DY
DYNAMIK
LIFE

Dear partners, customers, and friends,

it is my pleasure to welcome you to the first edition of DYNAMIK LIFE. This fantastic magazine was produced in its entirety by the adjustable enthusiasts of LOGICDATA's global team and is a fine manifestation of the "LOGIC Spirit": one community pulling together to create a magnificent end result.

At LOGICDATA, the prevailing sense of teamwork and commitment to the creation of the extraordinary extends far beyond the editorial desk. Our team works tirelessly to bring our customers the very best in adjustable furniture technology: a noble quest to develop indispensable pro-ducts of true quality, precision, and beauty.

Yet none of this would be possible without you. Throughout over two decades in the industry, we've nurtured countless, wonderful working relationships with customers and suppliers from across the globe. You are the motivation behind all we do, and it is to you that this publication is dedicated.

This magazine is about the future. Not only our predictions for the adjustable furniture business, but also an honest analysis of how the wider world sees us, not just as a company, but as an industry. It shows us the need to think deeply about why there is a need to create the pro-ducts we create, and why we must listen, not just talk, to bring our ideas to reality.

LOGICDATA is more than just a manufacturer of components for adjustable furniture. It is a beating heart of innovation, a flagship leading an expedition to improve the lives of people around the world. I'd like to invite you personally to become part of our journey: our doors, like our hearts and minds, are always open. Until we meet, enjoy reading.

Best regards,

Johannes Gradwohl
Chief Executive Officer

ABOUT THE
EDITOR

Born in Maidstone, United King-
dom, Thomas George is the
Editor of DYNAMIK LIFE and
LOGICDATA's "adopted Styrian".
Following a successful career
as a Writer, Editor, and Techni-
cal Editor in Eastern and Central
Europe, he moved to Austria to
work for the company in 2018.
George is also a children's author,
ghost-writer, and the inventor of
the "Medway Mist" cocktail.

AHEAD OF THE CURVE

The Evolution of Office Furniture

📷 STEFAN LEITNER, LSW PICS
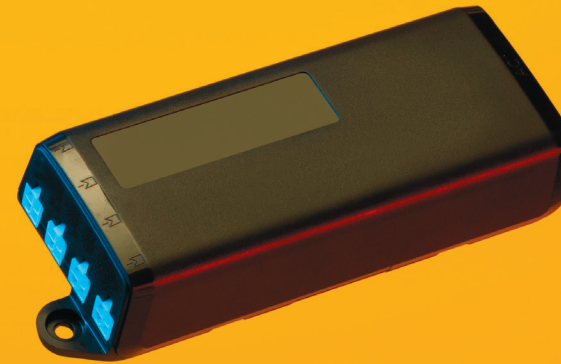
Adjustable office furniture is big business. Not just at LOGICDATA, one of the pioneers in the industry, but for countless competitors – both established and emerging – from countries all across the world. DYNAMIK LIFE spoke to Stefan Kieler, Director of the LOGIC OFFICE Business Unit, Matthias Buch, Team Leader of LOGIC OFFICE Product Management, Jörg Schweiger, Chief Operating Officer, and Jim McKnight, Field Application Engineer at LOGICDATA North America about what the future holds.

LOGICDATA has been in the business of adjustable furniture since 1994. What have you noticed about demand for adjustable products in that time?

Kieler: A revolution. Sit/stand desks have transformed rapidly from a "nice-to-have" product to a key element of office environments, and the market has grown at a phenomenal pace. This growth is obviously helped along considerably by the media exposure that the dangers of continual sitting receives, with catchphrases like "sitting is the new smoking" capturing the imagination of office-based companies and the general public. The working day for millions of office workers around the world has changed considerably as a result.

Buch: I'd agree with that. Even at the turn of the millennium, height-adjustable desks in offices were something of a novelty. Now, they're tools that a large portion of the workforce not only expects, but demands.

McKnight: There's been a massive increase in the application of ergonomic principles. It's a good start, but the issue is that even though people can now adjust their workspaces, few are trained beyond knowing that moving is good and that their arms should be at a 90° angle while typing. We need more focus on education.

How have these cultural changes impacted the adjustable furniture industry?

Kieler: Obviously the increased demand for height-adjustable office furniture has led to increased competition. Price pressure from competitors in developed and emerging nations is a significant challenge we have to face, but it drives us to become more efficient. Vertical integration within the value chain has helped us to bring products that can cope with this price pressure to market, not just as singular components but as highly-efficient mechatronic packages. Continual organizational improvement is vital both to short-term survival and long-term success.

tomization options is now vital, with furniture manufacturers looking to differentiate themselves from one another. It's just another sign that the market is growing and that so many height-adjustable products are now available.

With so much competition, what do companies like LOGICDATA need to do to attract new business and maintain existing clients?

Kieler: It's all about flexibility, especially when it comes to logistics and service. The market is project driven, there's basically no stable daily business: our customers want and expect us to be able to cope with fluctuations in volumes

"We can't simply sit back and say 'that's impossible': we've got to make it work."

Schweiger: I think if you look at the industry from a global perspective, you'll not only see intense competition, but also the massive potential for growth – especially on the North American market and in Central and Southern Europe.

What other changes have had an effect?

Buch: Ecological aspects have never been as relevant. Due to the large quantities of raw materials that are needed to produce adjustable products, the industry must reuse and recycle as much as possible or even find new ways to cut certain materials altogether.

Kieler: I think on a really basic level, customers simply expect more. The ability to offer cus-

while keeping lead times to a minimum. It's a challenge, certainly.

Buch: I think it's more than that. The nature of the market we are in means that if we aren't the ones to offer high levels of flexibility to our customers, someone else will be. We can't vsimply sit back and say 'that's impossible': we've got to make it work.

How do companies like LOGICDATA anticipate change, recognize when the market is moving, and stay on the front foot?

Buch: We've got to maintain dialogue with our customers and partners, keep our ears to the ground, and not be afraid to blow the whistle

when we see an iceberg ahead. We're good at this though, communication is deeply ingrained into our corporate culture.

McKnight: It's not only about reacting to change, it's about a mindset that allows us to drive change in the market ourselves. We're continually challenging perceptions about what office furniture can and should do, which has led us into some pretty fascinating areas of technology like usage tracking and the internet of things. Sometimes we have to react to change too, but our attitudes to flexibility within the company are far more all-encompassing than that.

