

Six steps to strategic research planning



Using advanced instruments and considering input from external sources will ensure you and your teams reach your research goals

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Developing a strategic research plan for your institution is like establishing flight plans and routes for air traffic controllers to safely navigate airplanes to their destinations.

You work with your teams to develop the overall flight plans and routes, which in this case would be the strategic research plan, enabling your air traffic controllers, or leadership teams, to effectively guide each aircraft or research group. The guidance is based on experience and knowledge, but it's understood that there may be in-flight adjustments along the way to reach the destination. Using advanced instruments and considering input from external sources will ensure you and your teams reach your research goals safely.

A great strategic research plan is a blueprint to your research success. To ensure your plan is built on a strong base, you can make sure it touches upon critical pillars that contribute to your efforts. These are:

- The researchers, faculty and staff executing and promoting your mission
- The systems and services enabling effective operations, compliance and success
- The funding flowing through your institution, its departments and its research groups

This plan will be a living, breathing document. You and your teams will refer to it each year throughout the period it is set for, consulting it during critical decisions and updating it as needed.





The right approach for you will depend on your university's unique background, vision and mission.

For example, strategies may focus on:

- Identifying research strengths of focus to maximize impact on society
- Building a research culture that fosters research success
- Growing research capability and funding in focus fields

Developing a strategic research plan helps your organization stay on track, aligning its research outcomes with its vision, mission and values. Creating and updating the plan is a cyclical process, consisting of:

- Evaluation
- Planning
- · Implementation and monitoring

Your department can utilize SciVal at every stage, whether charting the initial strategy or paths, navigating the plan, or assessing progress and arrival toward desired outcomes and goals.

A framework helps to put this into practice. We've adapted a strategic research planning formula developed by Huong Thi Lan Nguyen and Bernadine Van Gramberg*. You may choose to follow these six steps or a similar sequence:



Evaluation

- · Situation analysis
- External environmental assessment
- Internal environment assessment



Planning

· Strategy formulation



Implementation and monitoring

- Strategy implementation
- Monitoring and evaluation

^{*} Nguyen, H. T. L., & Van Gramberg, B. (2017). University strategic research planning: a key to reforming university research in Vietnam? Studies in Higher Education, 43(12), 2130–2147. https://doi.org/10.1080/03075079.2017.1313218

Step 1: Evaluate your current situation

Evaluating your current research performance against carefully chosen external peers involves multiple qualitative and quantitative analyses and metrics. This process allows you to assess your progress towards your current strategy and align any new strategy with your longer-term goals and vision.

Complementing your own expertise with in-depth metrics and analyses about your institution's research activities, benchmarked to peers worldwide, enables you to build a clear picture of where you stand so you can take confident data-informed decisions about your future strategy.

How SciVal helps

SciVal lets you analyze, benchmark and visualize the research activities and performance of you and your peers, adding to your qualitative insights to create a more complete picture to work from.

With SciVal, you can:



Evaluate and baseline your performance against peers, and your current strategy, vision and goals



Profile research strengths, areas of niche expertise and key researchers



Detail your performance in national and international rankings



Profile your current research partnerships across sectors



Enrich your analysis of goals and performance with funding landscape intelligence and evidence of broader impact



Assess your position and performance relative to your peers in major rankings by accessing the actual bibliometrics used in the ranking calculations

Step 2: Assess the external environment

When developing your plan, it is important to understand what's happening beyond your organization's walls.
Who are your peers, and what are their strengths? Where does your competitors' focus lie, and what are the relevant national priority areas?

Benchmarking and assessing performance relative to external peers and relevant national priority fields can provide a nuanced, actionable view of the national, regional and global research landscape. This enriches and complements the insights gained from assessing your organization's internal environment in step 3.

How SciVal helps

With SciVal, you can gain a greater understanding of your external environment, contextualizing your current research priorities and strengths with a combination of telling metrics and in-depth analysis, produced with authoritative information.

With SciVal, you can:



Evaluate the performance and strength of key peers or competitors at the university, faculty, department or research group level



Profile the research landscape in national priority areas

and assessing performance relative to external peers and relevant national priority fields can provide a nuanced, actionable view of the national, regional and global research landscape.

Benchmarking



Analyze which fields of research key funding bodies are investing in



Identify the key experts of your peers and assess their research partnerships



Profile the performance of peers with funding landscape intelligence and evidence of their broader impact

Step 3: Assess the internal environment

Insights into your university's performance require not just an aggregate view of overall institutional performance, but also a drilled-down examination of faculties, departments, schools, groups, or individual researchers, using the context and benchmarks obtained from assessing the external environment.

These analyses, built on key performance indicators (KPIs) and metrics, can identify strengths, niche research expertise, and the research talent driving success – while also revealing opportunities for further growth.

How SciVal helps

SciVal not only helps you measure your research performance and broader impact on society but also contextualize it, using robust metrics and flexibility for your analyses based on authoritative and current information about your research activities.

With SciVal, you can:



Set baselines and evaluate your institution's research performance against your strategy, vision and goals, at the university, faculty, department or research group level



Profile your current research partnerships across sectors

built on key
performance
indicators (KPIs)
and metrics, can
identify strengths,
niche research
expertise, and
the research
talent driving
success...

...these analyses



Investigate whether key research fields are increasing in size and determine the citation and broader impact of publications in these fields



Evaluate your areas of research strength, related fields, areas of niche expertise, and identify your key researchers



Determine whether you're working on growing, well-funded topics



Identify which researchers are influencing policymaking or driving innovation and potential technological impact

Step 4: Formulate your strategies

Following the evaluation phase, it's time to use the situational, external and internal analyses you've conducted to develop a plan and formulate strategies that will enable you to set a path to your organizational goals.

