

# space & vision: collaboration

Turn collaboration into an asset that yields better ideas, encourages creative thinking and improves performance.





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Collaboration means business

A photograph of a man and a woman in a professional setting. The man, on the left, is older, has grey hair, and is wearing glasses and a light blue button-down shirt. He is pointing his right hand towards the right side of the frame. The woman, on the right, is younger, has dark hair, and is wearing a white top. She is looking towards the man with a focused expression. The background is blurred, showing what appears to be a modern office or meeting room with some lights and architectural elements.


# introduction five steps to better collaboration

Nearly 10 years ago Don Tapscott wrote in his popular book *Wikinomics*;

“We must collaborate or perish – across borders, cultures, disciplines, and firms, and increasingly with masses of people at one time.

What was true in 2005 is even truer today. Collaboration is no longer a ‘nice to have’ but increasingly a ‘must have’.

With increased globalisation, migration and teleworking, the demands of students and workers are changing. Businesses, schools and colleges have to change too. Understanding collaboration, its role and how technology can help facilitate it will help leaders overcome many of the growing challenges they are facing now and will face in the near future.



But how do you create and nurture collaborative environments? How do you reinvent educational practices and business processes to inspire learners and workers? How do you break the mould and develop richer learning and working environments?

We believe there are five steps all leaders should consider:

1

Develop an organisation-wide vision for encouraging collaboration

2

Foster interactivity in the relationship between people and the working or learning environment around them

3

Identify, incentivise and reward your most collaborative people

4

Shift towards a culture that encourages different, more collaborative ways of doing things

5

Create a measurement framework for understanding how and why you are becoming more collaborative

This paper digs into these five steps, providing examples of organisations that have turned collaboration into an asset. Throughout you will find 19 tangible suggestions of things you can do to foster greater collaboration among your people.

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# step one

## create a sound vision

According to analyst **Frost and Sullivan** at least one third of all employees in business in Europe are considered 'virtual employees', working from home, on the road or from satellite offices.

**How do you inspire such a geographically diverse workforce? How can an organisation use communication and visual technology to not just enable effective collaboration, but stimulate those who come into contact with the technology?**

These are the sort of questions that directors at **Deloitte**, a world leader in auditing, tax, consulting and corporate finance services asked themselves when they planned to build what is now regarded as the most advanced office in the world.

Called The Edge, this office building in Amsterdam boasts a state of the art AV infrastructure. It is also equipped with the latest in AV technology, with 4K professional displays featuring HTML5 and remote, IP-based controls. While Deloitte wanted energy efficient solutions that had the highest picture quality available and offered application versatility from presentations to digital signage, it also wanted the technology to inspire its 1,000+ employees to collaborate and innovate.

**The role interactive technology can play in bringing people together to learn, to work and to play is well documented but it is the merging of these worlds that is fascinating.**

**The technology exists. Never before has there been such a visually stunning range of displays or such a powerful set of interactive tools on which to build collaborative ideals.**

The role interactive technology can play in bringing people together to learn, to work and to play is well documented but it is the merging of these worlds that is fascinating.

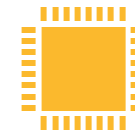
The visual and interactive experience should not be hampered by location. Remote workers and learners need to share the same experience as those in the meeting room or classroom as far as possible; otherwise attempts at engaging remote workers and learners in the collaborative process will be undermined.

For leaders the solution is to focus on the basics of what drives collaboration and not to get too hung up on the idea of waiting for a one-size fits all product because there isn't one. Building a solution around value creation, either in terms of business development or student enrichment and results has to be the initial focus. The technology exists. Never before has there been such a visually stunning range of displays or such a powerful set of interactive tools on which to build collaborative ideals.

## Collaboration strategy checklist:



Develop a collaborative strategy based on real trends, e.g. more remote learners should demand more remote conferencing



Develop a good technology base with future proofing - networking, bandwidth, etc.