Kieler: Agreed. It's a question of constant innovation on both a product and production level, being critical, and looking to add value for the customer wherever possible. Bringing costs down is vital to being competitive in the industry, but there's only so much tweaking around the edges that can be done: sometimes the solutions have to be more disruptive. The DYNAMIC MOTION system is probably the best example of this, but it's not just on the product side we're looking at a complete overhaul: in the Asia-Pacific region it's important to have a local presence, which is something we've been working on for some time. Everything just has to be more efficient in every way: if we stick to that principle, we'll be just fine.

Have there been any examples of this in the past?

Schweiger: I think the most significant event was our breakthrough with switched mode power supplies in 2009. It wasn't just new for LOGICDATA, it was a groundbreaking moment for the whole industry.

Kieler: That was massive. The change from toroidal transformers to switched mode power supplies led to huge reductions in material input, product weight, and standby energy consumption, while also allowing us to slash costs for our customers. I think what makes us genuinely outstanding as a company is that we didn't simply stop and applaud ourselves at that point: we got our heads down and cracked on with finding the next breakthrough. This was even more important than the initial development: everyone on the market now uses switched mode power supplies, they've caught up, but we've had time to prepare for the next big thing.

Is there already a strategy in place for the years ahead?

Kieler: The future starts with the present, which is why the imminent launch of the DYNAMIC MOTION system (at interzum 2019) is a significant part of our roadmap for the future. We've been looking at creating a genuinely competitive integrated adjustable system for several years now, but our first attempt – the so called LOGICdrive – wasn't a huge commercial success. We've now learned from some of the mistakes we made in the past, and we're confident we can show the market that LOGICDATA has the tools in place to offer any solution, to any customer, for any need. From a strategic perspective, LOGICDATA expects the industry to continue to grow for the next few years. I see two vital necessities here: re-analyzing our approach to the use of raw materials and continuing our efforts towards vertical integration. As I mentioned before, efficiency will always be key.

Buch: There's a clear demand for highly-integrated components and new models for

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logistics and production. We're also aware of the need to invest in new technologies for shared space management and even things like pay-per-use office equipment. For our

taining good relationships with customers and remaining as flexible as possible, no matter how their production processes work. We have the products to keep them satisfied.

"good product quality is a basic need

customers I see two very important aspects: product and service. Our products have to be designed for simple, efficient handling and easy integration into the assembly flow. But we also want to support our customers and help them understand our products. That's a job for our Field Application Engineering Team.

McKnight: That's right. It's a question of main-

LOGICDATA's understanding is that good product quality is – and always will be – a basic need.

Schweiger: Using production data to optimize the production process and reduce our reliance on quality control will be hugely important for us. To stay competitive, we also need to address the question of "make-or-buy": which components we should source externally, and

which we should produce ourselves. We'll also have to start deep analysis and clever implementation of concepts such as "IoT", "Industry 4.0", and much more. New technologies offer us the possibility to customize products in a cost-efficient way.

### Are there any big trends on the horizon for the industry?

McKnight: As a Field Application Engineer, I see a lot of small things that I think might catch on in a big way quite soon. The first one is the increasing minimalism regarding office equipment: there's less paperwork nowadays, fewer components. Sometimes it's just a laptop on the table. This itself raises questions for us: do height-adjustable tables really need to be developed to lift 250 lbs., or is lightweight design the way forward? Is this a niche in the market we can exploit? I think other trends are probably better known, like co-working and desk sharing spaces, but it'll all center around ease of use and connectivity. I hear smartphones are pretty popular these days…

Schweiger: From a production perspective, automation is really the key: the missing link between lowering production costs and

increasing quality. However, it needs to be married with our ability to stay flexible when it comes to product changes. A smart approach to the creation of highly efficient production flows is crucial.

Kieler: I'd be inclined to agree. The current worldwide labor shortage makes the move towards automation essential: there are some regions where it's simply not possible to hire enough qualified people and those that are available are sometimes prohibitively expensive. But there are other things we can do to reduce the pressure on the production line, even without automation. For example, the DYNAMIC MOTION system allows manufacturers to achieve greater levels of integration in the production of sit/stand legs. We're looking to the future of course, but the here and now is just as important.

Buch: I think it's obvious that the market for height-adjustable products is here to stay: we just have to work out which products to focus on. Soon we'll be seeing a new generation of office workers, with new expectations and demands, but I'm confident we've got the potential to go above and beyond that. It's the LOGICDATA way. ⌐
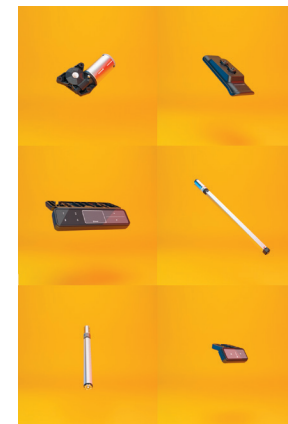
The next big thing? The DYNAMIC MOTION system by LOGICDATA is challenging the status quo.

We can be heroes

DA VINCI AND THE INSPIRATION FOR INNOVATION

W ho do we admire? The answer to this question depends greatly on the age in which we live. Heroes have taken many forms in the past: from Greek philosophers to Roman gladiators, onto Victorian explorers and modern political powerhouses.

Similarly, the champions of the modern era reflect the great age of digital discovery in which we live: pioneers of technology are idolized like never before, with technological masters such as Steve Jobs and Elon Musk acquiring a unique type of celebrity: role models for millions of creative, inventive, and highly ambitious young technicians across the world.

At LOGICDATA however, we like to do things a little differently. While the efforts of the modern technological geniuses cannot be underestimated, we draw our inspiration for innovation from a figure five centuries their senior: the original Renaissance Man, Leonardo da Vinci.

This year is especially poignant for the Da Vinci superfans in our Austrian Headquarters. 2019 marks exactly 500 years since the great inventor's death, which has inspired us to celebrate his magnificent works, but above all his commitment to revolutionary design. That so many of Da Vinci's incredible creations – including designs for the parachute, the helicopter, and the tank – have transcended the half-millennium since his passing serves only as testament to his genius.

Boasting a huge range of state-of-the-art equipment the LAB gives the company's employees a unique chance to hone valuable technological skills.

