughts on the future of the electronics industry.

If we could start by looking at the history, how would you describe what subcontractors (EMS companies) have done to improve their offerings to meet the product owners' (ODM companies) demands?

”In general, they’ve broadened their range of services, with specialised services and a focus on specific segments. The EMS companies have tried to create niches for themselves in, for example high reliability electronics or medical technology. We are seeing a focus on the low and medium volume segments, although they also seek to win some of the larger volume projects to fully utilize their manufacturing capacity. Some EMS companies are also turning to Lean Production in order to further improve their production process flow.”

“I can’t, however, emphasise enough how important it is to strengthen the link between design and production.”

MIKAEL JOKI, MANAGING DIRECTOR, ESKILSTUNA ELEKTRONIKPARTNER

”The EMS companies are turning to specialisation in order to be able to take on greater responsibility and therefore, higher value added business. They are looking to serve more as consultants, supporting in the development of concepts and products. An important factor for success in the future is the ability to participate more fully in the development of processes linked to production technology, enabling EMS players to make the move from simply manufacturing suppliers to partners.”

What sort of relationship would you like to see between the supplier and product owner?

”I’d like to see them work jointly across a broad platform and take in the entire value chain when introducing a product to the market, as well as set up a common goal right from the start. Ideally, we would see the product owners taking their ideas to the manufacturers, after which they would together choose appropriate partners to design and



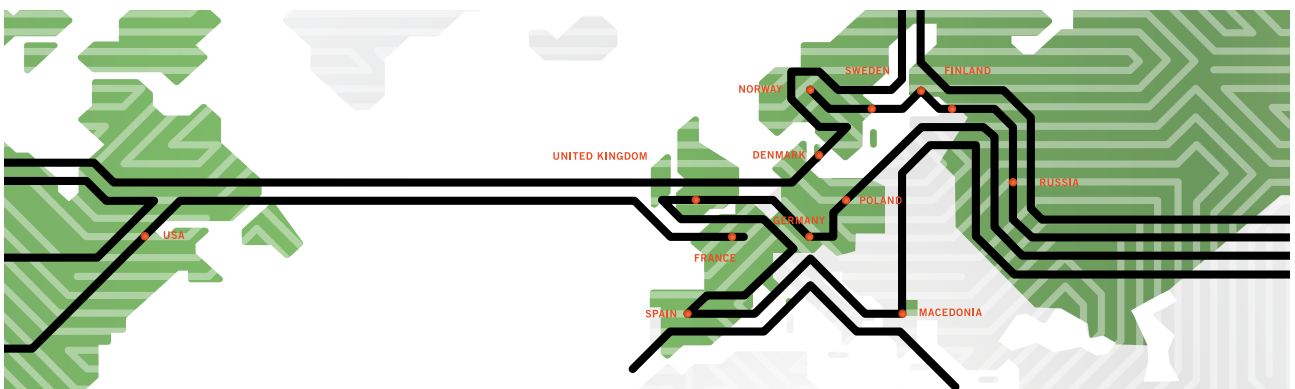
Mikael Joki would like to see EMS companies become more involved in the design of the end product.

develop a production prototype. All too often, we see mistakes made at the design phase, which leads to an exaggerated focus on minimising costs at the production stage.”

”Gathering round the same table would enable us to create smart designs built on a well defined goal. This approach would also make a locally based value chain competitive. But first I think we need to see a change in attitude that opens the way for manufacturers to participate and encourages them to contribute their know-how. It is all very well to talk about design for manufacturing but how many parties are actually involved in the entire chain?”

To what extent are EMS companies involved in the design of the final product today?

”Too little. Most manufacturers can experience production problems that can be traced back to the early phases of the design process. These can often be related to P-FMEA (Process Failure Mode and Effects Analysis) requirements without sufficient D-FMEA (Design Failure Mode and Effects Analysis) having been carried out, both well proven tools to aid quicker transition from design to production. Alternatively, it might also be found that components that worked at the prototype stage, are not necessarily suited for higher volume production, designers failing to grasp the link between footprints and soldering points that don’t meet IPC norms, or possibly, ambiguity



”The Baltic countries, Poland and Rumania are still currently outsourcing markets, apart from the large Asian market.” says Mikael Joki.

or even poorly specified requirements relating to the PCB or other critical components.”

“The work of the designer is crucial in this context. They need to familiarise themselves more with the production process. They have to leave their desks and adopt a more hands on approach close to the manufacturer in product development. This will give you the right quality and provide the product owner with a better platform from which to achieve competitiveness.”

What do you think the future holds in store for the Industry?

“We are going to have to meet even greater demands if we want to continue as suppliers in the future. It won't be enough to deliver the right product on time, with the right quality, at the right price and in some cases, extended payment terms. We'll have to accept greater responsibility for the final product even though we don't own the product. That will, on the other hand, give us a larger chunk of the business, as well as enable us to put greater demands in respect of design solutions.”

