

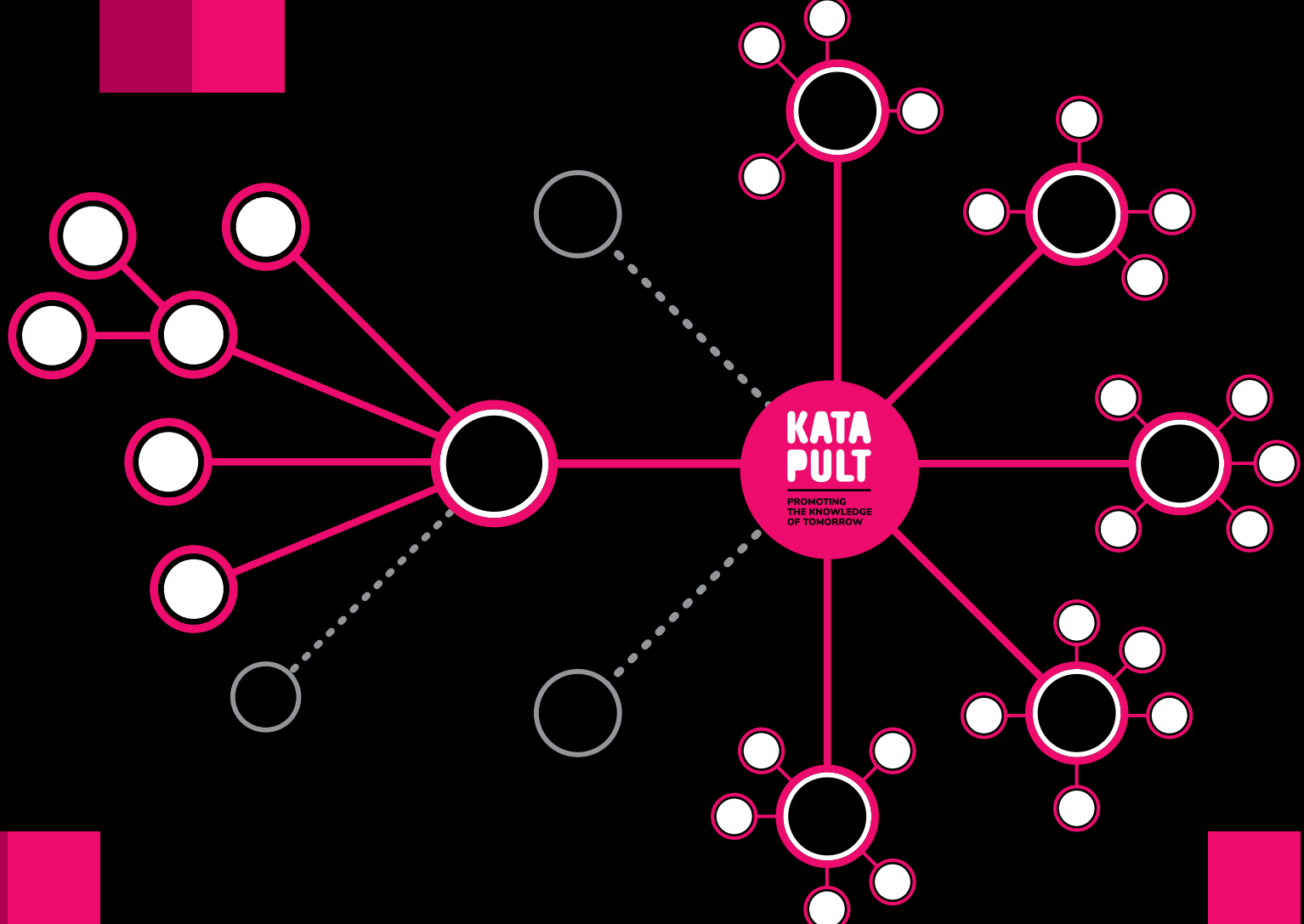
IMPACT AND ADDED VALUE

OF COOPERATION BETWEEN VET EDUCATION AND COMPANIES IN THE NETHERLANDS, 2019 - 2021



**KATA
PULT**

PROMOTING
THE KNOWLEDGE
OF TOMORROW



THE POWER OF PUBLIC-PRIVATE PARTNERSHIPS IN THE KATAPULT NETWORK

Collaboration between education and business through public-private partnerships is the solution for working on tomorrow's vocational education and professional practice. For a sustainable, digital and diverse society and labour market in which we want to involve as many players as possible. By accelerating and intensifying processes and maximizing the interaction between vocational education and workfield. The permanent training and development of employees is a shared responsibility and together we make more impact. That is why we have Katapult, an open source learning community of over 450 public private partnerships, in the Netherlands and across Europe.





Colofon

The impact report 'Impact and added value' was published by Katapult, supported by PTVT. The figures in this issue are based on: a survey which was conducted in the spring of 2021 among nearly 300 public-private partnerships, the networking map consisting of more than 400 partnerships and their partners, and on the results of research on public-private partnerships that was carried out by third parties.

November 2021



MORE IMPACT BY ACCELERATING AND SCALING UP

We are working on public private partnerships for more than a decade. With this third impact measurement, we document how we are doing. And the good news: we are still growing! More and more students, more teachers, within more schools and more companies are reaping the fruits of public-private partnerships in education. Obviously, we are very happy about it, but we're not there yet!

We face enormous societal challenges: Energy transition, sustainability, ageing workforce and society, climate effects and ongoing digitalization are major themes. More often working requires entrepreneurship and as many as sixty percent of new jobs are temporary employments. All of these changes affect very many people and organizations. Many more than the network of Katapult consists of.

We are continuing our efforts to scale up successful public private partnerships, expand their reach and what they contribute to the major societal challenges. The potential for growth is there, let's make the most out of it!

Pieter Moerman
Katapult

EXAMPLE OF INTERNATIONAL EXPANSION

CENTRES OF VOCATIONAL EXCELLENCE

The development of public-private partnerships in vocational education has also taken off outside the Netherlands. Since 2019, the European Commission has been supporting the development of Centres of Vocational Excellence in which companies, schools and governments work together to ensure that workers enter the regional labor market with the right skills. In addition, European Platforms of these regional Centres are being created per sector or theme so knowledge, educational materials and facilities can be exchanged.

