THE DataPoints

CASE STUDIES

How universities are using our data
to help them improve

www.timeshighereducation.com/datapoints

> ❝ We as a university…have been trying to develop our business intelligence. And to do that, you need good data.
>
> The great thing about THE DataPoints is that it has provided us with insights that we wouldn't have been able to get otherwise – around the university's reputation, around dimensions of what we do, [which] we just can't get from our own data or from Hesa [the Higher Education Statistics Agency]. ❞

SIR ANTON MUSCATELLI

PRINCIPAL AND VICE-CHANCELLOR
UNIVERSITY OF GLASGOW

INTRODUCTION

One of the most profound changes in global higher education that I have witnessed during my two decades at Times Higher Education is the move by universities to harness data to help them improve their performance.

Global higher education has been transformed by the insights gained from mining rich seams of data.

Data has helped universities across the world to become more responsive to change, more dynamic, more collaborative, more entrepreneurial and more competitive. It has helped to give rising university powers the enhanced global visibility they deserve.

Data has helped universities to better support their students and to devise and deliver more successful research and knowledge transfer strategies. It has helped institutions to pinpoint where precious resources might be spent most productively and to identify the talent that merits investment.

Data – especially as ever more of it is internationally comparable – has helped to support a thriving global community of scholarship, which is helping to make the world a better place.

The *THE* World University Rankings were first conceived in late 2003, when a report on university research and knowledge transfer for the UK government, the Lambert Review, argued that a global league table of research-intensive universities would support higher education leaders and governments to deliver thriving institutions.

A global ranking "would provide the Government with a way of assessing its research funding efforts", the Lambert Review said. "It would provide academics with a valuable reality check, and help vice-chancellors in their efforts to win the support of their colleagues and the Government for their strategic plans."

THE rose to the challenge and produced the first *THE* World University Ranking in 2004. Some 15 editions later, the rankings have far exceeded those early expectations – not least in serving the interests of global higher education, not just those of the UK.

As a resolutely global business, with offices in the US, the UK, Australia, Singapore and Hong Kong, *THE* today provides deep, rich and sophisticated data-driven insights and analyses to university leaders, industry and investors, and to politicians and governments, right across the world. The case studies detailed in this publication demonstrate how the vast and bountiful reservoir of data that underpins the *THE* World University Rankings is being utilised for good by universities across the world to support their development in a multitude of key strategic activities.

THE is thrilled to be able to play its part in this international revolution and to support universities in their vital endeavours.

PHIL BATY

EDITORIAL DIRECTOR, GLOBAL RANKINGS
TIMES HIGHER EDUCATION

Yonsei University, established 132 years ago as the first modern higher education institution in Korea, has played a key role in educating the leaders needed for Korea's economic development and industrialisation.

Practical impact of DataPoints

- Identifying ranking performance strengths and weaknesses
- Targeting international students
- Planning research collaborations

Yonsei University's use of DataPoints

> " DataPoints shows how well Yonsei is recognised by different continents and countries, as a university and by subject areas "

Why did you purchase DataPoints?

Our senior leadership, including the provost, attended the Times Higher Education World Academic Summit at the University of California, Berkeley in 2016, where they were first introduced to DataPoints. Back then, Yonsei had already secured its position as a leading private university in South Korea, and it was seeking ways to leap forward to become a world-class university.

Rankings were thought to be critical leverage for the purpose, and so DataPoints, which provides a tool to analyse data in depth in comparison with global benchmarking institutions, was an eye-opener for us.

What objectives will DataPoints help you to achieve?

Yonsei University strives to secure its position as a world-class university and to make an impact in the international community. We expect DataPoints to be useful for the diagnosis of both our strengths and weaknesses. Using the tool, for example, the institution's industry income can be compared with that of the world's top universities, and we can see that our global reputation falls short [of the level we would like it to be]. DataPoints provides potential solutions as well. It shows how well Yonsei is recognised by different continents and countries, as a university and by subject areas.