“Apart from better interaction within the value chain, I also hope we will see more collaboration between companies, for example through benchmarking, which can help build up the electronics market overall. That's what we at the Swedish Electronics Trade Association are striving for - a strong platform for collaboration that enables problems and prospects for the Industry as a whole to be brought to the fore. My impression is that the other Scandinavian countries, as well as Germany, are better at this. We should learn from them.”

How would you describe the outsourcing trend and what do you think will happen in the future?

“Taking to one side the large Asian outsource model, the Baltic countries, Poland and Rumania are still currently considered as potential outsourcing markets. We continue to see a trend where manufacturing today is not automatically being out-sourced to Asia, and in some instances, we are seeing an increasing flow of production trickling back. We now have a future scenario that will see some production relocate back from the Far East, driven by global market forces.”

“I think that Scandinavia could well be a part of a global shift with increased production volumes within the electronics industry in Europe. Our region offers the advantage of a stable market. Just now, the infected relations between China and Japan reveal the inherent instability in Asia. And with incomes rising fast in the low-cost countries, the balance will eventually shift.”

So you feel the prospects of Scandinavia being competitive in the future of good?

“If we set our sights right for our own operation and with the appropriate value chain, I think that we will be able to build a strong competitive concept that measures up to our customers requirements and expectations. Our production is highly flexible and needs only small tweaks to be able to adapt to unique or specific demands. The increasing complexity of the products manufactured today speaks volumes about the production capability here, as well as the trend towards smaller production runs. This puts greater demands on both man and machine. We have the industrial experience, as well as systems that encourage individuals to experiment and develop in their job situations.”

“I can't, however, emphasise enough how important it is to strengthen the link between design and production. The value chain will greatly benefit from this and attract new competence. What is also needed is competence development and research, both basic and applied research. This is something that we at the Swedish Electronics Trade Association are working to create a common strategy for.”

Finally, how would you describe your dream supplier?

“That would be a pro active supplier who always delivers the right quality, at the right time, as well as ideas as to how we might generate better business together.”



“Poor quality is expensive and that message is more readily acceptable today than it was 10 years ago.” says Mats Andersson.

PROFITABILITY THROUGH LONG-TERM COLLABORATION

In his role as Sales Director at Data Respons, **Mats Andersson** has a multidimensional view of the market, since his company provides both consultancy services, develops system solutions and sells standard products for imbedded computer systems.

How do you view the future of the electronics industry in the Nordic region?

“I am convinced that it is here to stay and will develop. Then there is the question that is always being asked regarding the amount of production that takes place here compared to elsewhere. Research and development will be conducted in Sweden and the Nordic region. Production will also be located here, the question being what type and what sort of volumes.”

“The largest volumes for the consumer market will surely continue to be produced wherever costs are at their lowest, but I think we'll find the Nordic region producing industrial applications, encompassing both small, medium and large volumes.”

What are the three most important criteria Data Respons applies when developing your products?

“Innovative strength, speed and quality. We have to be innovative and familiarise ourselves with the customer's application. Through dialogue with the customer we can find out what they really want.”

“A strong relationship and long-term collaboration make it easier to develop the next generation of products.”

MATS ANDERSSON, SALES DIRECTOR, DATA RESPONS

Having thoroughly familiarised ourselves with the technology, we can proceed to find the best solution. Speed is vital and, in order to reduce time to market, it is important to have a long-term and close relationship with our subcontractors.”

“On the question of quality, poor quality is expensive and that message is more readily acceptable today than it was 10 years ago. Industrial customers understand the difference between consumer electronics and the demands of industry. Industrial users have to be able to fully rely on their software always functioning and that the units always contain the same components. There is a greater level of awareness today; they don't just look at price, but also recognize that they get what they pay for. Today one can discuss a product's life-cycle costs at a professional level.”

What changes can you see in the way the product owner and subcontractor collaborate? And how do you see things shaping up in the future?

“We are increasingly seeing it take the form of partnerships and long-term relations. They work very closely together in a project during the product’s entire working life. That’s good because strong relations and long-term collaboration make it easier to develop the next generation of products.”

“The parties involved have to work together to achieve a level of performance, quality and price to be able to compete in the global market. As I said, long-term relationships are - for all concerned - the best basis for reducing time to market in the future. New partnerships always take time to establish.”

What sort of demands on the value chain will the future bring?

“We will see closer collaboration, but I don’t think that there will be any dramatic changes. One aspect that will be looked at more carefully will be to avoid unnecessary transportation, which is both financially and environmentally beneficial. A close partnership is of course a precondition for achieving this.”

What are your thoughts regarding outsourcing trends in the future?

“Right now, we’re seeing a levelling out between Western Europe and Asia/Eastern Europe, but I suspect that occurs in waves. Production will always take place wherever the desired balance between price and performance can be achieved. It’s also becoming apparent that factors such as language, culture, travel times and time differences are beginning to form part of the equation, which would speak for local production.”

“What’s important generally is to bring in the question of where and how production is to take place at an early stage, when the product is being designed and developed. One needs to take stock of this early on in the process since it has a bearing on the final result.”