Statistics:

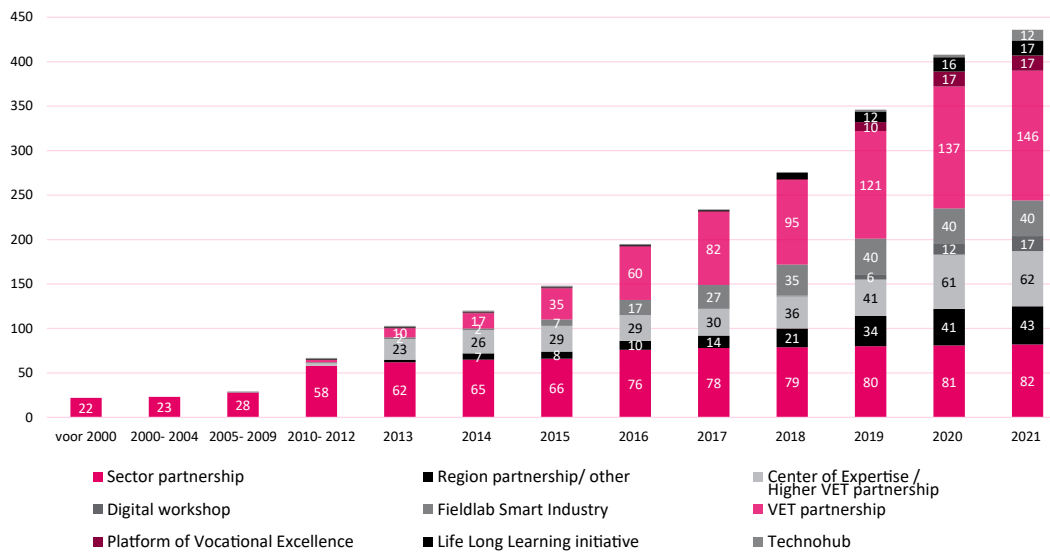
- 12 European Centres of Vocational Excellence in 9 countries
- Each European Centres of Vocational Excellence is active in least 4 countries with regional Centres of Vocational Excellence
- 400 million Erasmus grant for 2021-2017
- A new call for proposals every year
- 4 million grant per project for 4 years

CIV Water and the Platform of Vocational Excellence Water

Over the past two years, the Platform of Vocational Excellence developed an online platform where public private partnerships share online teaching materials on their expertise with other regions in Europe. The Maltese partners put their knowledge about osmosis online, the Dutch share everything on water management and the Latvian partners share their specialism in wastewater. In this way, we prevent each region from developing existing knowledge on their own. In addition, the exchange of students and teachers within the network is an important pillar.



NETWORK GROWTH: PARTNERSHIPS



The regional investment fund (RIF), funded by the Dutch Government, has clearly given the Dutch vocational education a boost: a lot of new initiatives emerge and existing public private partnerships are scaling up. Higher vocational education is increasingly working on their focus in Centres of Expertise. In 2019 the first pilot 'Centres of Vocational Excellence' (CoVE) took place, following the example of the Dutch Centres for innovative craftsmanship. A variety of initiatives have emerged from the regions or industries, especially in the field of installation technology, construction, ICT and technology.



EXAMPLE OF NEW CENTRES OF EXPERTISE: PREVENTION IN HEALTHCARE AND WELFARE

Noor Christoph, Program Manager

"We took a year to develop a good plan and it was a voyage of discovery, in which the common goal became increasingly clear. We did this by asking ourselves all sorts of questions in a number of creative sessions: who are we doing it for and how do we achieve this? We owe our success to three important things. Firstly, we took every contribution and every signal seriously, even though it wasn't always convenient. We listened carefully and took resistance seriously. Then we wrote the business plan like a three-stage rocket: three documents, each time building on the previous one. And finally, what certainly helped was being clear about the decision-making process."

[Learn more](#)

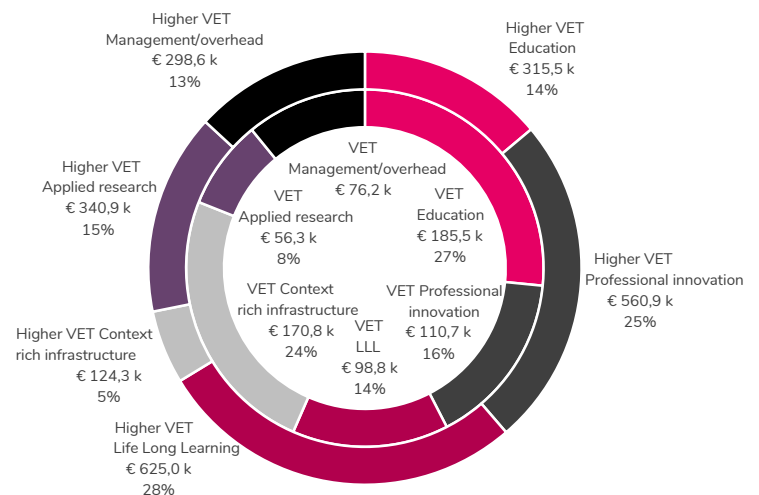


FUNDING

INVESTMENT IN INNOVATION, LIFELONG LEARNING, EDUCATION AND RESEARCH

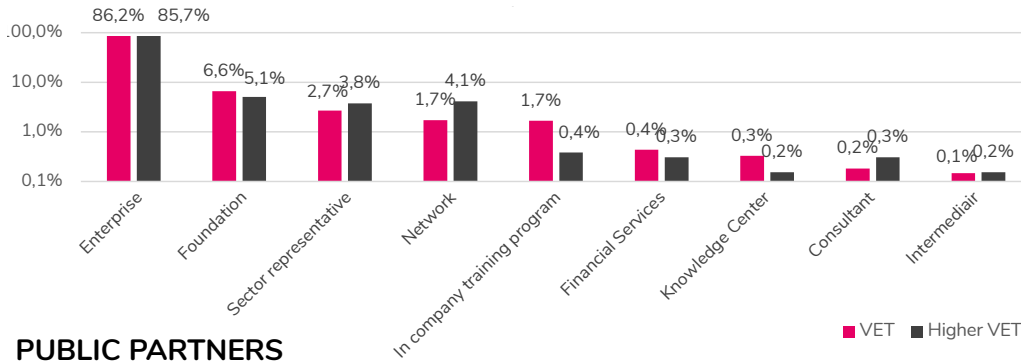
The average budget from public private partnerships in vocational education and higher vocational education has an annual volume of about €2 million. However, there are big differences: a large public private partnership has an annual turnover of €6.5 million, where a small partnership has an turnover of about €200.000,- (without subsidy). In higher vocational education, the volumes are larger on average. The expenditure of funds is shown here.