In homage to the creativity, ingenuity, and artistic flair that Da Vinci inspires throughout the company, we decided to christen our very own hub of innovation in his honor. Opened in early 2018, the Da Vinci LAB is a dedicated makerspace where all LOGICDATA employees can acquire new skills, broaden their imagination, and to get to grips with a huge variety of tools that will define the future of adjustable furniture technology.

Boasting a vast range of state-of-the-art equipment, including four 3D printers, a laser cutter, and a robotic arm, the LAB gives the company's employees a unique chance to hone valuable technological skills. More than 100 LAB licenses, which verify the basic skills required to use the equipment, have already been issued, with around 120 hours spent in the facility each month.

"Engineers love to build, to create; they are curious about exploring new concepts and finding new ways of doing things, so the Da Vinci LAB is a natural setting for many of our team to innovate," explained Thomas Platzer, Innovation Manager for LOGICDATA.

One such engineer is Michael Lauko, part of the volunteer taskforce that helps with the day-to-day running of the LAB, known within the company as the "Da Vinci Experts". When they aren't sharing knowledge through their training seminars in the LOGIC Academy – LOGICDATA's in-house training program – the Da Vinci Experts are serious technological creators in their own right. Lauko explains his current project:
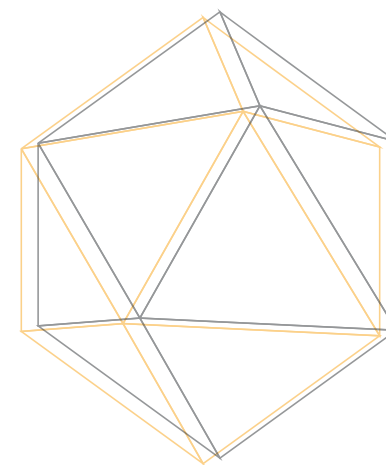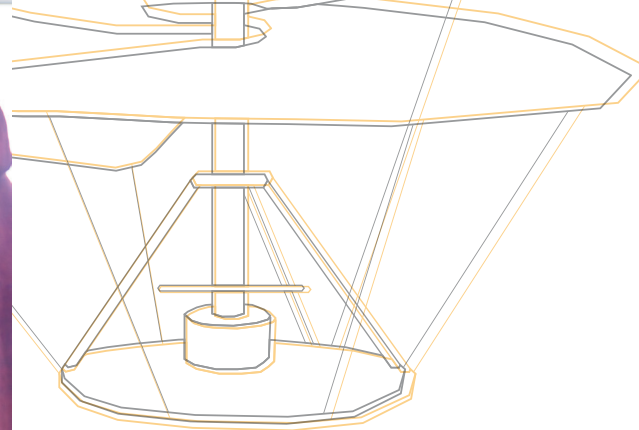
"A colleague and I are currently building a hexapod called Vorpal. This is exciting for us because of the skills required: expertise in 3D printing, soldering, and programming is a must. We've already learned a lot, and it's great that LOGICDATA supports us – especially because our new skills apply to our daily work."

Not unnoticed by Lauko and the other Experts, this significant investment into equipment and infrastructure is a major signal of intent by the company's executive management. By motivating and inspiring members of the team to bring their dreams to reality, and by using the LAB as a testing ground for the technologies that will shape the future of our industry, LOGICDATA keeps its eyes firmly on the road ahead.

As Da Vinci himself once said, "Being willing is not enough, we must do it."
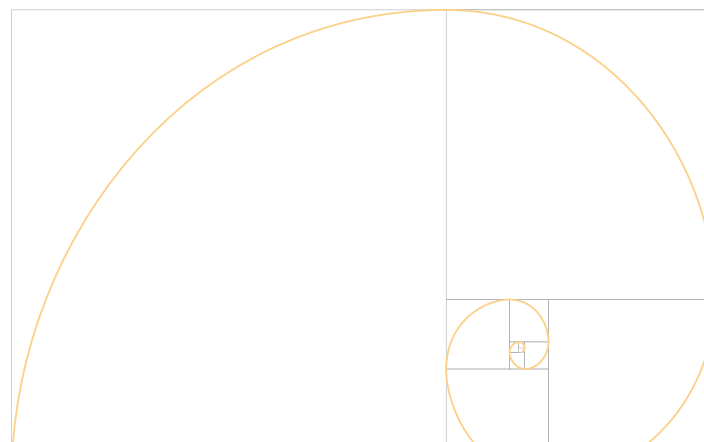
The Da Vinci LAB is a unique chance for all employees at the company to acquire new skills, broaden their imagination, and to get to grips with a huge variety of equipment that will define the future of adjustable furniture technology.

FROM DARKNESS
COMES lite

Expanding the SILVER Series with a (r)evolutionary new approach.

MANUEL SCHAFFERNAK
LSW PICS

*Sleek, modern and minimalistic –
the all-new SILVERlite is the second
major product in the SILVER Series
by LOGICDATA*

Early 2019 saw LOGICDATA hoist the flag of the adjustable revolution with the release of the lynchpin product in the SILVER Series: the all-new SILVERlite. Sleek, modern, and minimalistic, it is forward-thinking in other ways too: this innovative adjustable bed frame was specifically optimized for e-commerce. To meet the demands of the blossoming online adjustables market, LOGICDATA's R&D team pulled out the stops and drove hard for maximum retailer and end user convenience – including single-package shipping with no oversize charges, a 10-minute assembly concept, and a clean, intuitive control system.

Even one year ago, the product was little more than a distant dream for the company, but a proactive new approach to development has turned fantasy to reality at speed. DYNAMIK LIFE talks to some of the key players in the SILVERlite Project Team about the inspiration behind the product, the development process that brought the bed to market, and how the company is preparing to meet the demands of the thriving e-commerce sector.

"In the USA, roughly one adjustable is sold for every ten mattresses, but this number is growing at pace."

Despite the spring sunshine at LOGICDATA's Austrian Headquarters, Georg Hoefler is tired. Having recently celebrated the birth of a new child, he muses whether his lack of sleep at night provides the motivation for his almost-manic commitment to bedroom furniture in the day. Yet Hoefler's interest in the business of sleeping is far more than just a longing for a good night's rest. As Business Development Manager at LOGICDATA, his job is to notice the up and coming trends in the home furnishings industry and to use this knowledge to help steer the company towards the market's demands. While LOGICDATA has provided components for adjustable home and office furniture for many years now, the opportunity to create complete bedroom products was one that could not be missed.

