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# **GPV annual** **MAGAZINE** **2017**

**Realising quality  
– from strategy to  
technology**

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## Editorial

**On target. Never done. Always ambitious.**

Dear Reader,

A strategy needs the right execution. If you fail to turn plans into business, your strategy will never go from good to great.

We bear this in mind as we look back on our first year since launching a new and ambitious strategic growth plan. We are proud to say that the strategy is very much on target and has come alive throughout our entire organisation and in relation to our customers. The results are visible on several levels: from our new factory in Mexico and the implementation of new technologies and platforms, through one acquisition and increased production capacity.

To our customers, “stronger is better” in the sense that our growth translates into better business for you. We are working to move even closer to deliver on your present and future needs and continue to focus on uncompromised quality and on-time delivery from the three biggest time zones.

We are very much aware of the fact that being on target is not the same as having crossed the finish line. Our goal is to keep moving, keep improving and keep being ambitious.

In this edition of the GPV Magazine, we invite you to gain a deeper understanding of our journey and how quality and growth are paving the way for the work with our customers in the EMS industry.

I hope you enjoy reading the magazine.

Sincerely

**Bo Lybæk**  
**CEO, GPV International**



# Deploying strategy

## Four successful initiatives

*If 2016 was a year of preparation, 2017 is a year of execution for the GPV Management Team.*

**Our customers typically operate in highly specialised industries, where even small changes in production methods and product quality can be the key factor in achieving competitive advantage - or the opposite. Our 2020 growth agenda allows us to continuously match their ambitions and serve as an attractive EMS partner. But talk of strategy needs to be followed by concrete (re)action. With this in mind, our 2017 growth plan is deployed on four levels.**

### 1. Organic growth with our current customers

As an EMS partner, our ambition is to continuously evolve our customer relationships and to work on being a good and relevant business partner. In 2016, we grew with our customers. We are satisfied that the last year has shown good organic growth from our current customer base - a trend we see continuing in 2017.

### 2. Increased capacity via Guadalajara and investments

In 2016, a new production site in Guadalajara, Mexico was an ambition. today it is in full operation. The 5,000

sqm. (54,000 sqft.) facility has given us a strong foothold and proximity to OEM customers in the Americas.

The facility also stands as a testament to the global GPV Business System supporting high uniform quality for every single customer and project.

With complementary investments in Denmark and Thailand, in two new complete SMT lines in 2016 and two more to be installed in 2017, and with significant investments in new Mechanics technology, we established the framework for continuing our growth plan.

This strengthens the GPV promise of Service Excellence for high-mix/low-medium volume technical electronics, as we provide rapid and tailor-made manufacturing and logistics solutions, regardless of geography.

### 3. Acquisitions for consolidation in Northern Europe

The acquisition of the Danish EMS manufacturer BHE A/S consolidates GPV in the Northern European electronics market. The acquisition will offer BHE's customers access to GPV's state-of-the-art production setup and the opportunity

to exploit GPV's global production platform and competencies within testing, mechatronics and logistics.

The acquisition of BHE marks the beginning of another significant aspect of the GPV growth plan - growth through strategic acquisitions. The aim will be, in combination, to achieve strategic market expansion and economies of scale with the goal of further strengthening our competitiveness.

### 4. Strong relationships: growing businesses and customers

Strategic growth drives businesses, but also customer relations. By sharing our strategic initiatives with our customers, we can match expectations early in the project phase through transparency and direction. Our customers clearly know where we are going and our ambitions for their projects.

But knowledge is not the only benefit for our customers regarding our growth strategy. We have also set a strategic goal to achieve a much higher level of completeness and smarter handling of logistics and stock management with our customers' products. This will translate into increased flexibility and service excellence for all our customers.



# Implementing new technology a matter of mindset

**Technological advancement is a people game, whether it happens in Thailand, Denmark or Mexico. State-of-the-art technology is an essential part of the GPV business system, but exploiting the potential of new equipment is all down to developing the right people with the right mindset.**

Investing in best-in-class technology is key to evolving parameters like high-standardisation quality, flexibility and capacity. Over the years, GPV has invested in upgrading and aligning the company's production platforms in Thailand, Denmark and recently in Mexico. The benefits and results are obvious. An aligned machine platform eases the transfer of products from one site to the other and enables seamlessly swift operations across countries, while ensuring better service and repair agreements for customers.