We identified a positive correlation between citation and international research collaboration through our DataPoints analysis of Yonsei and its peer institutions. Yonsei's leadership had been working to promote international research collaboration for the purpose of strengthening our internal research ecosystem.
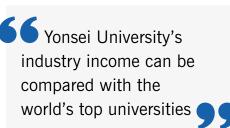
> " We identified a positive correlation between citation and international research collaboration through our DataPoints analysis of Yonsei and its peer institutions "

This led to the establishment of the Yonsei Frontier Lab (YFL) in June 2017, which aims to support the university's global research. YFL runs programmes that provide outstanding international faculty and young researchers with financial and administrative support so that they come to Yonsei and collaborate with leading Yonsei faculty.

DataPoints has been most helpful to our university planning and marketing strategies. Some ranking indicators work with the implementation of university development plans, and a few are even adopted as performance indicators for mid- to long-term goals.

Have you seen any unexpected benefits?

About 4,700 international students from 120 countries make Yonsei one of the most internationalised universities in South Korea. As the country's school-age population is rapidly decreasing, attracting talented international students has become even more important for higher education institutions.

In discussions with our online communications and marketing staff, we have agreed that the *THE* rankings may provide meaningful insight regarding international student recruitment strategies. We are currently interviewing Yonsei international students from targeted countries (selected with reference to DataPoints) to obtain their feedback and to share their stories online. This has been quite a positive experience. You can check them out on our Facebook page.

> " Yonsei University's industry income can be compared with the world's top universities "

What is your advice for getting the most out of DataPoints?

We want to give key faculty and staff from relevant offices and departments direct access [to DataPoints] so that data can be interpreted from various perspectives, which would add much more insight.

We expect the process of sharing and discussing analyses from different perspectives to lead us to brilliant ideas of cross-disciplinary research among various fields of medicine, life science, engineering and other neighbouring disciplines.

연세대학교
YONSEI UNIVERSITY

The University of Newcastle was founded in 1965. The Australian government's Excellence in Research for Australia assessment puts it in the top eight national universities for research quality.

Practical impact of DataPoints

- Gets academics in different faculties to engage with institutional strategy
- Provides individuals with data that matter to them personally
- Allows senior executives to quickly access timely, current information

> " Being able to have these data at our disposal, and then put that information in the hands of the people who are best placed to influence our performance, has been really helpful "

University of Newcastle's use of DataPoints

Why did you purchase DataPoints?

For the majority of its history, Newcastle has been a fairly domestic and regionally focused university. Over the past 10 years, however, it has made a concerted effort to position itself, and think of itself, as a global university. A big part of that has involved trying to dive into what global university rankings mean, and why they matter. We want to really try to understand our performance, because the Times Higher Education World University Rankings is one of the rankings that we want to excel in. There was a general understanding that improvement wasn't going to happen by itself. To get sustained improvement was really going to require some strategic and tactical thinking, and so having the data provided by DataPoints is what we think is going to get us there.

Why do rankings matter?

Being seen as a global university is not just about attracting international students — although every university will say that they want to attract international students. Beyond that, we want to know what are the global partnerships we should be a part of; what conversations we should be a part of; what research projects we should be a part of. We need to know how we position ourselves as a genuinely global institution. Rankings are a means to an end rather than an end in themselves.

We have made some good strides towards that over the past few years, but we are still relatively early in that journey — which is why we need all the information we can get, and the DataPoints platform allows us access to some of that data.

What objectives will DataPoints help you to achieve?

We really want to drive engagement with rankings at a school, faculty or discipline level, but we have found that getting individual faculty members from a diverse range of disciplines to buy into the ambition of trying to lift the University of Newcastle's ranking can sometimes be a challenge. This is because academics often have a stronger affinity with their discipline than they do with the rankings performance of the university. If we can make the process more about them, and show them that this is not about how the university compares with other universities, this is actually about how your discipline — whether it is sciences, law or engineering — compares worldwide, then we can engage them. We can start to have conversations about how small improvements here or there could really improve how their discipline is performing globally.