Hoefler explains: "Adjustable beds are an increasingly common presence in homes all over the world. In the USA, roughly one adjustable is sold for every ten mattresses, but this number is growing at pace. Adjustable products have become more affordable, reliable, and well-known. The wave has been slower to hit Europe and Asia, but it's still very clear to us that this is a market with vast potential."

Yet the rapidly expanding industry poses a challenge as much as an opportunity. The mass of people looking to make the switch from stationary to adjustable furniture – coupled with the relatively few companies capable of providing these products at the correct price and quality – means that much of the growth within the business is absorbed by a handful of major players.

Would Hoefler agree that the message from the market was clear: high-risk, high-reward? "Perhaps not that simply, but essentially, yes" he says. "It's a massive market to get into, but the barriers to entry are high and we need to be smart. LOGICDATA's reputation as a manufacturer of components – for both home and office adjustable solutions – is considerable, but we're learning a new ball game here. What we're proposing is a genuinely revolutionary concept; it's going to take some time to take hold."

So how can companies like LOGICDATA achieve the breakthroughs they're looking for?
According to Product Manager Thomas Neger-Loibner, the answer to that question was simple: think like a start-up. "We aren't a new company, we've been in and around this industry since the 90s. Yet that needn't mean we're held back by outdated practices. We already had the knowledge and the infrastructure: what we needed was a mentality shift."

Neger-Loibner got the chance to test his theory when approval to start development on the SILVERlite was granted, a project in which he played a central role. "For the SILVERlite project, we immediately set up a core project team that contained members of every department we would need input from. This isn't especially uncommon within a project, but we took the concept to a new level with two key philosophies: we are always ready to go above and beyond our individual areas of responsibility and – most importantly – we stick together like glue. The ultra-tight cooperation saw the group meet twice a week in the designated project working area, which ensured everyone was reading from the same page and that issues were dealt with effectively. By doing this, we managed to get everyone pulling together towards the same project aims." Yet speed in the development process isn't just a "nice-to-have": it's a necessity. Wilfried Url, Director of LOGICDATA's HOME Business Unit, explains: "The market is alive. It's always changing, adapting, eating up the weak and the slow and spitting them out again: the industry simply doesn't allow for long development cycles. With customers permanently searching for more innovation at a

*Stella Genge, Marketing Manager | **Georg Höfler**, Business Development Manager | **Wilfried Url**, Director Business Unit LOGIC HOME | **Thomas Neger-Loibner**, Product Manager at LOGICDATA*

The SILVERlite accommodates even the heaviest sleeper. With a maximum load of up to 1,000 lbs. it even features the best-in-class stability.

lower price, we wouldn't be able to compete if the process were too laborious. Retailers want to bring the best products to their customers and we have to be there to assist them. This was communicated continually to those working on the SILVERlite and, to their credit, they rose to the challenge magnificently."

With Url laying down the gauntlet to his team, the project progressed at intense speed. Less than a year after the official kick-off, the SILVERlite had evolved from a grand design to a truly revolutionary bedroom product, primed for production and ready to take on the competitive world of adjustable furniture.

The key to toppling the status quo? Be smaller. The focus on minimalism is evident in

almost every aspect of the SILVERlite, and it's clear that "lite" was intended to be more than just a name. The project team succeeded in creating an adjustable bed that is shippable in a single box: compact enough to avoid oversize fees from providers such as UPS and FedEx, a unique achievement on the US market.

All this was achieved without having to compromise on stability or safety: the bed will function perfectly even under loads of 1,000 lbs and – for extra peace of mind – was subjected to the stringent UL-962 Standard for Household and Commercial Furnishings.

This huge emphasis on packaging, shipping, and reseller potential could be seen

as the tail wagging the dog. Wouldn't conventional wisdom suggest focusing on the product first? Url disagrees: "At the end of the day, it's all about the consumer, and what they really expect when buying a bed. We know that people are buying mattresses online in huge numbers, so it's essential that our bed frames are tailored to that market too."

While the SILVERlite is the second product in the SILVER Series – following the SILVERstandard – it represents a more serious assault on the e-commerce industry, especially towards the lower end of the price range. So why is it so important to develop products to suit the needs of the e-commerce market?

"The first thing we needed to do was truly understand the product: what it was and why it was unique."

Url continues. "The SILVERstandard was one of the first beds to be designed for e-commerce. We noticed that there was an opportunity if we could be innovative, mainly because much of the market was still essentially old-fashioned. Furniture isn't an exception to the digital shopping revolution, in fact it's very much part of it."

Visibly excited, he continues: "After the SILVERstandard was released, we re-evaluated our position and came up with the SILVERlite. As the name would suggest, it's essentially a stripped-down version of the SILVERstandard, providing only the really core functions but helping us to cope with price pressure on the market, as well as cutting down on size and weight."

Creating a product perfect for e-commerce is one thing. Finding potential customers and convincing them of the benefits is quite another. To bridge the gap, an intuitive marketing approach was necessary, centered around the Las Vegas Market in January 2019, the SILVERlite's industry première. LOGICDATA's efforts at the event were led by Marketing Manager Stella Genge, who picks up the story:

"The first thing we needed to do was truly understand the product: what it was and why it was unique. To fall in love with it, to be convinced it was the best. To find out exactly why this was

the bed to trigger a revolution in bedroom furniture. Once we had found the answers to our questions, it was easy to expand the story while remaining consistent on these truths. We were much more aggressive than usual, but I think it suits the fact that we're relative newcomers in the business. We need to stand out, but more importantly we have the products to back it up."

LOGICDATA communicated their position to the market through a strategic campaign that included partnerships with influential industry publications and digital outlets, all leading up to the Las Vegas Market in January.

Genge was pleased with the results: "Our showroom at the event was a huge success – we got a lot of great feedback from current and potential partners about it – but without the planning, and more importantly the efforts of the team, it wouldn't have been possible."