Think visual – large, easy to watch projections or screens can inspire students and workers



Consider gamification in learning and the workplace to increase engagement

“ **The increasing maturity of cloud-based collaboration and asset sharing platforms have given organisations far greater scope for making truly interactive collaboration achievable, regardless of location. By creating a sound vision and encouraging collaboration from the top down, leaders can harness these technologies to make it happen.** ”

# leading edge collaboration

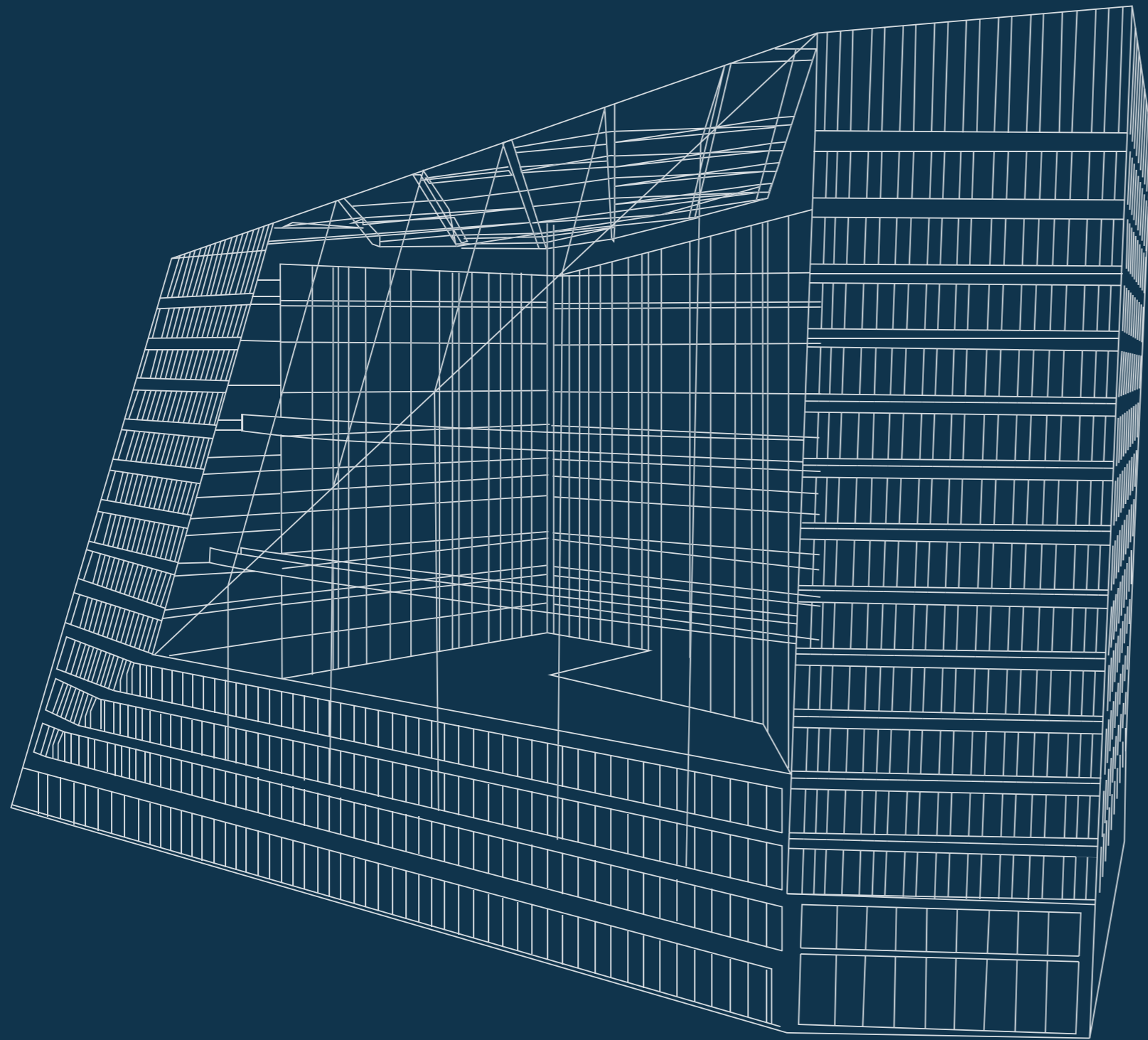
The Edge is no ordinary office building. Completed in 2014, The Edge is officially the world's most eco-friendly building (according to its BREEAM score) featuring state of the art office and meeting spaces. It's the Dutch headquarters for Deloitte, a world leader in auditing, tax, consulting and corporate finance services.