With DataPoints, we are able to make that argument in a compelling way, rather than just relying on a whole range of assumptions. Being able to have the data at our disposal, and then put that information in the hands of the people who are best placed to influence our performance, has been really helpful. It has helped us to open the faculties' eyes to what the situation is, and what they can do. At the end of the day, I am one person, my team is only a handful of people — and we are not the ones who are actually going to lift the university up the rankings. We are not the ones writing papers, getting citations or getting research; it is the world-class scholars who are doing that, so they need to be engaged. DataPoints is making our discussions about this much easier.

> " DataPoints presents information in ways that are far more sophisticated than we could have generated ourselves internally "

What are the key benefits of using DataPoints?

Since using the tool, we have found that it has saved our team a lot of time. Prior to having access to the DataPoints analytics, we would often collate similar data ourselves in fairly clandestine ways, which was very time-consuming. Then we would run our own analyses and present the results to our executive group. By the time it got there, the world had moved on, and people were questioning the purpose of the whole exercise. But now, it is at our fingertips. It is a huge time-saver, and the tool also presents the information in ways that are far more sophisticated than we could have generated ourselves internally. Getting that communication up through to the senior ranks more quickly has certainly been a very welcome benefit from my and my team's perspective. It is making life easier.

What is your advice for getting the most out of DataPoints?

What we have found useful is spending time in the DataPoints tool — not just when it is time to build a report on something, or when answering a specific question from the executive committee, but just to see what is there. Often when you are just playing around with the tool, you can encounter some quirks that prompt you to ask some really exciting questions about things you might not otherwise have considered.

Northwestern University is one of the leading private research universities in the US. It can trace its origins back to 1851. It has campuses in Chicago and Doha, Qatar and boasts the 9th largest endowment in the US.

> **"** DataPoints has helped us to identify the regions in which people know the university's strengths – or where they don't **"**

Practical impact of DataPoints

- Offers quick access to information on competitors that can be used to inform staff and graduate student recruitment strategies
- Allows the creation of charts for meetings about areas of strength or weakness
- Provides a better understanding of previously unknown international competitors

Northwestern University's use of DataPoints

Why did you purchase DataPoints?

DataPoints gives us a better global perspective of how the university is perceived than we had previously. For both the recruitment of research staff, and for getting a better understanding of the international graduate student world, it is useful for us to learn how people outside the US actually perceive who we are and what we are strong in. The DataPoints tool is part of our wider strategy to get information about this.

What objectives will DataPoints help you to achieve?

We want to add the information we get from DataPoints to the more qualitative, boots-on-the-ground perspective we get from staff. Because DataPoints has helped us to identify the regions in which people know the university's strengths – or where they don't – this then leads us to think about the types of strategy we might move forward with to help increase awareness in certain regions. The tool gives you tangible statistics and metrics and also reputational information. We are trying to find the similarities and differences: where do the numbers support the reputation, and where do they not? Once we know this, we can try to understand why. The global focus is always going to be key for US institutions and, depending on what political administration is in place, it could become an even more important area to monitor. DataPoints is not the be-all and end-all of our international monitoring, but it helps us to paint a higher-resolution picture of the situation more quickly.

What is DataPoints teaching you?

We had a pretty strong grasp of who our national competitors and peers are, and who we want to compare ourselves against. But from the global perspective, we worked with the team at Times Higher Education to look at universities that are similar to us in terms of their data. Some of that was surprising, because there are universities we found to be like us that we were not at all familiar with. We needed to learn a little bit more about them, and how we view them, because if they are similar based on a fingerprint of measures and metrics, then a prospective student or faculty member may be viewing [that institution] similarly as well. It helps us consider the perspective of those potential faculty members, or prospective students, and to understand who they view us as being similar to. Knowing this information might give us a competitive advantage.

How do you use Data+?