The relative contributions of private partners in vocational education (42%) are larger than in the higher vocational education (25%). Public private partnerships in higher vocational education generate more public funding (for research). In addition Partnerships (in vocational and higher vocational education) are increasingly developing additional income from services such as practical assignments or in-service training activities.



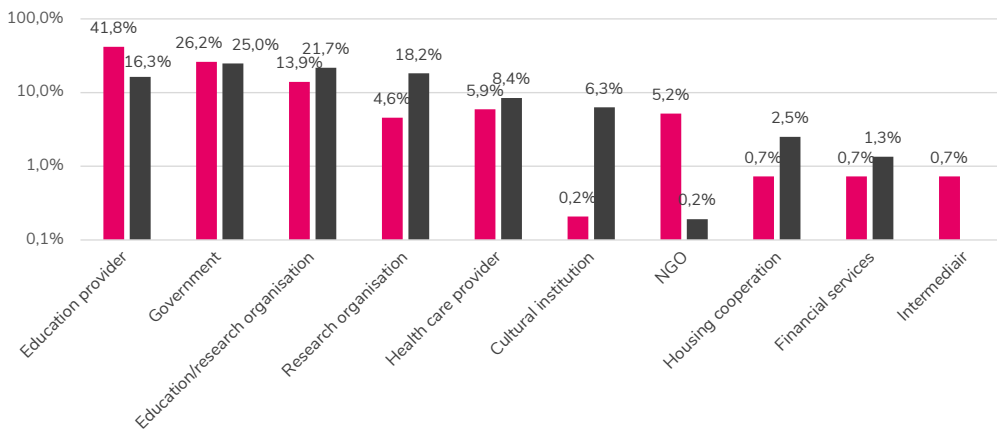
COMPOSITION OF THE NETWORK: PRIVATE AND PUBLIC

PRIVATE PARTNERS



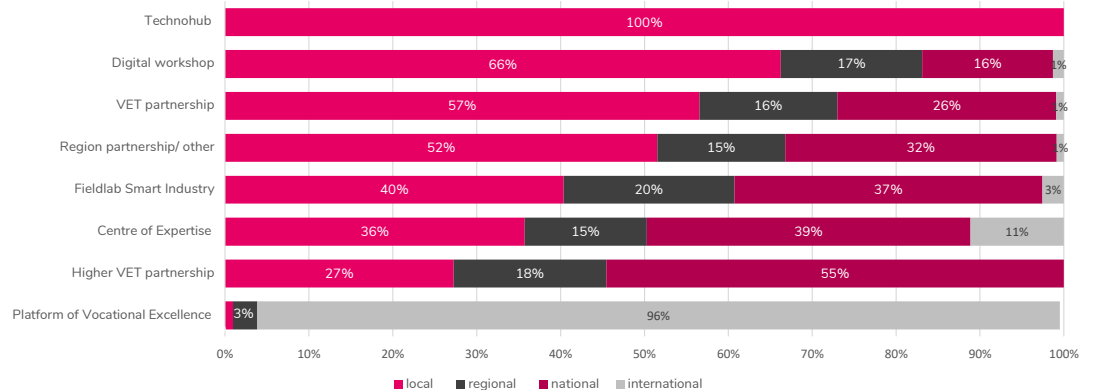
Of the 12,000 registered partners, the majority is from the private sector, often in the ratio 80% private - 20% public partners. The share of private and public partners shows a strong representation of SMEs, educational and governmental institutions. The share of “research activities” in higher education is an important pillar of Centres of Expertise, which is also visible in the networks.


PUBLIC PARTNERS



DISTRIBUTION LOCAL, REGIONAL, NATIONAL AND INTERNATIONAL PARTNERS

Katapult network partners are located in every region in the Netherlands. Often these partners work together with a public private partnerships from the same region, but that is not necessary. The cooperation can also take place with a partnership from another region or a partnership located in another part of the country (nationwide) and even with a partnership located in a foreign country.





EXAMPLE OF SCALING UP

CHEMELOT INNOVATION AND LEARNING LABS (CHILL)

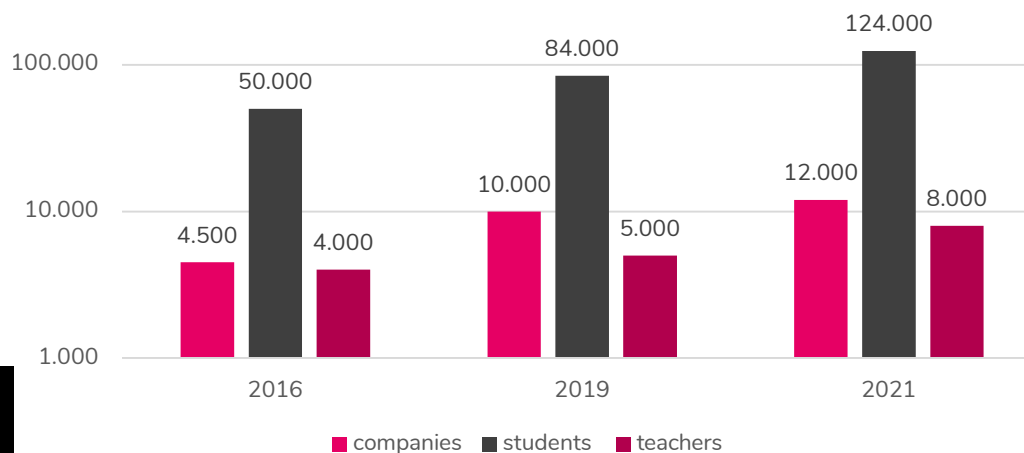
Luc Lanclus, CHILL board member

“The expansion to other training domains - in the context of chemistry and materials - is one of the key points of our strategy. A good example of that multi-disciplinary system we are aiming for is a lectureship around engineering we are now helping to start up. In our scale-up hall we are realizing a recycling line for plastics for this purpose. We are washing, filtering and sorting plastics into monostreams and processing them into new, first-class materials. The entire production line is supervised by students from various programs.