When the company embarked upon this ambitious project, it wanted leading edge technology to drive its communications and collaborative working ideals. The technology had to be 4K and HTML5 ready and provide a fully centralised AV backbone that would future-proof the offices for years to come. On-top of this, the solutions needed to be user-friendly for the 1,000+ employees.

## Sound and vision

Engaging visual communications is a core part of the Deloitte business. This meant The Edge would require the latest industry standard in image resolution: 4K. The format offers a resolution four times greater than Full HD (1080p)





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and delivers a sharp and detailed visual image. In addition to its 4K solution needs, Deloitte wanted solutions that had the highest picture quality, were energy efficient, and offered application versatility from presentations to digital signage. Sony was recommended by systems integrator Avex as the only manufacturer able to deliver a complete line-up of 4K professional displays with HTML5 and IP Control, which enable teams to manage and update their content and settings centrally via the internet.

The BRAVIA 4K displays helped Deloitte to instantly grab everyone's attention from digital signage to video conferences thanks to the lifelike detail, rich colours and exceptional wide contrast of the solution, ensuring Deloitte gets its message across when it really matters. The HTML5 capability of the professional monitors also made it easy for Deloitte to create stunning digital signage – quickly, efficiently and at a low cost. The BRAVIA 4K displays are also very easy to install and simple to manage, from standalone signage to large multi-screen applications.

In addition, Deloitte opted to install the 4K SRX-T615 projector for visualisation and simulation applications in its presentation/auditorium room.





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“The Deloitte office is certified as the most innovative and sustainable office in the world,” said Erik Ubels, Director of Information Technology & Workplace at Deloitte Netherlands “The office even knows individuals light and temperature preference. Our aim was to make The Edge the best place to work. It is an honor to have Sony, a very important client, working with us. I have always been a very dedicated Sony fan and customer and I have a long relationship with the company. All the technology in the office is based on Sony’s 4K Professional Displays, which blend nicely with the design of the building. We also use the 4K SRX-T615 projector in our auditorium,

which is very beneficial for demonstrating a large amount.”

Sam Beesems, Audiovisual Coordinator Technology & Workplace Services at Deloitte Netherlands added, “We are constantly trying to innovate and deploy new things. What we meant to do was to set up several AV pillars, one of them being 4K. We are currently looking at opening our own in-house studio so we can actively deliver 4K content to employees and customers and we expect 4K to be fully adopted throughout Deloitte Netherlands within the next 2 years.”