If you aren't a subscriber to Data+, it would take a lot of work to harvest the information that it gives you. As a Data+ subscriber, I can download information sets; it provides me with tables and charts that make it easy to look at where you stand on specific measures relative to your peers. It gives me the actual values for Northwestern versus our peers, so it helps you see really specific information – like what their doctorates-awarded-to-academic-staff ratio is, and how it compares with ours. More importantly, it allows you to see how tightly bunched we may be with certain peers on certain measures – that is critical with any kind of assessment: what is the clustering that is occurring, and how far away is the next institution behind you, and the next one ahead? Data+ provides that. The number-one advantage is time. The information is there, it is available. You can pull it up in a meeting and show in a chart where Northwestern stands across its peer group. If I want to do a comparison with just one institution, I can quickly bring that up and show where we are performing at a higher level, or a lower level depending on the metric. It is very nimble. It provides the opportunity to have a conversation on the fly, which can develop during the course of that conversation. It is an interactive tool.

Have you seen any unexpected benefits since using DataPoints?

We have noticed increased conversation among colleagues, and a deeper understanding about how important the global picture is. I think the more accessible this type of information is, and the more we share it internally, the more it prompts questions – and that is a sign of a healthy organisation.

What is your advice for getting the most out of DataPoints?

The first thing I do, which the tool is strong at, is look at the reputation information. One of the things that my colleagues have taken a liking to is the creation of "spider web charts" that show, both internationally and nationally, based on the subject areas, how are you viewed. If we look at our peer institutions, we can see their performance, and we see ours, and we are sometimes surprised that one of our peers may be viewed strongly in this field where we felt we would be more positive or prominent. It provides a great comparison. We may think we are strong in this area, but why are we not viewed that way internationally? These are good questions to be asking.

Monash University in Melbourne, Australia, was established in 1958, and has grown to be Australia's largest university. It is renowned for its collaborative research, including the development of influenza drugs and the bionic eye.

Practical impact of DataPoints

- Informing decisions about which universities to partner with
- Assessing research funding bids involving other institutions
- Understanding strengths and weaknesses as measured by rankings
- Delivering accessible information to senior management

> We have identified a few of the fast-rising Chinese institutions so that we can gain some further insights that might help us to see how they are increasing their rankings performance so rapidly

Monash University's use of DataPoints

Why did you purchase DataPoints?

Like most institutions, we want to improve our world university ranking, and we saw DataPoints as a vehicle to help us develop some strategies for achieving that. And, of course, we want to benchmark our performance in different areas against competitor institutions.

What objectives will DataPoints help you to achieve?

DataPoints has definitely been a contributing factor to our work identifying the institutions with which we consider forming partnerships. We have a range of strategic partnerships, and we are looking to develop further partnerships in the forthcoming couple of years. We need to know the qualities of potential partner institutions.

We use DataPoints information as a base to justify why we would want to collaborate with particular institutions – particularly the data around the subject rankings, which let us see what disciplines they excel at.

We have a programme called Network of Excellence, which offers internal funding for projects involving other international institutions. We have used some of the DataPoints information to help inform us about which applications for funding make sense, and to justify why we might want to partner with a specific institution.

> We use DataPoints information as a base to justify why we would want to collaborate with particular institutions

Have you seen any unexpected benefits?

Before we had DataPoints, we were extracting data from websites and doing our own analyses and visualisations. We were trying to look for general patterns in what makes a top 50 institution.

Using the publicly available data, we could see the areas where we were doing very well, as well as areas where we could improve. What the DataPoints product allows us to do is dig a bit more deeply into that. It can show us the areas of research reputation and teaching reputation where we can improve, and also tell us where we are performing very well. It is good information to know.

DataPoints has given us a really good way of visualising that information, helping the new management team to get their heads around where we are. It definitely saves us time.

Which universities do you compare Monash with, and why?