Such a plan won't only consider your institution's own researchers, facilities, operations and funding; it will also examine external expertise and resources to pursue. Through partnerships, or the procurement of new systems and services, your institution can expand its capacity, reach and impact.

How SciVal helps

SciVal allows you to develop comprehensive, sophisticated and targeted strategies by enhancing qualitative insights with robust quantitative data and insights.

With SciVal, you can:



Identify your areas of research focus and strength and uncover which highpriority areas have reached critical mass



Evaluate the competitive environment in research focus areas and strategic priority fields across your organization



Investigate new potential strategic research fields to pursue and identify the key researchers and outstanding partnerships to enable this



Maximize funding potential by identifying possible pivots into growing, well-funded research fields



Highlight internal researchers who are influencing policy for potential policy-making committee appointments or media outreach



Identify researchers who are driving innovation and have the potential for technological and economic impact



Develop approaches for increasing policy influence, technological and economic impact and showcasing your organization's broader impact on society



Develop university rankings strategies by analyzing the actual bibliometrics used by major ranking bodies such as Times Higher Education (THE) and Quacquarelli Symonds (QS)

Step 5: Implement your strategy

During the implementation stage, the preparations made during the previous four stages come into force, possibly calling for additional budget and resource allocations, development of recurring plans and securing additional funding.

This is when you establish and agree upon checkpoints for the period to come, where you'll monitor approved indicators and KPIs to track your progress toward your goals.

How SciVal helps

SciVal offers the quantitative insights and analyses necessary to effectively implement strategy, monitor progress, and make informed decisions, including when a pivot is necessary.

With SciVal, you can:



Enhance promotion and tenure applications and exercises with databased insights to retain faculty talent



Enrich grant applications with quantitative insights around global research expertise and broader impact



Analyze global research in strategic priority fields to inform targeted recruitment or identify areas for cohort hiring

SciVal offers the

analyses necessary

strategy, monitor

quantitative

insights and

to effectively

progress, and

decisions...

make informed

implement



Analyze performance and develop impact case studies relevant to national assessment exercises



Demonstrate the impact of your research programs to enhance your reputation and attract faculty talent



Increase capacity and competitiveness for collaboration and interdisciplinary research with insights into global research expertise

Step 6: Monitor and evaluate

You and your teams now have a strategic research plan in place with an implementation strategy and established benchmarks and checkpoints.

It is essential to conduct regular analysis using defined KPIs and other metrics to assess whether your plan is effectively guiding your institution toward its goals. This will help you determine if any adjustments are needed or if there are new opportunities to leverage as you implement your plan. The same level of rigor is necessary at every stage. The key difference now is that you are proactively adjusting your course in real-time. Being able to shift and change direction is critical.

How SciVal helps

SciVal's robust metrics and data analysis capabilities allow you to use the authoritative research information used in evaluating, planning and implementing your strategy, to carefully monitor progress toward your objectives.

With SciVal, you can:



Evaluate the success of rankings strategies using the actual bibliometrics that contribute to the rankings methodologies



Benchmark your ongoing performance relative to peers and national benchmarks



Track and evaluate the performance and progress of existing and new partnerships



Demonstrate and showcase the broader impact of your research programs on society



Enhance the monitoring and evaluation of your research performance and progress toward your organization's goals to help assess the ongoing effectiveness of your strategy

Charting a course for *success*

Just like the aviation authorities, air traffic controllers and aircrew using flight paths and plans, instrument panels, and other guidance to navigate aircraft to their final destinations, this suggested planning framework can help you develop and implement the strategies required to reach your goals. The combination of meticulous pre-planning, on-the-fly adjustments and expert input from peers will help your institution deliver on its strategy and reach its goals.

SciVal is the digital consultant and high-tech control panel that can help you navigate in clear conditions or unexpected storms. Equipped with quantitative, data-driven insights, you can:

- 1. Analyze your present situation
- 2. Assess the landscape around you
- 3. Assess your own efforts
- 4. Build a detailed research strategy and plan
- 5. Implement your strategy and plan
- 6. Adjust on the fly

Remember, just as a flight isn't over until the plane taxis over to the gate and passengers deplane, overseeing your research strategy is an ongoing process worthy of close attention and meaningful adjustments at every stage.

SciVal comes with you every step of the way as you plan your next step, implement new practices, assess your progress and adjust for ever-greater results.

Unlock your research potential with SciVal

SciVal is purpose-built for the research community, so it goes beyond generic tools to effectively support research strategy and planning needs.

Rather than customizing a general-purpose analytics solution to meet your needs, you can smoothly move through the six steps of the strategic research planning process, drawing upon metrics and insights to enhance each stage. No matter what level of performance and analysis you're currently achieving, SciVal can show you opportunities to improve, grow and expand.

Strategic research planning is a continuous process, rather than a one-off event. SciVal comes with you every step of the way as you plan your next step, implement new practices, assess your progress and adjust for ever-greater results.

Begin strengthening your strategic research planning activities: Add SciVal to your panel of instruments. See all that SciVal offers – **contact Elsevier**.



SciVal

SciVal brings to life insights from your institution's research activities against peer benchmarks and emerging research trends to enhance strategy and decision making. With uniquely adaptable analyses and meaningful insights, you can evaluate and showcase expertise and impact at the researcher, department, faculty and university-level and support future funding success.

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