# step two improve interactivity and learning

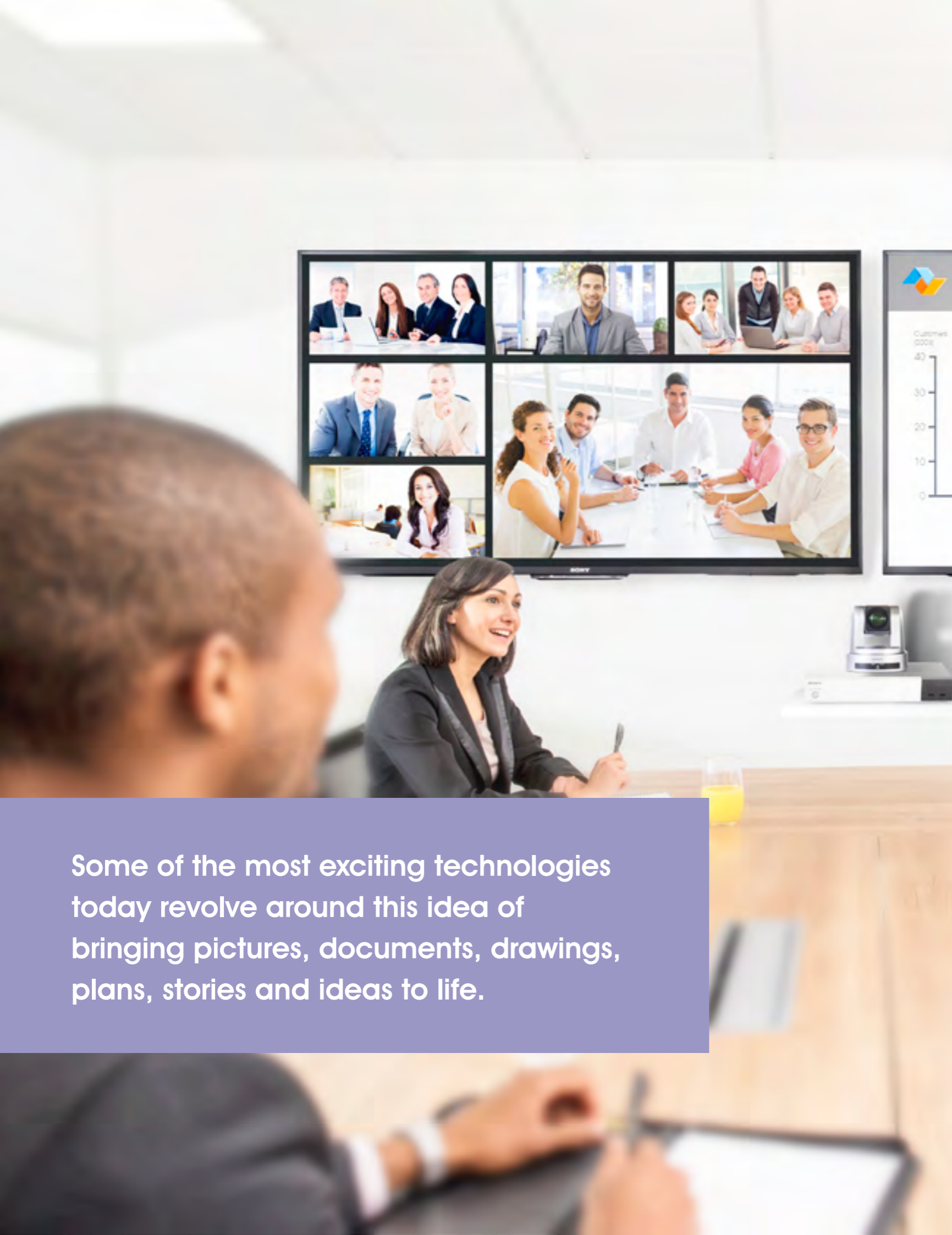
If you ever visit Norwegian university **NTNU** in Trondheim, you will be greeted by a large projection on a wall in reception enabling you to virtually walk around the campus. The projection is interactive, using Microsoft's Kinect to enable hand control with pictures projected using a state of the art 3LCD Laser projector. This enables the university to present a slide show of pictures from events, student activities, student projects and other relevant information.

While essentially a marketing tool for the university, it's also a good example of how technology is enabling organisations to think differently.

Interactivity in work and in learning is essential to innovation. Speaking at a TED talk in 2006, education and creativity expert **Sir Ken Robinson** talked about how schools kill creativity by almost blindly following traditional learning paths. We as humans are not engineered to work and learn that way.



Technology is enabling organisations to think differently. Interactivity in work and in learning is essential to innovation.



Some of the most exciting technologies today revolve around this idea of bringing pictures, documents, drawings, plans, stories and ideas to life.

“Intelligence is dynamic,” said Robinson. “If you look at the interactions of a human brain, intelligence is wonderfully interactive. The brain isn’t divided into compartments. In fact, creativity -- which I define as the process of having original ideas that have value -- more often than not, comes about through the interaction of different disciplinary ways of seeing things.”

**In short, to get the best out of people, they need to be stimulated with a mix of mediums and interactions. Collaboration is clearly in our blood.**

**So how do you create an interactive and collaborative environment?**

Some of the most exciting technologies today revolve around this idea of bringing pictures, documents, drawings, plans, stories and ideas to life. While fascinating technologies such as augmented reality are still in their infancy, interactive whiteboards, **4K cameras and displays**, LCD projectors and a whole range of collaborative communications software and systems can turn once stuffy meeting places and classrooms into exciting forums for collaborative working and learning.