## **Equipment > skills > mindset**

Although implementing new technology happens across borders and cultures, the process entails the same parameters of approach from Thailand to Mexico.

GPV's newly appointed Operations Director in Bangkok, Alessandro Marinai,

sees technological investments as crucial to this approach, but only as one of several steps:

"You must have quality equipment to support growth and show potential in a competitive market. But success in implementation is dependent on two other parameters: the skills of the people operating the equipment and the general mindset of the company."

Tommy Kristiansen, General Manager of GPV Electronics in Mexico, elaborates on this, seen in the light of GPV's new production site in Guadalajara:

"To establish a new location and successfully move quality across borders is a massive challenge, because you basically risk creating a "new company" with its own mindset. You need to hire the right people with the right capabilities, who are able to inherit and execute GPV's strategic perspective on how to work with quality. As predicted, GPV and our local management in Mexico are currently succeeding with this challenge."

## **Start from the top**

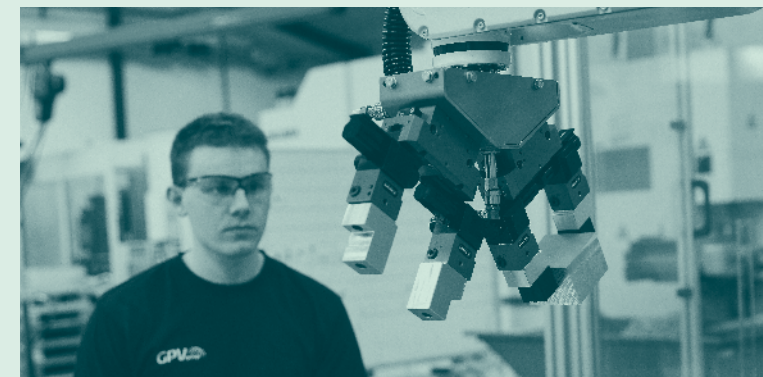
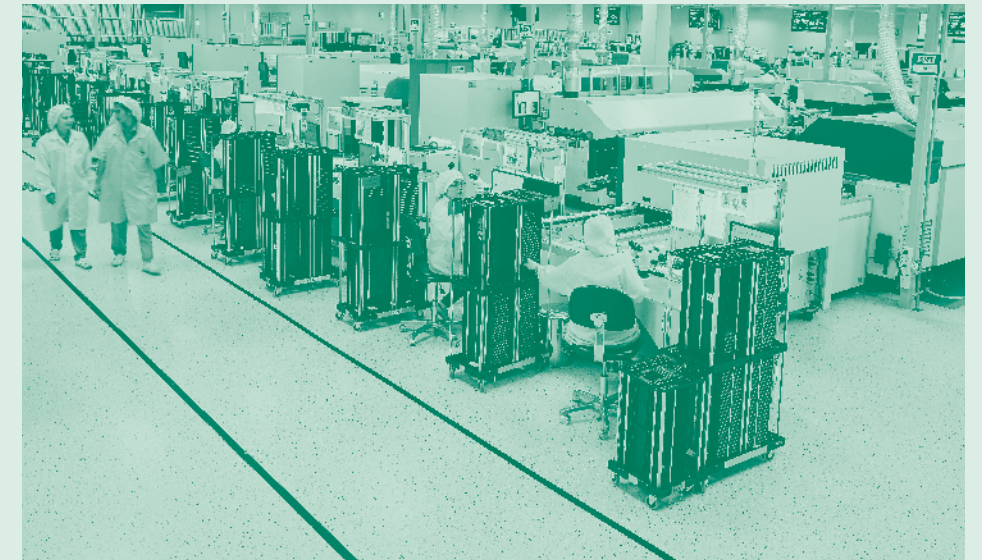
How does a company build an organisation that embraces change and innovation to reap the full benefits of new technology? For GPV, the answer is to

recognise that the task involves everyone within the company and to realise that keeping quality at the heart of operations is a shared task.

Tommy explains: "The attention to quality must build on a mindset that is shared on all levels of managers and operational personnel, as well as by the Executive Management - and it needs to be a mindset that does not settle for what is necessary - only what is right."

But aligning new technology, people skills and a corporate mindset is nothing without a dedicated effort to communicate the shared mindset through all levels in an organisation:

"Start from the top, breaking down your desire for change through your organisation and always working as a team sharing a common goal. If you can get this right, you are not far from successfully implementing new technology", Alessandro explained.