Despite the revolutionary features the SILVERlite possesses, the problem with such a fast-paced market is that unique selling points don't stay unique for very long. While a huge step in the right direction for LOGICDATA, it's unlikely to be long before the company's competitors are offering products that will rival the SILVERlite in size, convenience, and price. Yet this is something that

neither Neger-Loibner nor Hoefler consider to be a negative. "It drives us", says the latter. His colleague continues: "This is really just the beginning: with just our second product, people are already taking notice of the fact that we offer what others can't. And while others try to catch up, we'll be chasing innovation in other areas: connectivity, intelligence, and of course increasing value for our customers, especially those in e-commerce."

Like the revolutionaries of old, sharing the spoils of success throughout the whole team is a key part of LOGICDATA's ethos, something that resonates clearly from those at the very forefront of the SILVERlite project. Thanks to this extraordinary spirit, the future looks very bright indeed. ⌐

LOGICDATA's showroom at the Las Vegas Market in January 2019, the SILVERlite's industry première.
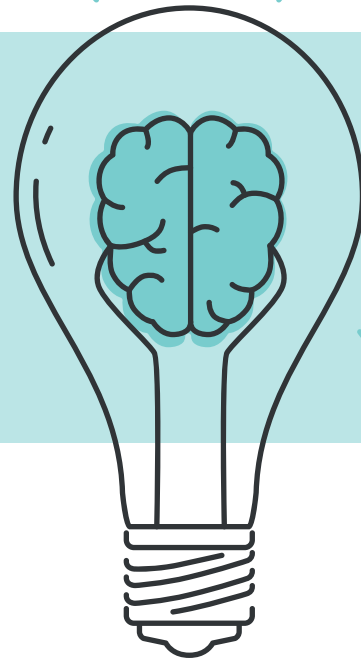
A FLEXIBLE FUTURE

As anyone who watched the hit TV series "Mad Men" will testify, the office environment has changed considerably over the last half century. We can see our co-workers without the hazy filter of cigarette smoke, our meetings are usually sterile PowerPoint affairs rather than raucous liquid lunches, and our female colleagues are (hopefully) treated as equals, not sex objects.

Yet even if you compare the office of 2019 to the one you worked in just five years ago, you might find that change is happening even faster than you imagine. Let's look at some of the top trends coming to an office near you:

Bright Ideas

Many days in the office seem very much the same. They aren't. Office workers are influenced profoundly by very slight changes to the conditions that surround them, particularly changes in light. Minor deviations can have drastic effects on alertness, productivity, and even how we sleep at night.

Smart technology makes the creation of perfectly-lit working environments a more intuitive process. Specially-developed brightness sensors can pass information to intelligent lightbulbs, which in turn set the strength, tone, and even color of the ambient light. The process can be personalized to maintain perfect lighting for everyone, regardless of time or season.

Tear down these walls

No one liked cubicle offices. It's probably why few still exist and even fewer are still being made today. The problem is one of dehumanization: we are social creatures, and the vast majority of us work better if we can bounce ideas off our colleagues. However, people can also be a distraction: sometimes we'd just like somewhere to work quietly and privately.

So why not have it all? With the rise of Activity Based Working – which allows workers to rotate between traditional desks, collaboration spaces, and creative rooms – the modern employee has never had so much freedom over their working environment. The benefits of Activity Based Working to companies can be summed up in one word: space. No employee has their own designated desk, which in turn allows their employer to implement a desk-sharing system to ensure that workspace occupancy is higher and wasted space is minimized. With prices for commercial property skyrocketing in every major tech hub across the globe, thinking outside the box to keep a handle on overheads can make the difference between success and failure in business.

Comfort in Sound

The shift to open plan offices has its negatives, however, above all noise. With dozens of people working in the same space, sometimes sound can reach uncomfortable levels without any one person being especially loud. Three major trends look to counteract this. Firstly, background noise control is increasingly being used to create a more calming ambience within shared spaces, with relaxing sounds such as ocean waves and rainfall being played at soft, yet constant volumes to mask unwanted noise.

Elsewhere, "Sound-friendly Furniture" is being used to improve office acoustics. Intuitively designed furniture not only absorbs soundwaves and reduces echo effect within large rooms, it also creates subtle partitions without the de-humanizing effect of a cubicle.

The final trend is a little more left-field: "Cocooning" allows office workers to immerse themselves into their working environments with the aid of specially-designed noise-cancelling headphones and other acoustic-friendly design elements such as soundproofed telephone boxes and relaxation pods. Striking the balance between communication and focus has always been a tricky question: but modern office technology is providing the answers.

Go hard

Partly due to the price of commercial leasing and the need for companies to reduce pressure on office space, another trend gathering pace is home working. There are a variety of reasons for this: cloud-based and mobile technology has eliminated the need for a full-time presence in the office for many employees, while the increasingly globalized economy means that flexibility in working hours is often required to account for differences in time zones.

Socioeconomic factors are another major consideration: families in which both parents work full time are now the norm rather than the exception, and in an increasingly employee-dominated job market, companies that can offer the freedom of home work gain a huge advantage in recruitment.

And go home

To cater for the transient nature of both modern companies and their staff, a major emerging trend is "Virtual Office" technology: software that enables employees to set up camp anytime, anywhere. By allowing workers greater freedom in their working schedules, companies can simultaneously increase productivity and employee satisfaction. Businesses are made by their employees: and firms that offer flexibility get the best.

Kisses and Huddles

Turning up, doing a good job, and going home again might have been a standard attitude towards work in decades gone by, but for the disruptive start-ups that grab the headlines in so many industries today, it is no longer enough. When creativity strikes, there's no time to rearrange the chairs in the boardroom: you need a place to shake the ideas tree – and fast. Introducing huddle rooms: small, compact meeting rooms big enough for just a handful of people at a time, designed to facilitate fast-moving, dynamic meetings where quick thinking is key.

Even for larger companies, huddle rooms can prove spectacularly useful, helping to cut through red tape and reach key decisions with minimum fuss. When seconds count, facilities like these can make a huge difference.

All hail the King

Each of these trends sends a clear message: flexibility is king. Companies that are too rigid or too strict are being left behind by those that put their employees' needs first. With the benefits of better-motivated, more creative employees, as well as the potential cost savings of allowing employees to work independently, the question is this: can any company afford to ignore the trends?

DESIGNS FOR LIFE

Florian Busl
Senior Industrial Designer

Florian Busl appreciates aesthetics. A senior industrial designer with a resume brimming with commercial success stories, he is well placed to share his thoughts on the importance of industrial design, the inspiration behind his greatest achievements, and the challenges facing designers in the present and future.