The Group of Eight is a network of eight leading research-intensive Australian universities. As Monash is a member of the Go8, we like to do comparisons with the rest of the group. We also identified some institutions that we had previous memoranda of understanding with. As we look at our strategic partnerships, and at the institutions we are keen to work with, we add them to our comparison list, our list of "peers". You can change peer institutions all the time by emailing Times Higher Education. We recently increased our number of peers – we have another 10 institutions – because we are working through our Network of Excellence applications, and we want to look at the different candidates.

We have also identified a few of the fast-rising Chinese institutions so that we can gain some further insights that might help us to see how they are increasing their rankings performance so rapidly, and perhaps help us develop targeted strategies that we can deploy to give us the same rate of rise.

> DataPoints has given us a really good way of visualising information, helping the new management team to get their heads around where we are. It definitely saves us time

China is doubling the number of its institutions in the top 100 each year, and every additional entry shuffles other universities down the rankings. It means that even if you maintain the status quo, you are going to drop down, so we need to find ways to implement targeted strategies – and to do that, we need as much information as we can get.

Founded in 1897, Zhejiang University is an innovation-focused university. In 2017, the institution filed more than 2,000 patent applications.

> " A big reason for many Chinese universities involving themselves with international comparisons is the government's Double First Class University Programme. DataPoints gives us access to information that allows us to better understand the World University Rankings "

Practical impact of DataPoints

- Helps fine-tune international staff and student recruitment plans
- Allows for comparisons with similar domestic universities
- Aligns university strategy with government's international agenda

Zhejiang University's use of DataPoints

Why did you purchase DataPoints?

We first bought DataPoints about three years ago. It was at a time when we started to pay more attention to the World University Rankings and to analyse our performance internationally.

A big reason for many Chinese universities involving themselves with international comparisons is the government's Double First Class University Programme (which aims to develop a group of elite Chinese institutions into world-class universities by 2050). DataPoints gives us access to information that allows us to better understand the World University Rankings.

We needed to know more about not just our university's performance, but also other universities' performances and data. DataPoints is a good platform for us to get that information – not just about similar international universities, but also domestic universities.

What objectives will DataPoints help you to achieve?

We hope that understanding rankings data better will help us to climb the rankings. We are a comprehensive university, but we know that our engineering subjects have a much better reputation in many places than, for example, our social sciences.

> " Because we have bought DataPoints for three years, we can compare data over several years "

We want to be more balanced, so we need to know which of our subjects are well respected and which are not as strong. DataPoints allows us to look at other institutions – including domestic ones such as Peking and Tsinghua – so that we can understand more about how they balance their subjects and their data. This subject-level information is really valuable to us. Zhejiang also wants to recruit more international students. Because of the Belt and Road Initiative (a multibillion-dollar government project to develop ties with countries based along the old "Silk Road" trade route), we are recruiting international students from across Asia. However, we do not have many students from Europe or North America, and we want to attract students from these regions.

One way to do this is to assess our reputation in different countries. DataPoints allows us to see data from the World Reputation Rankings (which is based on the results of a survey of tens of thousands of international academics, who "vote" for the universities that they feel excel in their own subject area). This information shows us that while the number of votes we get domestically is high, there are places where we get fewer than 100 votes.

Our president was a little upset to learn this, of course, but having the information means that we can pay more attention to how we might improve our performance by recruiting international academics and students from particular locations. This is now happening.

> " We want to be more balanced, so we need to know which of our subjects are well respected and which are not as strong. DataPoints allows us to look at other institutions so that we can understand more about how they balance their subjects "

What is your advice for getting the most out of DataPoints?

We use DataPoints to look at performance internationally and domestically, so when we were choosing our peer institutions, we looked at the C9 group of prestigious Chinese universities and also those international universities with excellent engineering courses, places such as Stanford and MIT. This means that we can compare ourselves at a local and an international level.

Because we have bought DataPoints for three years, we can compare data over several years. With it, we can produce many useful diagrams and charts so that it is clear when I am writing reports for the president what has developed, and it means that we can see any trends that are developing.

Kindai University, located in Osaka and founded in 1949, is one of western Japan's largest universities. Its research is at the forefront of energy and food supply concerns.