**We invest in  
automated  
technology in  
our successful  
Mechanics**



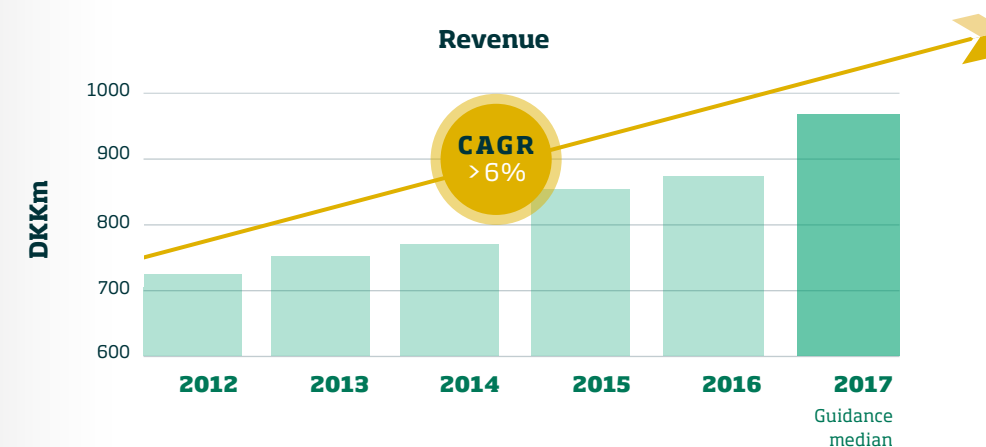
**Start from the top, breaking  
down your desire for change  
through your organisation  
and always working as a team  
sharing a common goal.**

Operations Director at GPV Electronics TH,  
Alessandro Marinai



**GPV's financial performance in 2016 showed solid progress and provided the first financial results of our growth strategy**

# Key figures



**Since the launch of our Core & Customers (CoCus) strategy in 2012, GPV has continuously met the strategic and financial expectations of our stakeholders. 2016 was no different.**

GPV delivered more than 8.2 million products (with 4,500 different product types) to our customers in 34 different countries with total revenues of DKK 880 million in the 2016 calendar year. The numbers signify a journey of strong growth with our customers and satisfying financial results for the first year under new ownership by Schouw & Co.

2016 has also been a busy year with our establishment of a new production

facility in Guadalajara, Mexico, cross-organisational lean facilitation training, the launch of our GPV Talent Factory and significant investments in new technology, automation and capacity expansion.

We have seen the first effects of these initiatives with a contribution to GPV's financial performance in 2016. The real impact of the initiatives on our growth strategy will be even more prominent, when we reach FY 2017.

Based on our investments, combined with the initiatives mentioned above and increased customer activity, our expected revenues for 2017 amount to DKK 950-1,000 million, representing a solid annual growth rate (CAGR) above 6% since the launch of our CoCus strategy in 2012.

**2016**  
**in flash**

**4,500**  
different products delivered

**New technology,**  
automation and capacity

**New factory**  
in Guadalajara, Mexico

**34**  
countries delivered to

**53,000**  
work orders manufactured

**Cross organisational**  
lean facilitation training

**Talent factory**  
initiative launched

**8,200,000**  
products delivered to customers

**48,000**  
deliveries to customers

**1,150**  
dedicated employees





**The contribution about quality and digitalisation, from Matthias Barbian, sets our approach towards quality into perspective.**

Bo Lybæk, CEO

# Quality in the digital era

**Digitalisation, IoT and robotic automation are gifts to companies with a high focus on quality. But with lower error margins and increased product quality due to automated production and transparent processes, companies must remember to not only look at quality from a product, but also from a people, perspective.**

"In the digital era, quality will become 'permission to play'."

The words are Matthias Barbian's - one of the leading figures in the European Industry 4.0. movement. He has worked with Integrated Plant Engineering throughout his career - a career that counts Rockwool and Siemens, where he has worked for several years. He will soon join Siemens Mindsphere working with disruptive business development, digitalisation, IoT, and Industry 4.0.

As spokesman for Industry 4.0 in VDI and VDE in Bavaria, Germany - an industry association for engineers and electricians - Matthias is clear on the role of quality in the digital era.

"It will be expected that companies deliver a high product quality. This is made possible through e.g. documented processes and robotic automation, which will increase the product quality dramatically. Also, errors are detected earlier because of the transparent production phases, and quality will simply be a Voraussetzung - a prerequisite - for the serious company in the digital era."