This is where business can learn more from education. Classrooms across the planet are using interactivity in learning, making lessons more engaging and ultimately fuelling the idea of collaboration.

In business this idea can be a little more complex but it is no less important. A recent **Frost and Sullivan report** revealed that businesses are now “compelled to employ inventive technologies that will facilitate employee collaboration” due to “rapid globalisation.”

Frost & Sullivan Technical Insights Research Analyst Sathya Vendhan said:

“Deploying innovation management tools empowered by emerging technologies will help firms propel organic growth through innovation. For instance, the integration of cloud computing with idea management solutions will enable organizations to reap the benefits of collaboration.”

It’s about understanding how interactivity can work in projects and provide tools that make the process seamless and engaging. With an interactive platform to collaborate, businesses will reap the benefits of a more enthused, switched on workforce, keen to learn and keen to do well personally and professionally.

### Interactivity checklist:



Build interactive experiences through planning the use of technology



Develop lessons and projects around interactive capabilities, rather than making interactivity an after-thought



Re-think classroom and meeting room layouts, harnessing technology to encourage interactivity

“While seeing is believing, interactivity is really learning. Classrooms and meeting rooms can come alive with high-impact LCD projections and 4K displays. Combined with an interactive communication system which knits together various content sources and you have a powerful set of tools to make collaboration fly.”

# bring on the wall

Norwegian university **NTNU**, based in Trondheim had a problem. How could it promote its work, the work of students and “wow” visitors to its campus, helping to raise its profile in an increasingly competitive learning landscape? Established in 1996, NTNU is one of the main institutes for higher technological education in Norway. It offers skilled training in science, humanities and arts, social sciences, finance and business subjects. The university has 23,000 students, of which 2,600 are foreign students.

Yet despite all of this, it still needs to market itself effectively. In an increasingly competitive global market for students, NTNU decided to try something new.

## **The ‘wow’ factor**

NTNU aims to be a prominent international university attracting the best students and employees. The university always uses innovative and high-quality technology to enrich the student environment, which is an important part of the university’s strategic aim of having a modern teaching and research infrastructure.



**In an increasingly competitive global market for students, NTNU decided to try something new.**

**The university decided to create an exhibition space in the reception area, to showcase its diverse work and attract the interest of new students and other guests.**

Hundreds of potential students and other guests visit the university every year so the Faculty of Information Technology, Mathematics and Electrical Engineering (IME) decided to create an exhibition space in the reception area, to showcase its diverse work and attract the interest of new students and other guests.

Rather than a static exhibition area, IME decided to create an interactive wall. Using a [VPL-FHZ700L](#) 3LCD Laser Light Source projector from Sony in combination with Microsoft's Kinect system, IME has created an interactive information wall, presenting a slide show of pictures from events, student activities, student projects and other relevant information.

The wall also enables visitors to view an interactive 3D model of NTNU's main building. Here, visitors can take a virtual trip around the building with the help of the Kinect's motion sensor. The 3D system plays when a person stands in

front of the information wall and the motion sensor detects the movement. The person can then control the presentation with their hands and explore the 3D model in order to become more familiar with the university's main building.

### **Lasers**

The information wall was installed at IME in September 2014 and immediately engaged visitors who wanted to know what the university had to offer. The information wall is an important part of the university's external and internal marketing and the system will be developed in the future with the aim of showing even more interactive content. This, together with the university's other investments in laser technology, shows that this new and innovative projector technology is here to stay at NTNU.

"We chose Sony because we needed high brightness, low running costs and high operational reliability. Our hope is that the projector and the rest of the installation are so robust that our visitors always enjoy spending time at our information wall," says Dag Nummedal, Head Engineer at NTNU.





# step three

## reward leaders

A good workman never blames his tools, so the saying goes, but surely a great workman (or person) needs the latest tools to create something extraordinary? Within every organisation there will be those that understand technology and embrace it and those that struggle and tend to run away from it. Every organisation needs leaders, evangelists, those that understand technology and how it can help improve particular working or learning environments.