Practical impact of DataPoints

- Results of analyses are informing the redesign of the English-language website
- Insights have helped to sharpen and refocus promotional materials
- Information about strong rankings performers is improving understanding of how strategy can influence global reputation

Kindai University's use of DataPoints

Why did you purchase DataPoints?

Three years ago, Kindai University entered the top 800 of the Times Higher Education World University Rankings. We have always been very successful domestically, and the university has attracted more applicants than any other institution in Japan since 2014. However, the ranking results made us aware of how competitive Kindai was internationally, and we wanted to find out the areas in which we were performing strongly.

We wanted to know exactly why Kindai had become so highly regarded so that we could reinforce our performance. By allowing us to see the data in detail, the *THE* DataPoints product gives us a better understanding of our strengths.

> " By allowing us to see the data in detail, the DataPoints product gives us a better understanding of our strengths "

What objectives will DataPoints help you to achieve?

In order to carry out our international strategy, we felt that it was very important to first know the relative position of Kindai in the World University Rankings. In particular, we wanted to know how similar institutions were performing on the different rankings metrics so that we could understand the areas where we were performing well, and also the areas where our peers were ahead of us. We are using these insights to guide how our international strategy operates. Because DataPoints made us realise that our reputation in some fields, especially life sciences, was stronger than that of many of our peers, we are going to include our achievements in these areas in our promotional materials – particularly those that we will send out internationally. Another good example of how we use the information is the way in which we are renewing our English-language website. The data

we now have mean that we know how best to present our researchers' strengths and achievements. We can also pull strong indicators from our analyses into a booklet, focusing on the topics that DataPoints has identified as our strong points. We hope that such a strategy will help to create a virtuous circle of reputation and citation, which will, in turn, back up our international strategy. DataPoints gives us access to a great variety of information – not just numerical data and statistics relating to the world rankings, but also detailed analysis of our reputation, the way in which scholars around the world view Kindai University.

We really feel that our international reputation has improved in the past five years, and because of the information that we can access using DataPoints, we

> " DataPoints gives us access to a great variety of information – not just numerical data and statistics relating to the world rankings, but also detailed analysis of our reputation "

can back this up with some figures. Our global position in the Times Higher Education Academic Reputation Survey has improved more than 150 places in the past two years, and using DataPoints we are able to see that our reputation for the life sciences is actually higher than we had expected. This means that we can consider our next steps: what are the best ways to enhance our research output based on reputation? How can we improve our reputation with actual research achievements? These are the questions we are looking at.

In 2016, we opened a new faculty, the Faculty of International Studies, where we offer a unique curriculum designed to support our students in English-language learning. We expect and hope that the faculty will contribute to our reputation in the arts and humanities, and we look forward to finding a positive influence in our teaching reputation. One of the ways in which we will monitor this will be through the detailed reporting we can get from DataPoints.
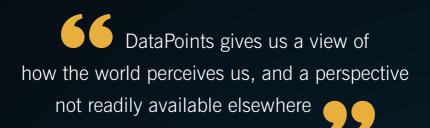
Have you seen any unexpected benefits?

Since we purchased DataPoints, we have had many opportunities to communicate with Times Higher Education staff, which has helped us to gain a more thorough understanding of how the World University Rankings work.

What is your advice for getting the most out of DataPoints?

The selection of benchmark universities against which you can compare your performance is very important. Choosing universities that are in similar circumstances to your own will make it easy to compare universities, and help you to consider applicable strategies in the future.

It can also be helpful to choose a university that has demonstrated real momentum in recent years. By looking at its data, you will gain a much better understanding of how its strategy and approach have influenced its World University Rankings position and its global reputation.

" DataPoints gives us a view of how the world perceives us, and a perspective not readily available elsewhere "

PROFESSOR SUNNY KWONG

ASSOCIATE VICE-PRESIDENT
DIRECTOR OF PLANNING,
CHINESE UNIVERSITY OF HONG KONG

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