“At Data Respons, much of our development work takes place in

the Nordic region, close to the customer. We’ve located more of our production however in Taiwan, which is a leader in embedded products. We have set up an office there in order to secure the projects and quality. We do have production in the Nordic region as well, both at our own facility and at our partners locally. We take care to avoid reinventing the wheel. If we are talking about tailor-made products within demanding applications, there could be advantages in producing locally due to a greater need of crosschecking and monitoring.”

What countries will be focusing on development and manufacturing respectively?

“Production will to a large extent take place in the Baltic countries and Asia – China, Taiwan and the Philippines, while R&D will continue to be located here in Europe.”

“There are variables to that picture however. Asia used to account purely for production, but they are now building R&D competences there. At the same time, it’s important that we retain our manufacturing knowledge base in the Nordic region in order to be able to produce equipment that will work in our environment and our climate. If we don’t have any manufacturing activities here, we will no longer be able to create designs that are appropriate in our hemisphere. A lack of engineers is another problem we are going to have to face in the future. The trade organisations are focusing on this issue to ensure that there will be a new generation of engineers.”

And how would you describe your dream supplier?

“Speed is vital. We want a high degree of attention. And of course we should always expect quality. We should be provided with the quality we pay for. My dream supplier should also understand and care about what we want and be able to contribute a great deal of knowledge. We want a dialogue where the supplier feels free to make suggestions and advise whether our idea might be implementable in a better way than we had thought ourselves.”

Questions around the world: How would you describe the interaction between being PMS provider and PCB supplier in the value chain on your market?



UK
HOWARD GOFF
Managing Director, NCAB Group UK

“The trend we see is very much towards a collaborative solution between the OEM/ODM and their EMS provider and the PCB supplier. The benefits of this are evident to all. The OEM/ODM gets design support to achieve optimum production price, the EMS company has confidence that the PCB supply chain is secure and proven and the PCB company has the opportunity of producing “right” board in terms of design and cost.”



FINLAND
KIM FAGERSTRÖM
Managing Director, NCAB Group Finland

“In Finland and the Baltics, the size of the end-customer is a decisive factor in this context. The biggest end-customers strive to control the whole process and assume full responsibility for the design as well as prototyping. They often also define the certified PCB suppliers they wish to use and their factories. The smaller the end-customer, the more freedom they give to their EMS company to choose the suppliers and manufacturers and then rely on their control of the whole supply chain.”



POLAND
MICHAL KOPCEWICZ
Managing Director, NCAB Group Poland

“From my perspective I see a strong connection between the end-customer and EMS supplier. They are very good at communicating their sales needs, which both parties benefit from. However, there is still an issue with regard to technical problems, with the EMS suppliers reluctant to consult the end-customer, preferring to turn to the component suppliers for help in solving them. I feel we would all benefit from a more open attitude.”

What do we know about the future

HANS STÄHL
CEO, NCAB GROUP



The overriding vision behind the NCAB group's operations builds on the needs of our customers – in this context mainly the EMS companies. However, we live in an ever changing world when we consider our customers' requirements. In order to adapt to tomorrow's demands, it becomes more important, as far as possible, to find out how our customers – and their customers in turn – view the future.

That is the background to our interviews with Mats Andersson and Mikael Joki. Notwithstanding the fact that they are both involved in the north European market, their view of the future is highly relevant in a far broader context, since our experience tells us that events in northern Europe reflect those in other western markets as a whole. NCAB's own success around the world is evidence of that.

You only need to look 10 years back in time to see how much has been happening in the electronics market. The biggest change during

that period has been a shift in production to Asia. The process of change within our industry is still happening and will continue into the future and those who fail to adapt will not survive. We need to accept that part of the production will continue to take place in low-cost countries. In the high-cost countries, we will to a large extent focus on smaller volume production runs, with high focus on R&D as well as work with accelerated time to market demands on new product development.

To retain our competitive position, as a supplier we need to build on the way we communicate so that we together, starting at the design stage, "build in" all the knowledge that we jointly possess. In today's market, we cannot afford, nor do we have time, to make mistakes.

Would you like to know more about the electronics industry globally and in Scandinavia?

- » **Custer Consulting Group – Serving the global electronics industry with market research, business analyses and forecasts**
- » **The Swedish Electronics Trade Association – Working to strengthen Swedish electronics by monitoring and acting in industry-wide issues**
- » **Datarespons – A full-service, independent technology company and a leading player in the embedded solutions market**

Subjects we have covered earlier

Do read our earlier newsletters. You will find them all on our website, www.ncabgroup.com/newsroom/

» **The American market**
2012 10 24 | NEWSLETTER 3 2012

» **Reforms**
2012 06 25 | NEWSLETTER 2 2012

» **Sustainability**
2012 04 05 | NEWSLETTER 1 2012

» **Customer Relations**
2011 12 15 | NEWSLETTER 4 2011

» **Securing quality**
2011 11 09 | NEWSLETTER 3 2011

» **Controlling all details ensures quality**
2011 06 18 | NEWSLETTER 2 2011

Are we taking up the wrong subjects?

We are always looking for interesting subjects that we could take a more in depth look at. If there is something you would like to learn more about, or perhaps you would like to comment on anything we have written, do get in touch with us and tell us more.

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