In managing - writing business cases – you are in need of economics students. Engineering, i.e. improving processes or adapting machines, is the job of engineering students; trainee mechanics maintain the production line, trainee process operators operate it. Of course, they are all coached by professionals. In this way, students experience working in real life during their studies. We also apply this form in the CHILL Circular Space to get students excited about circular production. The funding is secured, the first community for development will be up and running in September and the vocational education students will get to work.”



GROWTH IN REACH

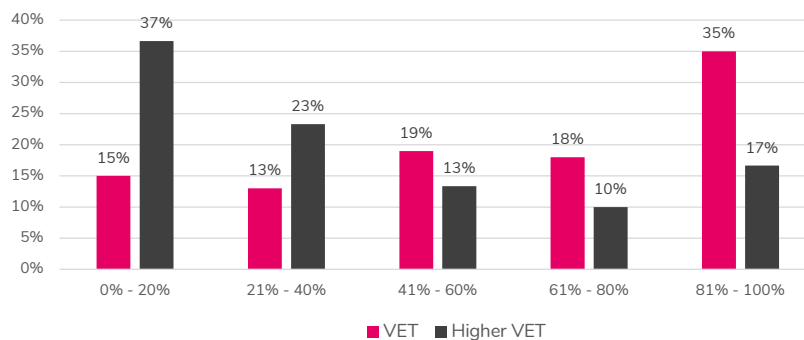


The impact measurement shows that the measured public private partnerships together currently involve about 124,000 students, 8,000 teachers and 12,000 companies. Not all partnerships are included in this measurement, the total number of companies, students and teachers is therefore higher in practice. If you include the partners of fieldlabs and partnerships in technical industries, the number of companies is 5,575 higher.

Thanks to the growth of existing and new vocational education partnerships and Centres of Expertise, a total of 12,000 companies are now part of a partnership. On average, 50 partners are involved in a vocational education partnership and 69 in a Centres of Expertise. It must be said that the differences between partnerships are significant. In addition to this growth, the partners of fieldlabs and public-private partnerships in the technical branches were also mapped out, totaling 5,575 partners.

The partnerships individually reach an average of 562 vocational education and 668 higher vocational education students annually, with outliers to more than 3,000 students. This is a 33 percent increase in comparison to 2019. Through the developed teaching materials such as minors and electives, an even larger group of students will come into contact with the public private partnerships with outliers of up to 6,000 vocational education students and 12,000 higher vocational education students. An average of 25 teachers are directly involved in the vocational education per public private partnership. In higher vocational education the number of teachers reached 58, with outliers of 200 in vocational education and 300 in the higher vocational education. Partnerships in vocational education reach an average of 90 teachers, partnerships in higher vocational education reach an average of 100, with outliers to 400 and 200 teachers.

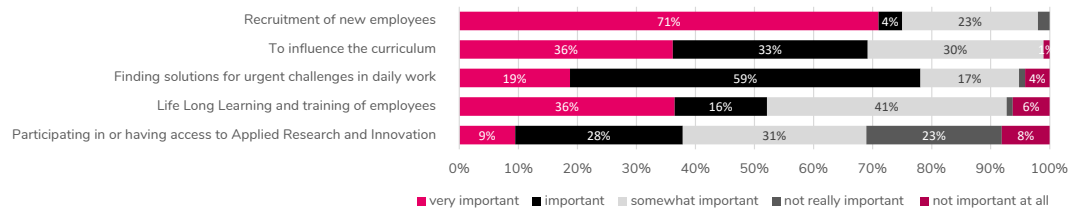
GROWTH POTENTIAL IN STUDENT OUTREACH



The impact is growing, but the ceiling is far from being reached. This is shown, for example, by the number of students currently enrolled in public private partnership-affiliated programs (total potential) compared to those participating in partnership activities (reach). Moreover, 69% of partnerships say they would like to reach more students in the near future; in particular, new target groups. For example, by (with new offerings) including new courses or by increasing the focus on diversity.

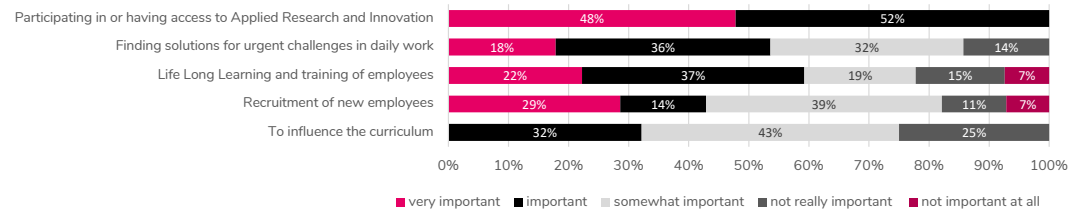
SUBSTANTIVE FOCUS

MOTIVES OF WORK FIELD PARTNERS IN PUBLIC PRIVATE PARTNERSHIPS



The reasons for work field partners to participate in partnerships have hardly changed since the last measurement in 2019. In higher vocational education, access to knowledge (through practice-based research) and help with innovation questions are at the top. In vocational education, the access to human capital and influence on its development rank number one.