## **A clear roadmap**

"The companies that will not digitalise will not survive. Digitalisation is the starting point for rethinking the business

models of tomorrow, today", says Matthias Barbian. Getting started can be a daunting task, but his advice is simple: "Stop talking about digitalisation and Industry 4.0, and start asking questions on behalf of your company. Form a roadmap that is ambitious, but realistic: How do we define digitalisation in our company? Which of our goals can be reached via technology, and what are the resources needed to achieve them?"

## **Size matters - but isn't everything**

Large companies may be front runners within digitalisation today. Siemens' award-winning electronics production in Amberg is a well-known example of a company that has built a top-class production site and it reaches an incredible 99,9985 % quality rate.

But even much smaller companies can reshape their focus on quality through digitalisation: "We will see in almost every industry tomorrow, what we see in e.g. the automotive industry today. Automation becomes standard to ensure a high uniform quality, and IoT is used to connect machines and share data in the cloud. Smaller companies can utilise this technology to scale production and distribute it to the entire world."

## **From quality equipment to quality people**

Matthias Barbians final argument is that companies should not lose themselves in confusing tech-talk and expensive consultants. The secret to winning through quality is often already at hand: "Instead of using consultants, companies could benefit from using external facilitators to help uncover the potential within the company. Digitalisation, automation and quality equipment is in itself not a guarantee for quality, people with the right mindset often are".



# Responsibility in business

Running a successful and responsible business not only requires the right strategy and state-of-the-art technology. It requires the right guidelines, strong ethics - and solid dedication and attitude. Here are our CR initiatives across our company.

**Code of Conduct** - The Code of Conduct represents our core values and reflects GPV's continuous commitment to ethical business practices and regulatory compliance.

**Diversity** - We aim to create a comfortable and open-minded working atmosphere, where we treat all colleagues equally, regardless of gender, culture, history and/or tradition.

**Gender** - In 2016, we reached almost 50/50 gender diversity with 57% female and 43% male employees out of a total workforce of approx. 1,150 people.

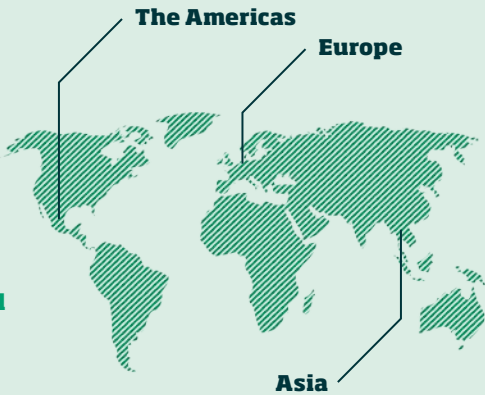
**Safety** - We monitor all production sites in terms of safety and measure LTI rates with close attention to risk control, employee health, work adjustment and process assessment.

**Work environment** - All our production sites have guidelines for quality control in the workplace. We strive to keep all our facilities clean and presentable to ensure high quality and an efficient work environment for all our employees.



# Three locations one company

Across three locations with five production sites, GPV provides high-quality services and specialised strengths to accomplish more with our customers.



## Europe

From Denmark, we primarily service customers in Europe and USA. We provide low-volume production, prototyping, service and repair and logistics set-ups.

Our Danish sites have developed unique competences through a combination of Electronics and in-house Mechanics delivering everything from sub-assemblies up to finished products - including final testing and global logistics.