Even for the most utilitarian products, one truth is eternal: image matters. Before we've surveyed the spec sheet, considered the costs, and analyzed the applications, our decision to buy a product may already have been made. Love at first sight? Perhaps not. If magnificent looks aren't accompanied by exceptional functionality, we can lose interest in even the most beautiful products. Therein lies the difference betwixt art – eternal, ageless – and design: dynamic, ever-changing, and practical.

However, what great artists and great designers share is the ability to convey creative impulses to the human eye: oil on canvas, words on paper, pixels on screen. According to Busl, a designer with 16 years' professional experience behind him, the secret is focus: "I concentrate intensively on the job in hand: usually there is a problem that needs to be solved, and it's my responsibility to find the solution. Customer input is vital: knowing the basic functions of the product can be a source of inspiration as well as being of practical use."

Once he starts, the steady stream of ideas evolves into a roaring rapid of creativity, the drive for innovation reaching the point of obsession. This phenomenal creative spirit was particularly evident in one of LOGICDATA's flagship projects, the Virtual Factory, a feature that gives visitors to the company's Austrian headquarters a virtual insight into the production line. Busl explains: "I arrived at the first meeting with a presentation including over 100 slides, but the result was completely different from my first expectations. The key to design is the ability to free yourself from conventional thinking and prepare for the extraordinary."

The brainchild of LOGICDATA chairman Walter Koch, the Virtual Factory took almost four years to complete, a long time at the cutting edge of industrial design: a business in which new trends and technologies are emerging every day. But how exactly has the industry evolved in Busl's time?

> **"The key to design is the ability to free yourself from conventional thinking and prepare yourself for the extraordinary."**

"It's wild. Customers are more demanding and want better value for money: something that the accessibility of digital design is providing them. A well-designed website might have cost you €10,000 a decade ago, but nowadays you can get perfect layouts for just €100. It's not necessarily a problem for designers, it just means you have to specialize more and focus on what customers really want: you aren't there to realize your own artistic vision, but theirs".

His advice for the future? Keep your finger on the pulse. "Customers' needs and requirements are changing faster than ever. It's difficult to point out the exact trends, but generally I think we'll see corporate image moving more into commercial consciousness. Each step from purchase, to unpackaging, to usage, will be accompanied by a single message, a unifying theme. It's what customers expect, what companies look to provide, and what designers will have to accommodate."

Virtual Factory: One of Florian Busl's flagship projects, the Virtual Factory, a feature that gives visitors to the company's Austrian headquarters a virtual insight into the production line.

QUALITY:
A QUEST

Trust, but verify.

LOGICDATA delivers millions of mechatronic components to its customers every year with the promise that performance, reliability, and safety are assured. But how much do we actually know about the processes behind ensuring that products are ready for market?

DYNAMIK LIFE looks at the fascinating world of quality testing at LOGICDATA, talks to some of the key figures in the R&D and Testing & Verification teams, and finds out how the drive towards automation in testing is changing the landscape both inside and outside of the company.

Monday morning. Wolfgang Pucher cuts a friendly figure as he walks across the airy communal space at LOGICDATA's Headquarters, sharing a joke at the coffee machine with a colleague and asking pleasantly about the weekend past. Yet today's talk is about business. As Team Leader of the Mechanical Testing & Verification Team, he seems the right person to ask a very simple, but very important question: what exactly is quality testing? Pucher smiles broadly. This is a subject he knows well: "I would split it into three categories. Firstly, the testing of products during development to make sure they fulfil func-

tionality and quality requirements, secondly, the testing of parts at the end of the production line to make sure that they were assembled correctly, and finally, testing according to the standards that we must meet to enter the market."

Smells Like Team Spirit

At LOGICDATA, the responsibility for mechanical testing falls largely upon the shoulders of Pucher's team, a tight-knit unit of just 11 engineers. While the sheer amount of research and development projects running through the company at any one time means that mechanical engineers are often spread quite thinly, this has the distinct advantage of providing each team member with the opportunity to specialize on a smaller selection of products, identify quality issues effectively, and anticipate potential problems.

Although the workload is often hectic, the role of Testing & Verification has become increasingly clear over time. During projects, the team's tasks are split into a variety of key functions: creating and maintaining test devices, documenting the results of the various quality tests, and finally presenting the results of these tests to key decision-making figures

within the company. It is based on these presentations that LOGICDATA is able to develop and adapt its development and production strategies and to decide whether a product is ready for public consumption.

This wasn't always the case. Before the rapid expansion of the company, LOGICDATA's "Testing Department" was integrated into its various engineering teams. Although very flexible, this set-up was hampered by the inability to test products independently and with the required depth. However, today's well-established systematic approach to testing products throughout the entire development cycle allows for greater specialization and more meaningful results.

Advanced Mechanical Engineer Michael Lauko certainly sees the improvement: "We've come a long way. If you look at how testing was performed in the company ten years ago, we relied heavily on gut feeling rather than a structured testing methodology. It worked well enough – the products were still at a solid level – but we need to make sure that we're always improving. The company demands it, we want it, and above all, it works."

But how does it work?
For complex mechatronic products like linear actuators, a test cycle can take several months. Timing, therefore, is of the essence. Pucher explains the very first stages of the process: "Testing begins very early in the project, even before we have anything physical to "test". Once the product concept is ready, we can already see the direction the project is going and make the relevant preparations. We read the standards, think about potential weaknesses, and begin preparing test devices. Then, when the prototypes arrive, we're ready."
Each product that LOGICDATA produces un-

dergoes a stringent series of tests: not just from the Mechanical Test & Verification Team, but also from "sister" teams that assess the suitability of the product's electronics and software. Much of the mechanical testing is designed to recreate real life and "worst case" scenarios: dropping the product from various heights to assess impact damage, lifetime tests to see whether the product contains components that may deteriorate over time, and load tests to see how much weight LOGICDATA's table systems can safely lift.

The time required for testing, lifetime testing in particular, varies strongly from product to product. The test cycles are linked to intended use: for handsets, the buttons of which will be pressed many times a day throughout the product lifetime, it is necessary to run tens of thousands of tests with differing levels of force. For plugs and sockets, which may only be used a handful of times, this number is considerably less.
Implementing the results of these tests requires close collaboration with other departments in the company. Relations with the R&D Teams – especially Mechanical Development – must remain strong if the team's hard work in identifying quality issues is to be implemented into the final product.