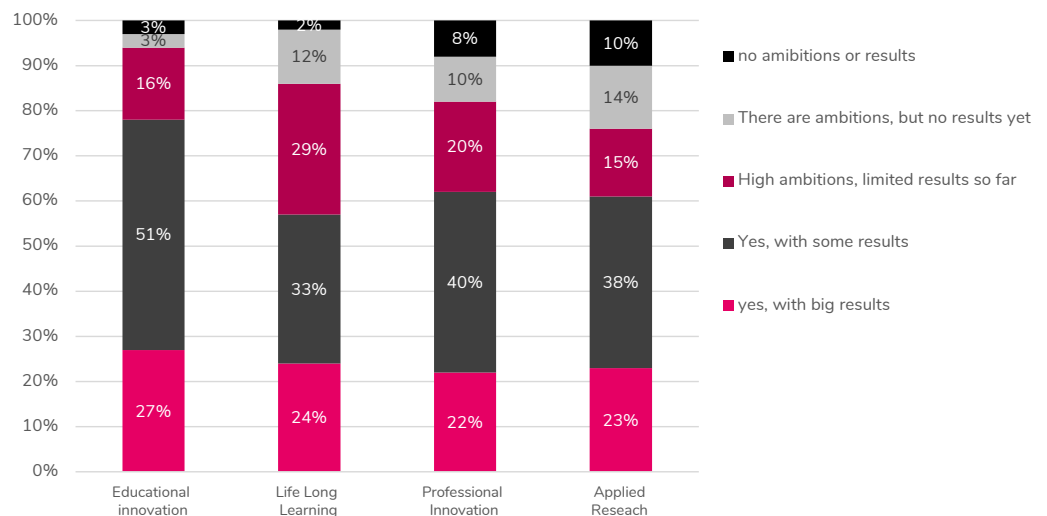
MOTIVES OF WORK FIELD PARTNERS IN HIGHER VOCATIONAL EDUCATION PUBLIC PRIVATE PARTNERSHIPS



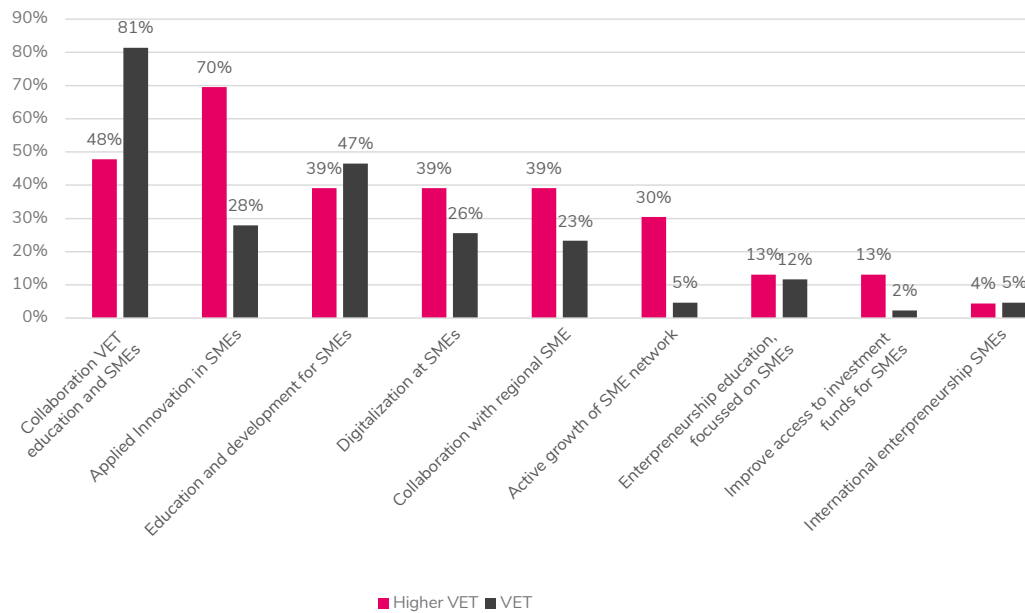
The European Centers of Vocational Excellence created a handbook for SMEs on how they can collaborate with the Centers, based on the motives of companies.

AMBITIONS AND RESULTS

The public private partnerships focus on bringing together education, research and practice. The ambitions and results align well with the interests and motives of the partners. Educational innovation is at the top of the list of priorities, ambitions and results for many partnerships. In the higher vocational education in particular, the emphasis lies more on applied research. In all cases, innovation of professional practice is a close second. It is striking that 24% of the public private partnerships have already implemented many result reports in the area of lifelong learning. This helps to catch up in this area.



SERVICES FOR SMALL AND MEDIUM SIZED ENTERPRISES



Of the business partners of public private partnerships, 80% are (small) SMEs. Through initiatives such as **MKB!dee** and **MKB-Werkplaatsen** Digitalising, public private partnerships are working on the innovative capacity of SMEs (in the field of digitalization of work processes and services) and the professionalization of employees. But the interests of SMEs are also being considered in other public private partnership contexts. This graph shows, for example, how partnerships in the Katapult network are active in the themes from the SME action plan of the Dutch Ministry of Economic Affairs.

CENTER FOR INNOVATIVE CRAFTSMANSHIP INSTALLATION TECHNOLOGY LIMBURG (CIVIL)

All new techniques in installation and electrical engineering are lined up in the **CIVIL**. The regional business community makes this equipment available in order to ensure modern and innovative education.

Frank Theeuwens, project leader: "Some of the SMEs don't realize that they need to invest in the development of their employees. They are primarily concerned with their customers. As **CIVIL**, we make SMEs aware of the fact that if you want to be part of the transition, you'll have to do the work. We discuss what package **CIVIL** has for this and review with the entrepreneur per staff member what is needed. We have an advisory role and show SMEs the way in the energy transition."





EXAMPLES OF PUBLIC PRIVATE PARTNERSHIPS WITH FOCUS FOR LIFELONG LEARNING

TECHNOHUB

The **TechnoHUB** is an MKB!dee and affiliated with the CIV Smart Technology and TIB Network Woerden.

Marloes Sikkema, Program Officer TechnoHUB: “The TechnoHUB in Woerden is a physical, technical education space where a broad target group is enthused and equipped for technical professions. This ranges from elementary school students to professionals and people with a distance to the labor market. Employees of companies that are members of Woerdens Technique Talent follow training together in the TechnoHUB. Training together is more efficient and the TechnoHUB has modern facilities, which created together with our members. Some courses we purchase jointly, other courses are free for members to follow. One partner then supplies the teacher, the other the stuff and TechnoHUB is the booster.”