**To enable leaders to thrive, business executives and academic managers have to learn to step back from decision making. In practice, though, how can organisations identify those with valuable insight to offer and encourage others to do the same?**

A great example of this is at ING Direct in Canada (now called **Tangerine**). Two years ago former CEO Peter Aceto invited employees to “bitch” about the company. The business had already dispensed with job titles but here was an opportunity to vent frustrations and identify potential areas of improvement.

“We may not have solved major business issues by having this bitch session, but with my support, employees know that it is safe to be heard, and that dialogue is encouraged and feedback is actionable,” said Aceto. “And my senior team is reminded of the power that resides in having real conversations, honesty and open debate.”

This is incredibly valuable for a business. So many business leaders Tweet inspirational ideas about how to engage staff, but it seems so few are actually brave enough to make it happen and sustain it. It’s as if natural competition takes over and the rule of the jungle kicks in and management returns to the safety of the boardroom. But even **Charles Darwin** understood the importance of working together when he suggested that in human and animal history, those who learned to collaborate and improvise most effectively have prevailed.



**Every organisation needs leaders, evangelists, those that understand technology and how it can help improve particular working or learning environments.**



One company where this is understood more than most is financial advice business **The Motley Fool** that actually has its own Chief Collaboration Officer called **Todd Etter**. Todd's role is to help staff "get to know each other" and be creative. He does regular 'improv' sessions with staff and has the following rules for participation:

- Listening
- Having a "Yes" attitude
- Keeping an open mind
- Focusing on the task at hand
- Making bold choices and not worrying about failure

It's the sort of rules that could be applied to a lot of collaborative environments but it often takes leaders, divorced from boardrooms to gain the trust of staff and break down the traditional barriers that can kill any attempts to make collaboration thrive.

## Championing collaboration checklist:



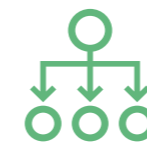
Identify good, measured communicators in the group and empower them



Develop a collaborative plan with a small group of 'leaders' to spark interaction



For businesses engage across departments, bringing in HR, for example, for staff retention and morale



Ensure a shallow hierarchy to minimise a 'them' and 'us' attitude

“ **As user-friendliness becomes a key selling point of leading technologies, focus on becoming familiar with collaborative technologies and reward those that make the most of the opportunities they provide. Creating an open collaborative environment in which even the most junior of staff are not afraid to participate is not easy, so celebrate those that can make it happen.**

# step four

## culture shift

Stowe Boyd, Research Lead at Gigaom Research and author of **A New Way of Work** said that for businesses to thrive and collaborate they have to learn to loosen the rules and give people more autonomy.

The same thought can be applied to education. However, relaxing the tried-and-tested ways of doing things – whether in the classroom or the office space – can be a daunting task.

**The first thing to do is challenge protocols surrounding team-based tasks and hierarchies. But how do you do this when the numbers of remote learners and remote workers are increasing? How can an increasingly tech-savvy and social media friendly society fit into a traditional world of desks, whiteboards and one-way communication?**

Relaxing the tried-and-tested ways of doing things – whether in the classroom or the office space – can be a daunting task.

**If everything needs approving by the CEO or the board or the teacher or the lecturer then collaboration will never happen.**

In Boyd's words, leaders need to "change the nature of social connections: specifically, weakening the ties that were strongest in the traditional organisation, the ties associated with hierarchic reporting and control."

Relinquishing control can be dangerous but that's where Boyd's thinking makes sense. If leaders expect staff and students to collaborate they have to empower them to make decisions within certain frameworks. If everything needs approving by the CEO or the board or the teacher or the lecturer then collaboration will never happen.

### Collaborative culture checklist:



Create a workable, less approvals-based structure, based upon input from people at all levels



Set clear, achievable but challenging goals



Start small, perhaps with one or two project teams or subject classes



Use the technology to fit the requirement, but make it inspiring

“ While 'letting go' is never an easy thing, leaders have to be conscious of peoples' increasing expectations to work with their own set of tools and their own preferred approaches. Technologies that support revision control and remote access can provide managers with a safety net as they loosen their grip. Equally, quick, interactive team conference calls enable them to track progress against shared goals, rather than micro-managing the 'how'.

# step five measure and manage

Measuring the effectiveness of collaboration is extremely important, but what metrics do you use?