## Asia

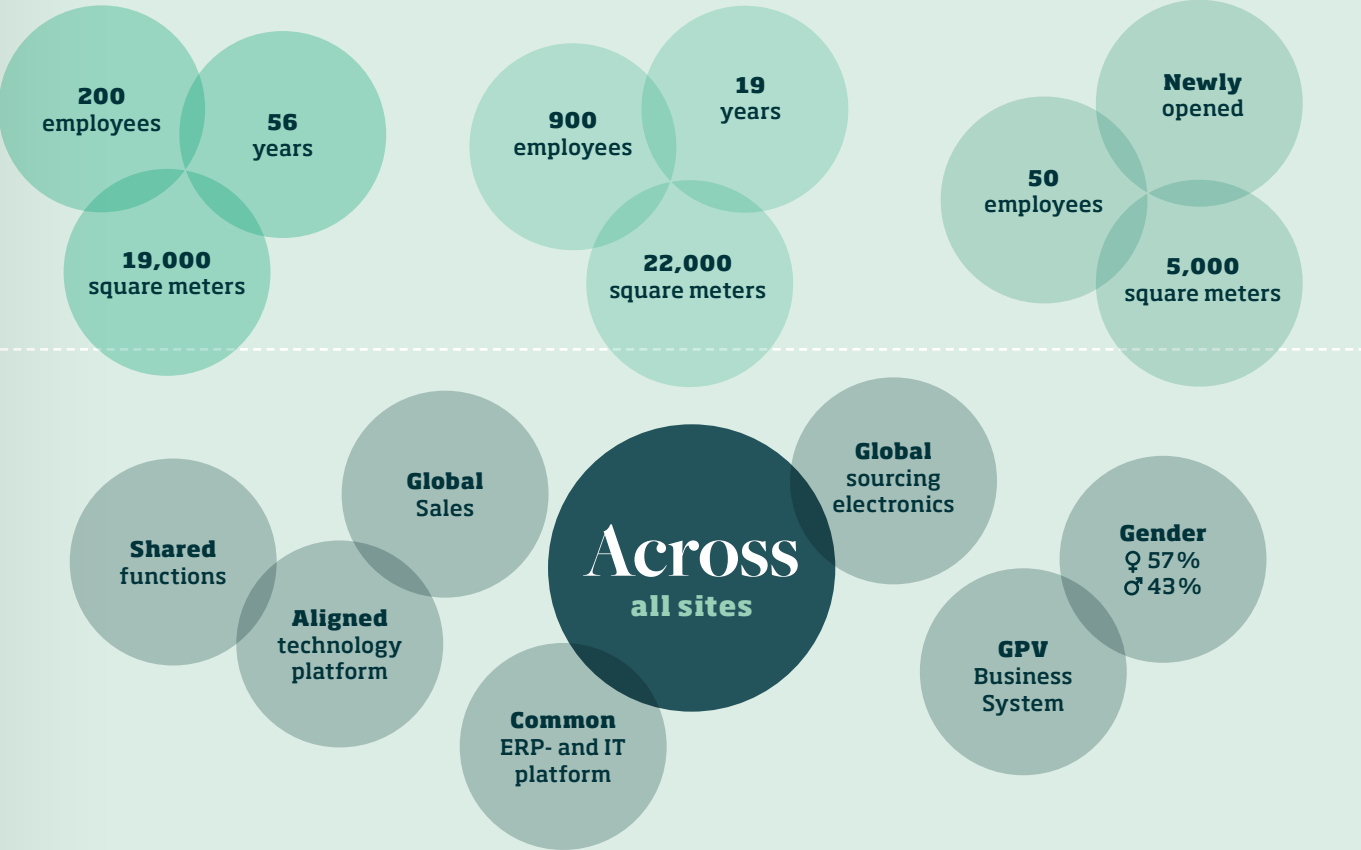
GPV sites in Thailand are among the leading high-mix/low-medium manufacturing sites for deliveries out of Asia.

In Thailand, we have strong capabilities within test development and manufacturing of test equipment. Our unique competences through a combination of Electronics and in-house Mechanics is also a strength in Thailand, where we deliver final testing and global logistics for high-end sub-assemblies up to finished products.

## The Americas

GPV's newest manufacturing site in Guadalajara, Mexico. Our manufacturing site is based on the same concept as GPV Electronics facility in Thailand and in Denmark.

From Mexico, we ensure proximity to customers in the Americas. The aim for GPV Electronics MX is to become the preferred supplier of high-mix/low-medium volume products and logistics solutions in this part of the world.



# Accomplish more

## A unique customer perspective

GPV is an EMS-service partner committed to working determinedly to ensure that as our customer you will accomplish more.

We do this by building a strong partnership based on responsible and honest cooperation.

We acquire comprehensive insights into our customers' needs and industry and manage advanced product processing - relying on our strong technological know-how.

## Stable. Specialised. Global.

GPV is a global EMS-service partner specialised within high-mix/low-medium volume EMS.

We are one of the biggest EMS-partners in Scandinavia with a DKK 880 million / EUR 118 million / USD 132 million yearly turnover and more than 1,150 employees divided between factories in Europe, the Americas and Asia.

Visit our new website and learn more  
> [gpv-group.com](http://gpv-group.com)



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**GPV Mechanics TH**  
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