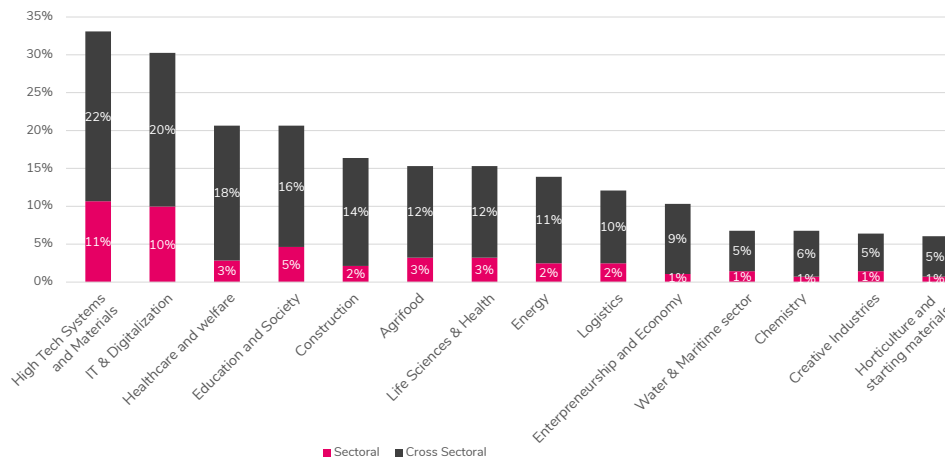
FIELDLAB CAMPIONE

Fieldlab **CAMPIONE** consists of a central fieldlab in Gilze and Rijen where there is a test installation where all Campione partners can make use of to test new technologies that make maintenance predictable.

Steven d'Hondt, from TNO and HCA Topsectoren: “The social context of the fieldlab is a trigger for innovations. Especially the discussion among students, and among students and employees in companies helps tremendously to bring innovation in preventive maintenance and smart maintenance. The Campione fieldlab and other fieldlabs of World Class Maintenance now making the leap to skills labs and learning communities. In those learning communities, both experienced as newly trained employees, develop their knowledge together. The Campione field lab sees even more applications of digital technologies to organise the maintenance of the future. Cooperation among students and employees from companies is crucial to achieve that.”

CROSS-SECTORAL COOPERATION

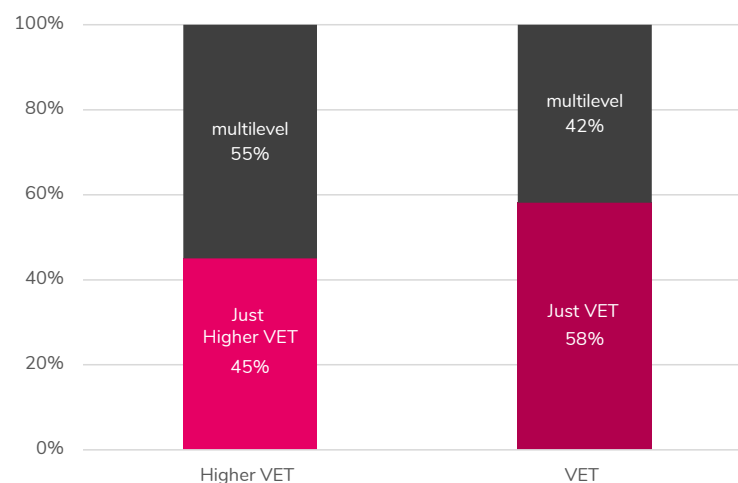
DISTRIBUTION OF MONO- AND CROSS-SECTORAL COOPERATION



An increasing number of public private partnerships are working across the boundaries of sectors. This is also evident in the strong growth in partnerships on themes that are per definition cross-sectoral, such as 'ICT & digitalization' and 'education & society'. Public private partnerships are increasingly becoming the centre for different disciplines, education and sectors come together to solve complex challenges.

SHARE OF PUBLIC PRIVATE PARTNERSHIPS WITH MULTILEVEL COOPERATION

Also, the boundaries between educational sectors are becoming sought and exceeded. The number of public private partnerships which consists of a form of cooperation at different levels of the education chain (secondary education, vocational education, higher professional education, and university education). is slowly increasing. Multilevel arrangements within and between education and businesses (in e.g. learning communities) are especially important to contribute successfully to innovation challenges from companies and societal challenges.





EXAMPLES OF PUBLIC PRIVATE PARTNERSHIPS ON SOCIETAL THEMES: INCLUSION AND ENERGY TRANSITION

SEECE

The Netherlands has a number of enormous challenges, one of which is the energy transition. SEECE, a public private partnership between energy related business and higher vocational education, is involved in a number of projects in the so called Multi-Year Mission-Driven Innovation Programs (MMIP).

Tinus Hammink, SEECE program manager: “We always combine the MMIP research contribution with the human capital issue. We focus on impact. This combination is music to the ears of business partners. Participation of higher vocational education institute HAN assures the outflow of specialized students who can apply their innovative knowledge directly to companies. For new technologies such as hydrogen and electric driving this is extremely valuable. Because innovation only works with the right people. SEECE’s strength is the result of investing for a number of years in networking and building up expertise. The energy transition is so prevalent, a lot of things need to be done so we can reap what we have sown. That’s it.”

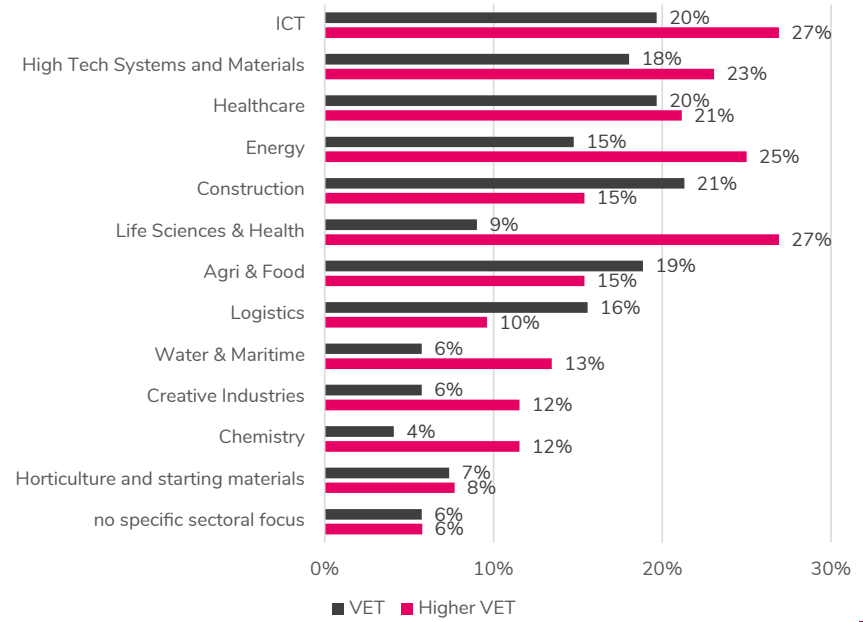
ENTRANCE PUBLIC PRIVATE PARTNERSHIP ‘THE EIGHT HUNDRED’