Mathias Bratl, Advanced Engineer in the Mechanical Development Team, explains the reasoning: "Testing and Engineering need to work closely together to find failures in the product as soon as possible. The sooner the failure can be found, the better solutions can be developed. Unreliable product quality is an issue that can destroy customer relationships permanently and cause significant disruption to our strategy: communication is therefore vital."

At LOGICDATA, potential product failures are located through a systematic process known as an FMEA (Failure Mode and Effects Analysis). According to Andreas Spath, LOGICDATA's FMEA Moderator, a well-performed FMEA is integral to ensuring quality:
"An FMEA is a risk analysis that has two distinct purposes: to make the design and development of a product as logical and structured as possible and to effectively document the decisions made in the design process. It allows us to locate potential errors early, which ensures quality but also saves the company money: the faster we can identify an error, the more we save. The difference between locating an error in the concept phase and finding it during series production can run into hundreds of thousands of euros."
So, when is the best time to carry out a risk assessment? Spath smiles wryly: "Yesterday. But the process never really ends, not until the product is taken off the market anyway. New insights are always being added, and the information is shared with the entire company."
However, meeting internal quality standards is only part of the battle.

To address the issue of quality, most manufacturers in the adjustable furniture industry insist on the fulfilment of specific standards as assurance that the components within their systems are safe and reliable. There are a wide range of both national and international regulatory bodies across the world that provide minimum requirements for mechatronic components. Standards are a question of market access, often differing from country to country and region to region: the UL 962 Standard for Household and Commercial Furnishings is vital for the US market, while the DIN EN 527 is similarly pivotal in Europe.

Ensuring compliance with these standards is the responsibility of Christian Kefer: Senior Compliance Engineer and one of LOGICDATA's longest-serving employees. He talks animatedly about his specialist subject, in no doubt as to the importance of regulation:

"Standards matter. They matter for consumers because of the checks and balances they provide: preventing companies from selling products that could harm people or the environment. And they matter for us, because without the certification, it's difficult to sell electronic and mechanical products in certain regions. Sometimes the arbitrary nature of the regulations can give the impression that we're being held back – but you have to ask yourself the question: what would happen if the standards weren't there?"

So how difficult is it to meet the requirements, and how does this affect the company as a whole? Kefer explains: "Meeting the standards shouldn't be a problem – regulations are a bit like cookbooks, you just follow the recipe. It isn't really about the certification anyway, more a matter of principle: if our products aren't capable of meeting safety and performance requirements, we shouldn't be selling them. It's a question of knowing exactly what each regulatory body requires and tailoring our internal processes so that we meet these demands efficiently. If there is a challenge, it's that the standards are so wide-ranging that they require everyone in the company to pull in the same direction, but we're improving all the time and – on the whole – we manage quite well."

Calm Under Pressure

As adjustable furniture in the office and the home grows in popularity, increasing numbers of companies in emerging markets are jumping on the bandwagon. In turn, this creates colossal price pressure for the industry's more established names, LOGICDATA being just one example. Does the drive to offer adjustable products at increasingly competitive prices mean that quality will inevitably suffer? Pucher isn't sure: "Some companies put product quality as priority number one and become synonymous with quality in specific fields. However, many more companies have a different approach, heavily focused on price. The issue is that high price and high quality don't always go hand in hand, and for end users it isn't always immediately obvious what the extra expense is for, especially without the name recognition."

Where does Pucher think LOGICDATA fits into this spectrum? Next to him, Lauko smiles and takes over the conversation: "Somewhere in the middle. We have to provide quality and price-competitiveness simultaneously: this takes a lot of engineering effort, especially in material testing, but above all we need to be creative. If we aren't, our business will be swallowed up by high-quality manufacturers on one side and low-cost ones on the other."
It becomes clear after some time that both Lauko and Pucher are skilfully avoiding the sizeable elephant in the room: China. One of the major reasons for the emergence of China as a force in the adjustables industry is the relative cheapness of labor, but there are also clear advantages with material, capital, and energy costs. So how can the playing field be leveled? One method would be to partially replace the human workforce with state-of-the-art

technology, driving down price while ensuring that quality and compliance are maintained.

The shift towards automation is one that has come to dominate discussion at LOGICDATA in recent months and years, a key part of the company's drive for "Operational Excellence". Pucher is impressed: "Automation is vital to making testing more objective, reproducible and efficient. In our company, we already use automated testing for software and electronics, mechanics is a different matter. The cost alone is prohibitive, but because our products are so different from each other, some manual corrections will be needed anyway. It's not really relevant for our current range, but we will have to go much deeper into the topic in the future. The message: evolve or die."
Away from the big picture and the holy grail of automation, how can the here and now be addressed? Mathias Bratl is convinced the an-

swer lies in information and organization: "Communication is always underestimated. But it empowers us. We have focused heavily on building internal and external communication networks over the last few years so that we can store and share our test results, ideas, failures, and corrective actions in a traceable and intuitive way. Yet the system is still a work in progress. If we're going to improve quality long term, including the transition to automation, these are the kinds of things we'll need to run perfectly."
The most striking thing when talking to Bratl, Lauko, Pucher, Spath, and Kefer is the sense that only the best is good enough for the company, not only when it comes to the standard of the product range but in terms of processes and organization too. They say there's no substitute for quality: at LOGICDATA, it's true in more ways than one. ⌶

*Wolfgang Pucher (Teamleader Mechanical Test and Verification Mechanics), **Andreas Spath** (FMEA Moderator, Quality Management) in one of LOGICDATA's test rooms*

GET YOURSELF
connected

Embracing the IoT Revolution

If you haven't heard the phrase "Internet of Things" by now, there are only two possible reasons why: either you've been living under a rock for an extended period, or you've teleported back to 1997.

In the unlikely case that either of the above apply, the term Internet of Things (IoT) describes the vast collection of internet-connected appliances that we use in our daily lives. Yet the defining feature of this technology is information: data that is shared by each device in the system, building a network that expands inexorably to the point where our appliances know more about us than we do ourselves.
Try explaining this to your parents or grandparents and the reaction will be predictable: why would anyone want that? However, the answer to the question goes further: it is not just what people want. Interconnectivity is – in a technological sense – what people want more than anything else.