It really comes down to what would have the biggest impact on a business. Perhaps staff retention is an issue or a lack of new ideas. In which case metrics could be built in to measure how collaborative processes are helping to solve these issues. **Intuit** for example uses product ideas generation as a measurement of collaborative success.

In terms of educational establishments the proof is in the results. If students are achieving greater results and a deeper subject understanding then it was worth that investment in the collaborative tools. Whatever the metrics, organisations do need them.

Measuring the effectiveness of collaboration is extremely important, but what metrics do you use?



Evan Rosen, author of [The Culture of Collaboration](#) and executive director of The Culture of Collaboration Institute, suggests managers can only manage and measure collaboration if all staff have access to the same tools.

“Some companies reinforce command-and-control culture by creating a hierarchy of tools,” he says. “If your company invests in only a few such systems, it’s more effective to reserve them for particular functions rather than for particular people. The most collaborative organizations give everybody access to the same tools regardless of level, role, or region. This eliminates unnecessary hierarchy, reinforces collaborative culture, and creates greater value.”

### So what does successful collaboration look like?

According to Avinoam Nowogrodski, founder and CEO of Clarizen, successful collaboration should be “measured by the efficiencies gained through the collaboration. Things like increased capacity and speed for completing work, efficiency of knowledge transfer when onboarding new employees, and increased customer satisfaction regarding initiatives completed for them are all good measurements for collaboration.”

### Collaboration measurement checklist:



Lead from the front – all those in authority have to spark collaboration processes



Agree on challenging yet achievable goals for each project or lesson



Measure results, but not necessarily through a box-ticking approach



Identify individual improvements in communication

“On the surface collaboration seems like an intangible, difficult to measure function of the business, but the real benefits of successful collaboration can actually be felt at every level. Not only do technologies such as IP-based communications, ‘cloud’ computing tools and video streaming provide the means for better collaboration, but their analytics dashboards allow organisations to track their uptake.”

# conclusion collaboration means business

Brian Solis, principal analyst with the **Altimeter Group**, defines collaboration technologies as one of the trends changing the way we work. "Collaboration platforms give us the ability to connect our people and information together anywhere, anytime, and on any device," he says.

It's true. With the most stunning visuals imaginable, the ability to interact with images and share and edit documents regardless of location, collaboration technologies are helping to reinvent how people work in business and education.

There are plenty of reports and statistics to support this idea. The **Aberdeen Group** recently released a study that found that over the course of a year organisations with a collaboration policy saw a 96% improvement in the time it takes to respond to customers. A report from **Econsultancy** in 2012 found that 96% of executives cite ineffective communication as the reason for workplace failures.



At San Francisco-based **Automatic**, the company behind Wordpress, communication is not a problem despite having over 300 employees spread across the globe as part of its remote working policy. Each employee is given state-of-the-art visual and communications technology and a budget to set up a home office. There are regular meetups in various locations around the world too and this has led to a diverse and happy workforce.

Is this what good collaboration looks like?

Understanding the goals – improved communication, more engaged students and staff, inspirational lessons and projects, valuable teamwork regardless of location, better performance and results – will help organisations determine their own collaborative frameworks.

**Exceptional technology solutions are available to support these frameworks. As detailed throughout this paper, these span innovative, user-friendly hardware such as interactive whiteboards, high quality videoconferencing and internet-enhanced 4K screens, and agile, evolving software tools including intuitive asset sharing and team-working platforms.**

**At Sony we can work with any organisation to design tools that fit their specific goals, empowering visual, collaborative learning and career development as best suits them.**

Richard Branson once said: “You don’t learn to walk by following the rules. You learn by doing and from falling over.” If organisations adopt the mindset that collaboration should be a given, they will eventually find their own magic formulas, the technologies and collaborative patterns that work best for that organisation and enables it staff or students to fly. This year, collaboration really does mean business.

**Effective collaboration is not just sharing ideas, it’s a mindset, a different way of working towards a common goal. People need to be inspired too, and this is where technology can help.**

**At Sony we have a range of powerful and visually stunning tools and products that enable your people to flourish.**

**[pro.sony.eu/collaborate](https://pro.sony.eu/collaborate)**