The vocational education institute Summa’s entrance app ‘The eight hundred’ focuses on training and finding a sustainable workplace for eight hundred people with a talent. A group of asylum seekers with a residence permit followed the program and entered the labor market. Régine van Lieshout, director of Summa College: “By offering customized education with additional guidance, people without a starting qualification still achieve an vocational education level diploma or practice statement and work at the same time. In addition, through the program a customization of education is achieved: a curriculum that deviates from the standard starting times, so candidates are able to start when it is convenient for them, at a level that suits them. Students choose when and what they want to learn and take exams in. With this approach we want to further scale up in the coming years to other levels and sectors.”

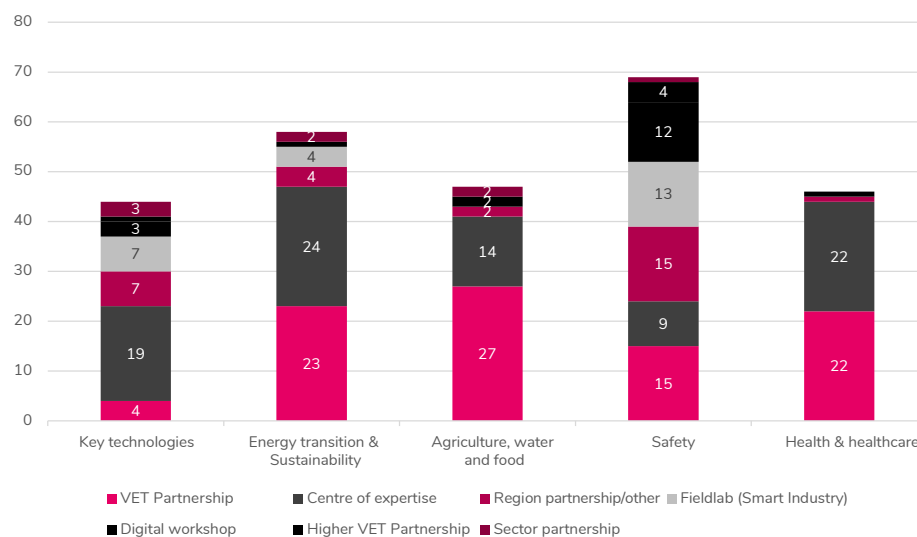
CROSS-SECTORAL COOPERATION

POSITIONING OF PUBLIC PRIVATE PARTNERSHIPS WITHIN (TOP) SECTORS

Public private partnerships occur across all sectors. Previously there was a strong emphasis on technical sectors such as high tech and construction, while nowadays the focus is shifting. Two facts stand out: the focus on ICT / digitization grows and it has become a theme where most of public private partnerships are active on. That's because it's pre-eminently a sector- and discipline-crossing theme and partnerships are increasingly multi-disciplinary, particularly in the combination of ICT and other disciplines. Compared to the previous measurement in 2019 the greatly expanded attention to care (in both vocational and higher vocational education) also stands out.



PUBLIC PRIVATE PARTNERSHIPS PER SOCIETAL CHALLENGE



In the Netherlands, we face large social challenges in the field of energy and sustainability, health and care, agriculture, water and food, and security. Public private partnerships align well with these themes. It appears that Safety is occurring the most in public private partnerships. This is particularly due to the large number of partnerships focusing on digital topics such as “cyber security”.



EXAMPLES OF PUBLIC PRIVATE PARTNERSHIPS ON ICT/DIGITIZATION

WOMEN IN ENGINEERING AND IT: GENDER INCLUDE IT (BY TECHYOURFUTURE)

To help both businesses and education to become more gender-inclusive, [TechYourFuture](#) developed the Gender include IT toolbox. TechYourFuture is the Centre of Expertise from Windesheim and Saxion that engages in researching and developing solutions and practices for attracting, developing and retaining technical talent. Dr. Sjiera de Vries, lecturer in Social Innovation at Windesheim: “The target group is changing and the ICT work environment needs to change with it, but it’s happening too slowly now. Companies and training programs that have tested the toolbox indicate that they gained a better understanding of why women are leaving ICT or feel uncomfortable in the sector. And more importantly, they gained insight in what to do about it. The tools are applicable to one’s own specific situation. We hope the toolbox will help to ensure that ICT education and businesses recognize that the outflow of women in the sector ICT can be limited.”