LOGIClink: Empowering users to customize their working environment like never before

There are two major drivers for the IoT revolution: convenience at home and efficiency at work. The former is epitomized by the massive shift towards voice-controlled assistants such as Amazon Alexa and Google Home, which centralize a range of traditional home appliances –televisions, microwaves, doorbells, etc. – into a single network controlled by just one device.

The devices themselves are fantastically easy to operate, with simple verbal commands replacing legwork and button pressing: "Alexa, play the Rolling Stones", "Alexa, pre-heat the oven", or "Alexa, turn off the lights" are examples of requests that save time and effort for millions worldwide: exactly why these gadgets are so popular.

Can we be sure it is safe? We like to trust manufacturers about things we like to use but don't truly understand, but there are inherent risks to hyper-connectivity, especially with regard to data privacy. Used correctly, the gathering of user data can enhance the digital experience, with the option to "opt out" and the "right to be forgotten" now at the forefront of public consciousness, yet the potential for misuse and even abuse is still a worry for many.

Despite these lingering doubts, the IoT revolution is not stopping: following us from our homes into our places of work. Interconnectivity plays a huge role in the race for market leadership in almost every major industry worldwide, and the benefits to companies who successfully exploit IoT technology are vast. From energy efficient factories to sensor-aided production lines, smart technologies are increasingly shaping the economy around us. The winds of change are whistling through office buildings too. The concept of the tradi-

tional workspace – one employee, one desk – is being replaced by new buzzwords: co-working, hoteling, hot-spotting and many more. Again, the question is efficiency: a 2011 study by property management experts GSA ascertained that in the US and Europe, only 35-50% of desks are occupied between 8 a.m. and 5 p.m., resulting in swathes of wasted office space each day.

The alternative is a fluid system that reduces waste by allowing employees to take any vacant desk at any time. The GSA study focused on a company that managed to increase office capacity from 650 to 1200 workers simply by r e m o v i n g d e d i -

cated workspaces. Now that companies know that their offices would still function efficiently with twice as many employees as desks, IoT systems are helping them reach this goal.

LOGIClink, a connectivity hub designed for the co-working revolution, is one example, allowing employees to simply check into vacant workstations when they need them, ensuring maximum usability via a custom-made smartphone application. Within the adjustable furniture industry, interconnected devices are changing the face of office ergonomics: and they're here to stay.

LOGIClink also provides data to occupancy management systems, lending itself perfectly to co-working, hot-spotting, and hotel-

ing systems and ensuring office space is utilized efficiently. Facility managers gain access via interconnected devices about vacant and occupied workspaces, an extra set of "eyes and ears" that can reduce downtime for key office assets. In short, it's a game changer.

Leading voices in the industry agree: "The emergence of three major trends – the drive to reduce office space wastage, the shift towards smartphone connectivity, and the increasing importance of office ergonomics – makes LOGIClink very much a tool for the here and now" said Jacquelyn Caprathe, Business Development Manager at LOGICDATA North America. "The key is flexibility, for facility managers as well as end users. LOGIClink can be integrated into existing systems or used as a standalone solution, which allows companies of all sizes to vastly increase efficiency and create a flexible desk system that works for everyone."

Even 10 years ago, the interconnectivity that is dominating our lives – both at home and in the office – would have sounded implausible, even frightening. Yet the IoT is here to stay, and it's changing business for the better: the future belongs to those who can harness it most effectively.

Jacqueline Caprathe
(Business Development Manager,
LOGIC OFFICE North America)

6 TIPS FOR AN ERGONOMICALLY FRIENDLY LIFESTYLE

By developing (r)evolutionary mechatronic system solutions for adjustable furniture, LOGICDATA promotes a healthy lifestyle both at home and at work. But we can only give you the tools: ensuring that your workday is a positive body experience comes down to many personal choices. To help point you in the right direction, we've borrowed the extensive ergonomic expertise of Melanie Kormann, a dietician and specialist in workplace health.

Read Melanie's top tips for a healthy working life and see how you can improve your wellbeing with just a few quick and easy steps.

Melanie Kormann
(dietician and specialist in workplace health)

SLEEP BETTER.

A bad night's sleep ruins the next day. Focus on improving the quality, rather than quantity of your sleep, and you'll feel so much better afterwards. No screen time 20 minutes before sleeping (read a book), but if you do have a radio or television on, make sure to set the timer. These things matter.

LIGHTS... ACTION.

Over long periods, bad light will have a terrible effect on your eyes. Get as much natural light as possible throughout the day and remember to adjust the brightness of your monitor so that it's just right for you.

AND BREATHE...

Fresh air keeps us alert and awake. Open a window for 5 minutes or go for a short walk during break times.

HYDRATE.
AND REHYDRATE.

Water makes everything work better. Dehydration can have a huge impact on how you feel, especially at work, but it's easy to forget to top yourself up regularly. Make a target of 2 liters per work day – it's easy once you make it a habit. Oh, and eat less chocolate.

SIT UP STRAIGHT.

People slouch a lot. By making an active effort to improve your posture, you'll notice a huge difference within a short period of time: your back will hurt less, you'll feel less sleepy, and you'll speak more clearly. Try "dynamic sitting": changing regularly between leaning forwards, leaning backwards, and sitting straight.

GET UP. GET MOVING.

Try to make sure you're standing up for at least 90 minutes a day. Even if you can't change the height of your desk, it's still possible to stand at work. My philosophy: if you don't have to sit, stand. Get up for a couple of minutes when talking to colleagues or if you're on the phone. Trust me, it can make all the difference.

LOGICDATA
MOTION FOR YOUR LIFE

FAST**facts**

LOGICDATA develops innovative electronic, mechatronic, and embedded software solutions for adjustable home and office furniture: raising our customers' products to new heights. For over two decades, our extensive product range has stood proudly at the cutting edge of technology, functionality, usability, and design. Our flexibility and our desire to adapt to the needs of our customers make us a major player in the global adjustable furniture industry.

HEADQUARTERS
Deutschlandsberg, Austria

SUBSIDIARIES
Grand Rapids (USA)
Maribor (Slovenia)
Zhuhai (China)
Zagreb (Croatia)

EMPLOYEES
> 330