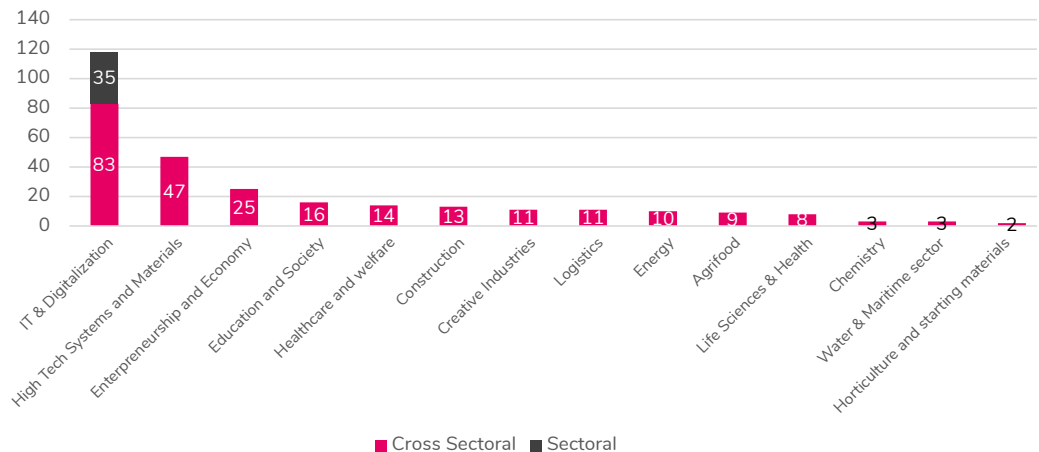
DIGITAL WORKPLACE WOO GRONINGEN

In a so called Digital Workshop, students from higher vocational education, university or vocational education are helping entrepreneurs with leveraging data and automation. The students are under the guidance of teachers and experts from businesses. [WOO Groningen](#) is 1 of 17 Digital Workplaces that, in a public private partnership context, help SMEs in digitizing. From the Groningen Digital Business Centre (GDBC), talented students are getting in touch with digital enterprises. For example, WOO creates internships, develops so-called learning communities and create consultancy assignments for students. Koenraad de Haas, owner of Marinminds: “Water sports companies currently operate mostly independently of each other, meanwhile they do have a shared clientele and target market. Offline, these companies are already working together, but don’t work together online. I hope the students with their knowledge can give a practical meaning to working together online.” Annette Dupree, project leader WOO: “Companies are generally very happy with the help and good ideas and for the students it is incredibly nice to work for a real company.”

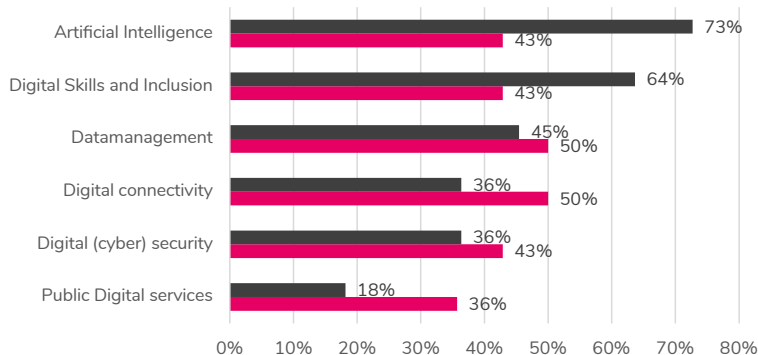
CROSS-SECTORAL COOPERATION

CROSSOVER ICT WITH OTHER (TOP) SECTORS

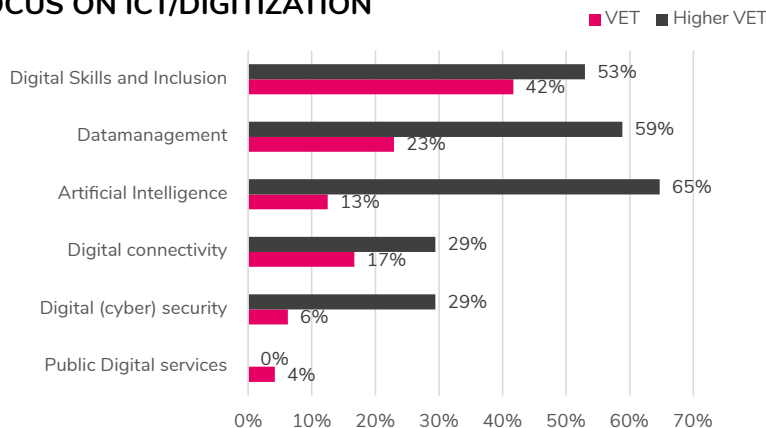
We already saw that ICT / digitization has become an important theme within public private partnerships. Not only as a discipline on itself, but above all as a theme that is combined with other disciplines. Most common application areas are the high-tech sector (Smart Industry), Education, Care & Welfare (Smart Health) and construction (Smart Building).



PUBLIC PRIVATE PARTNERSHIPS WITH EXPLICIT FOCUS ON ICT/DIGITIZATION



PUBLIC PRIVATE PARTNERSHIPS WITHOUT AN EXPLICIT FOCUS ON ICT/DIGITIZATION



The Dutch Digitization Strategy was developed to make the digital transition successful. Although public private partnerships do not necessarily develop itself with this strategy in mind, we still researched how public private partnerships relate to this strategy. Public private partnerships with and without an explicit focus on ICT / digitalization appear to differ little in what they consider most important. The only exception is the importance of AI: ICT apps find AI the most important, the other themes are equal ranked. It is also notable that public private partnerships with an explicit focus on ICT in vocational education stronger relate to the themes than partnerships without explicit focus on ICT. In itself this fact is not striking, but such a difference is not seen in public private partnerships in higher vocational education.

SUSTAIN AND SCALE UP

The theme in 2019 was “retain and scale up. that theme is still as relevant as ever. We are a movement in for the long haul. The transitions in education and labor market on which Katapult focuses are not realized overnight.

Therefore, after ten years of experimentation and successfully delivering, we are continuing our efforts. In supporting many new collaborations to help their first phases of starting up, developing and testing. And by helping partnerships with effective business models to scale up and increase their impact. Katapult finds it extremely important to join forces so even more students, teachers and businesses benefit from public private partnerships. Please do not hesitate to contact Katapult if you are also want to be part of the solution and a public private partnership appeals to you.



QR CODE: WHAT CAN YOU FIND BEHIND THIS?

This publication is a snapshot in time. Every month, new partnerships are formed, existing partnerships are being scaled up, and partnerships merge with each other. That means that the “landscape of public private partnerships” is constantly changing, as we are already seeing compared to the impact report in 2019. Katapult’s goal is to map out the partnerships as best as possible to create as much insight as possible in which partnerships excels in what. In doing so, others are able to learn from them and we are focusing even more on realizing impact. Enthusiasm is important, but in scaling up partnerships it’s important to focus on what the partnership accomplishes. By regularly conducting the impact measurement and ensuring that the landscape of public private partnerships is as up to date as possible, we are contributing to the knowledge about what public private partnerships achieve and accomplish. By using the QR code you will find a comprehensive analysis tool, in which the facts and figures, used for this publication are continuously updated. This information is provided in Dutch. Contact us at hello@wearekatapult.eu.



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